



CITY OF MORGAN HILL

Regular Meeting Agenda

Planning Commission

John McKay - Chairman

Liam Downey - Vice Chairman

Joseph Mueller - Planning Commissioner

Wayne Tanda - Planning Commissioner

Yvonne Martinez Beltran - Planning Commissioner

Mohammad Habib - Planning Commissioner

Juan Miguel Munoz Morris - Planning Commissioner

Tuesday, April 24, 2018 7:00 pm

Council Chamber

17555 Peak Avenue, Morgan Hill, CA 95037

CALL TO ORDER

ROLL CALL ATTENDANCE

DECLARATION OF POSTING AGENDA

Pursuant to Government Code Section 54954.2

OPEN PUBLIC COMMENT PERIOD

Members of the public are entitled to address the Planning Commission concerning any item within the Morgan Hill Planning Commission's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the Planning Commission is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ORDERS OF THE DAY

CONSENT AGENDA

These are items of a routine or generally uncontested nature. Any member of the Planning Commission or member of the public may request to have an item pulled from the Consent Calendar and acted on individually by the Planning Commission. Items pulled will be discussed after action is taken on the

balance of the Consent Calendar and before moving on to the public hearings.

1. APPROVE THE FEBRUARY 27, 2018 MEETING MINUTES

Recommendation:

Approve Minutes.

2. APPROVE THE APRIL 10, 2018 MEETING MINUTES

Recommendation:

Approve Minutes.

PUBLIC HEARINGS

3. UP2017-0015: CAPUTO-HUANG- CONDITIONAL USE PERMIT FOR A DRIVE-THROUGH, SELF-SERVICE, AUTOMATED CAR WASH WITH VACUUMS ON PROPERTY IDENTIFIED BY ASSESSOR PARCEL NUMBER 817-29-027 LOCATED ON THE SOUTHWEST CORNER OF CAPUTO DRIVE AND TENANT AVENUE.

Recommendation:

1. Adopt a Resolution adopting the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program prepared for the project (EA2017-0013); and
2. Adopt a Resolution approving a Conditional Use Permit (UP2017-0015)

CONTINUED PUBLIC HEARING

4. ZA2016-0006: ZONING CODE UPDATE AND ZONING MAP AMENDMENTS

Recommendation:

1. Discuss and Consider comments on the Zoning Code Update and Zoning Map Amendments; and
2. Adopt a Resolution recommending City Council consider the Addendum to the Morgan Hill 2035 Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) and approval of ZA2016-0006: Zoning Code Update

ANNOUNCEMENTS

ADJOURNMENT

NOTICE

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act that are distributed to a majority of the legislative body less than 72 hours prior to an open session, will be made available for public inspection at the Office of the City Clerk at Morgan Hill City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 at the same time that the public records are distributed or made available to the legislative body. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the Commission concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Commission on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Commission Chambers, and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Commission, but it is very helpful. When you are called, proceed to the podium and the Mayor will recognize you. If you wish to address the Commission on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the Commission.

Persons interested in proposing an item for the Commission agenda should contact a member of the Commission who may plan an item on the agenda for a future Commission meeting. Should your comments require Commission action, your request may be placed on the next appropriate agenda. Commission discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the Commission at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the Commission, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of Commission Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email michelle.wilson@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email michelle.wilson@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.

DRAFT



Meeting Minutes Planning Commission

John McKay - *Chairman*
Liam Downey - *Vice Chairman*
Joseph Mueller - *Planning Commissioner*
Wayne Tanda - *Planning Commissioner*
Yvonne Martinez Beltran - *Planning Commissioner*
Mohammad Habib - *Planning Commissioner*
Juan Miguel Munoz Morris - *Planning Commissioner*

Tuesday, February 27, 2018 7:00 pm

Council Chamber
17555 Peak Avenue, Morgan Hill, CA 95037

CALL TO ORDER

Chair McKay called the meeting to order at 7:00 p.m.

ROLL CALL ATTENDANCE

Chair McKay noted for the record Commissioner Tanda will not be in attendance for this meeting.

Attendee Name	Title	Status	Arrived
John McKay	Chairman	Present	
Liam Downey	Vice Chairman	Present	
Joseph Mueller	Planning Commissioner	Present	
Wayne Tanda	Planning Commissioner	Excused	
Yvonne Martinez Beltran	Planning Commissioner	Late	7:01 PM
Mohammad Habib	Planning Commissioner	Present	
Juan Miguel Munoz Morris	Planning Commissioner	Present	

DECLARATION OF POSTING AGENDA

Minutes Clerk Luna declared the posting of the agenda.

PLEDGE OF ALLEGIANCE

OPEN PUBLIC COMMENT PERIOD

Chair McKay opened the public comment period at 7:02 p.m.

Hearing no requests to speak, the public comment period was closed.

ORDERS OF THE DAY

No changes made.

CONSENT AGENDA

MOTION

Motion to approve items 2-3. Item 1 was pulled for discussion.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Juan Miguel Munoz Morris, Planning Commissioner
SECONDER:	Joseph Mueller, Planning Commissioner
AYES:	McKay, Downey, Mueller, Martinez Beltran, Habib, Munoz Morris
EXCUSED:	Tanda

1. APPROVE THE MAY 9, 2017 MEETING MINUTES

Recommendation:

Approve Minutes.

This Item pulled for discussion.

2. APPROVE THE NOVEMBER 28, 2017 MEETING MINUTES

Recommendation:

Approve Minutes.

3. APPROVE THE FEBRUARY 13, 2018 MEETING MINUTES

Recommendation:

Approve Minutes.

ITEMS PULLED FOR DISSUSSION

APPROVE THE MAY 9, 2017 MEETING MINUTES

Recommendation:

Approve Minutes.

Commissioners Habib and Munoz Morris were not in attendance at this meeting and abstained from this item.

RESULT: **ADOPTED [4 TO 0]**
MOVER: Joseph Mueller, Planning Commissioner
SECONDER: Liam Downey, Vice Chairman
AYES: McKay, Downey, Mueller, Martinez Beltran
ABSTAIN: Habib, Munoz Morris
EXCUSED: Tanda

PUBLIC HEARINGS

4. ZA2017-0007, DA2017-0003, SD2016-0009, EA2016-0009: E. DUNNE-KYONO - ZONING AMENDMENT FOR PLANNED DEVELOPMENT, DEVELOPMENT AGREEMENT, AND NON-VESTING TENTATIVE MAP FOR PROPERTY IDENTIFIED BY ASSESSOR PARCEL NUMBER 726-02-014 LOCATED AT 505 E. DUNNE AVENUE.

Recommendation:

1. Open/close the public hearing and continue the project to the March 27, 2018 Planning Commission meeting.

Community Development Director Jennifer Carman requested this item be continued to the March 27, 2018 Meeting.

Chair McKay opened the public hearing at 7:05 p.m.
 Thomas Davie was called to speak.
 Craig Erb was called to speak.
 Dick Oliver was called to speak.
 Margaret M. was called to speak.
 Chris Plut was called to speak.
 Hearing no further requests to speak, the public hearing was closed.

RESULT:	CONTINUED [UNANIMOUS]	Next: 3/27/2018 7:00 PM
MOVER:	Joseph Mueller, Planning Commissioner	
SECONDER:	Liam Downey, Vice Chairman	
AYES:	McKay, Downey, Mueller, Martinez Beltran, Habib, Munoz Morris	
EXCUSED:	Tanda	

OTHER BUSINESS

5. MONTEREY CORRIDOR STUDY AND IMPLEMENTATION OPTIONS

Recommendation:

1. Review and Discuss Monterey Corridor Market Analysis Report and Implementation Options; and
2. Recommend near-term and long-term Monterey Corridor Implementation Option(s) to City Council

Interim Principal Planner John Baty and Jennifer Daugherty from Lisa Wise Consulting, Inc. presented the staff report.

Chair McKay opened the public comment period at 8:44 p.m.
 John Telfer was called to speak.
 Don Hordness was called to speak.

Dick Oliver was called to speak.
Hearing no further requests to speak, the public comment period was closed.

MOTION

The Planning Commission reviewed and discussed the Monterey - Corridor Market Analysis Report and Implementation options. The Planning Commission recommends a Monterey Corridor Specific Plan and in the interim until this plan is adopted that a City Lead Block Level Master Plan be put into place to enable development to move forward.

RESULT:	ADOPTED [5 TO 1]
MOVER:	Joseph Mueller, Planning Commissioner
SECONDER:	Juan Miguel Munoz Morris, Planning Commissioner
AYES:	McKay, Downey, Mueller, Habib, Munoz Morris
NAYS:	Martinez Beltran
EXCUSED:	Tanda

ANNOUNCEMENTS

The next Planning Commission meeting will be held on March 13, 2018. Commissioner Tanda will be in attendance. All of the narratives, descriptions, and site plans are available online. The staff reports will be published early. Three Planning Commissioners have currently signed up for the Planning Commissioners Academy on April 4-6, 2018 in Monterey, California. Please contact staff if you are interested in attending as soon as possible.

ADJOURNMENT

There being no further business, Chair McKay adjourned the meeting at 11:33 p.m.

MINUTES PREPARED BY:

Jenna Luna, Minutes Clerk

Minutes Acceptance: Minutes of Feb 27, 2018 7:00 PM (CONSENT AGENDA)

DRAFT



Meeting Minutes Planning Commission

John McKay - *Chairman*
Liam Downey - *Vice Chairman*
Joseph Mueller - *Planning Commissioner*
Wayne Tanda - *Planning Commissioner*
Yvonne Martinez Beltran - *Planning Commissioner*
Mohammad Habib - *Planning Commissioner*
Juan Miguel Munoz Morris - *Planning Commissioner*

Tuesday, April 10, 2018 7:00 pm

Council Chamber
17555 Peak Avenue, Morgan Hill, CA 95037

CALL TO ORDER

Chair McKay called the meeting to order.

Attendee Name	Title	Status	Arrived
John McKay	Chairman	Present	
Liam Downey	Vice Chairman	Present	
Joseph Mueller	Planning Commissioner	Present	
Wayne Tanda	Planning Commissioner	Present	
Yvonne Martinez Beltran	Planning Commissioner	Present	
Mohammad Habib	Planning Commissioner	Present	
Juan Miguel Munoz Morris	Planning Commissioner	Present	

ROLL CALL ATTENDANCE

Minutes Clerk Luna called the roll.

PLEDGE OF ALLEGIANCE

Commissioner Habib led the pledge.

Minutes Acceptance: Minutes of Apr 10, 2018 7:00 PM (CONSENT AGENDA)

DECLARATION OF POSTING AGENDA

Minutes Clerk Luna declared the posting of the agenda

OPEN PUBLIC COMMENT PERIOD

Chair McKay opened the public comment period. Hearing requests to speak, the public comment period was closed.

ORDERS OF THE DAY

No changes made.

OTHER BUSINESS

1. **PRELIMINARY PLAN REVIEW SR2018-0004: COCHRANE-EVERGREEN: PRELIMINARY PLAN REVIEW OF A PROPOSED COMMERCIAL AND RETAIL CENTER. THE PROPERTIES, IDENTIFIED BY ASSESSOR PARCEL NUMBERS 726-250-35 AND 726-320-21, ARE LOCATED ON THE EASTERLY SIDE OF BUTTERFIELD BOULEVARD BETWEEN COCHRANE ROAD AND JARVIS DRIVE (COCHRANE ROAD INVESTORS, LLC, OWNERS).**

Recommendation:

The applicant is requesting Planning Commission initial comments on the project. Open public hearing to receive testimony and provide direction on content of proposed plan.

Contract Planner Rick Smeaton presented the staff report.

Chair McKay opened the public comment at 7:11 p.m.

Zach Lauterbach was called to speak.

Rogg Collins was called to speak.

Hearing no further requests to speak, the public comment period was closed.

No formal action is requested of the Planning Commission at this time. The Planning Commission provided comments and direction to the applicant on the content of the proposed plan.

RESULT:	NO ACTION TAKEN
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CONTINUED PUBLIC HEARING

2. **ZA2016-0006: ZONING CODE UPDATE AND ZONING MAP AMENDMENTS**

Recommendation:

1. Discuss and consider comments on the Zoning Code Update and Zoning Map Amendments; and,
2. Adopt Resolution recommending City Council consider the Addendum to the Morgan Hill 2035 Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) and approval of ZA2016-0006: Zoning Code Update and Zoning Map Amendments.

Interim Principle Planner John Baty presented the staff report.

Chair McKay opened the public comment. Hearing no further requests to speak, the public hearing was closed.

The Planning Commission discussed and considered comments on the Zoning Code Update and Zoning Map Amendment for the following sites:

1. 275 Tennant Avenue (Dan Ekins) - Staff supports the proposed CN Neighborhood Commercial Zoning District for the subject site instead of the proposed CS Service Commercial Zoning District. The Planning Commission supports Staff's recommendation for the proposed change to CN Neighborhood Commercial Zoning District.
3. 70 West 5th Street (Nicole Grave) - The Planning Commission recommends Residential Attached Low 3000.
4. Section 18.108.070 Minor Exceptions (Van Kuelen) - Staff supports adding a minimum lot width to the list of permitted operations. The Planning Commission supports Staff's recommendation.
6. 30 and 50 Myrtle Avenue (Michael J. Eggers) - Staff supports the proposal to remove the Residential Planned Development Overlay leaving the underlying commercial MU-N Zoning to match the adjacent properties to the west and east. The Planning Commission supports Staff's recommendation.
7. Floor Area Ratio (RJA) - Staff supports the proposal to not count porches that are 50% or less enclosed and covered as living space for FAR calculation purposes with the amendment that a porch would not count as part of the FAR calculation if it's a front porch visible from a public place. The majority of the Planning Commission supports Staff's recommendation. Commissioner Downey and Commissioner Mueller do not support this recommendation.
8. Nina Lane (Winland and Burgos) - Five Planning Commissioners support the change in zoning to Residential Detached Low 20,000.

RESULT:	CONTINUED [UNANIMOUS]	Next: 4/24/2018 7:00 PM
MOVER:	Wayne Tanda, Planning Commissioner	
SECONDER:	Juan Miguel Munoz Morris, Planning Commissioner	
AYES:	McKay, Downey, Mueller, Tanda, Martinez Beltran, Habib, Munoz Morris	

ANNOUNCEMENTS

Community Development Director Jennifer Carmen made a note that Commissioner Downey will be acting Chair at the April 24, 2018 Planning Commission meeting. Commissioner Tanda inquired about items that were previously referred to staff to bring back for discussion. Community Development Director Jennifer Carmen will let the Commission know when we will be scheduling the Vacant Land Inventory and Bylaws some time in the near future.

ADJOURNMENT

There being no further business, Chair McKay adjourned the meeting at 10:55 p.m.

MINUTES PREPARED BY:

Jenna Luna, Minutes Clerk

PLANNING COMMISSION STAFF REPORT
MEETING DATE: April 24, 2018

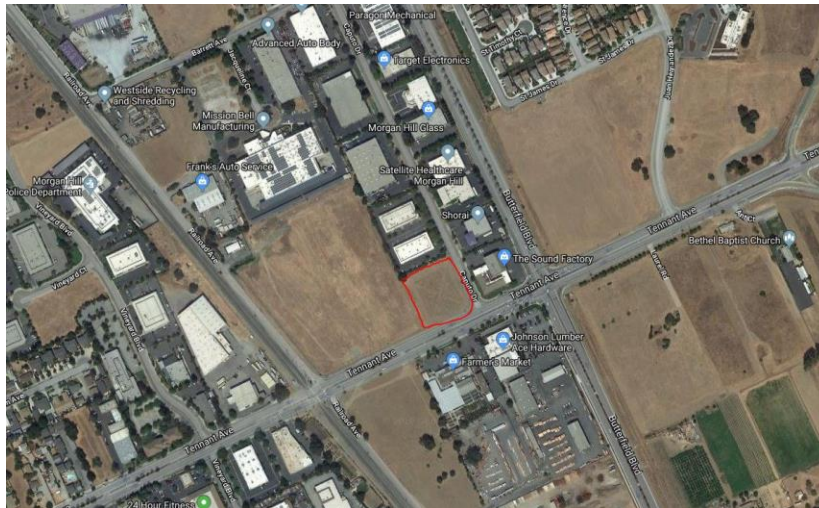
PREPARED BY: Gina Paolini, Interim Principal Planner
APPROVED BY: Jennifer Carman, Community Development Director

UP2017-0015: CAPUTO-HUANG- CONDITIONAL USE PERMIT FOR A DRIVE-THROUGH, SELF-SERVICE, AUTOMATED CAR WASH WITH VACUUMS ON PROPERTY IDENTIFIED BY ASSESSOR PARCEL NUMBER 817-29-027 LOCATED ON THE SOUTHWEST CORNER OF CAPUTO DRIVE AND TENANT AVENUE.

RECOMMENDATION(S)

1. Adopt a Resolution adopting the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program prepared for the project (EA2017-0013); and
2. Adopt a Resolution approving a Conditional Use Permit (UP2017-0015)

LOCATION MAP



PROJECT SUMMARY:

1. Location: Southwest corner of Caputo Drive and Tennant Avenue (APN 817-29-027)
2. Site Area: 1.45 Acres
3. General Plan: Commercial
4. Zoning: Administrative Office (CO)

PROJECT DESCRIPTION

Site Improvements

Paul Sagayaraj Amaldoss Henry proposes a Conditional Use Permit to construct and operate “Zip Thru Express Car Wash,” a self-serve facility. The proposed car wash would consist of a 5,370 square foot car wash building, an 895 square foot entry canopy, and a 198 square foot trash enclosure. The car wash building would include a small second-floor office space at the southeast portion of the building, a car wash tunnel, equipment storage rooms, and restroom facilities. Three pay station lanes would be located at the entry canopy at the southeast corner of the building. To the north of the car wash building, 22 parking spaces have been provided, which include, six general parking spaces and 16 parking spaces equipped with commercial wet/dry vacuums.

Landscaping would be provided along the project frontages at Tennant Avenue and Caputo Drive, as well as along the north and west site boundaries. In addition, landscaping would be provided along the east, south, and west sides of the proposed car wash building. Approximately 0.98 acres of the property will be developed, while 0.46 acres will remain undeveloped. Detailed project plans have been provided (Attachment 3).

Operations

The business would operate from 7:00 AM to 9:00 PM daily and would employ approximately four employees. Employees would not clean cars but would maintain equipment, provide maintenance and customer service. The car wash would be automated using conveyor belts to transport vehicles (approximately 200 per day) through each step of the cleaning process. Chemicals used in the cleaning process would be bio-degradable and non-hazardous. Approximately 60 percent of the water used in the washing process would be recycled for later use on-site.

Detailed project justification and statement of operations have been attached (Attachments 4 and 5).

Site Description

The site is vacant and flat, with a small number of ornamental shrubs and trees located along the site’s northern boundary between the site and the adjacent parking lot. The surrounding properties are currently developed for office and commercial uses or vacant.

Surrounding Zoning/Land Use

North:	ML / Light industrial buildings
South:	CS / Commercial businesses
East:	ML / Office building
West:	ML / Vacant land

ANALYSIS:

The proposed Conditional Use Permit to construct a self-serve car wash was analyzed for consistency with the: 1) General Plan; 2) Zoning Ordinance; 3) Conditional Use Permit Findings, and 4) California Environmental Quality Act.

1. **General Plan**

The site has a Commercial General Plan land use designation in the Morgan Hill 2035 General Plan. The Commercial designation allows a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers. The Commercial designation allows a maximum 0.6 floor area ratio (FAR).

Figure CNF-4 (Industrial Subareas) within the General Plan identifies the property to be located within Industrial Sub Area 4. This is an identified Established Employment Area and contains heavier industrial uses and provides future opportunities for a diverse range of industrial uses, including manufacturing, materials processing, and indoor storage.

The following are General Plan Goals and Policies that are relevant to the proposed use.

City and Neighborhood Form Element

Policy CNF-15.1 Mix of Commercial Uses

Encourage a variety of commercial and office development to meet the needs of City residents.

Policy CNF-16.2 Ancillary Commercial Uses Limitations

Limit repetitive ancillary commercial uses, such as fast-foot restaurants and service stations, on lands around all interchanges.

Policy CNF- 17.2 Industrial Land Use Conflicts

Ensure proposed new uses adjacent to industrial uses do not introduce land use conflicts that would adversely impact industrial activities.

Consistency

The proposed car wash is consistent with the allowed uses within the Commercial land use designation and with surrounding uses. The nearest residences are approximately a quarter mile to the north. No conflicts are expected between the residences and the car wash. In addition, because the project site is not located in the vicinity of any existing car wash facility, the project would be consistent with Policy CNF-16.2, which limits repetitive ancillary commercial uses. The project proposes a building FAR that would be below 0.6.

Water Quality and Conservation

Policy NRE-7.1 Water Standards for Private Development

Promote water conservation and efficient water use in all private development projects. Require development to exceed State standards for the use of water.

Policy NRE-7.3 Water Efficiency and Landscaping

Promote water conservation and efficient water use in all public and private landscaping plans.

Consistency

The project plans to recycle approximately 60 percent of the water used in the washing process for later use on-site. In addition, the project would be required to comply with the City's Water Efficient Landscape requirements, which would be reviewed as part of the Architectural and Site Review Permit.

2. Zoning Ordinance

The zoning designation of the site is Administrative Office (CO). Drive-in establishments may be allowed subject to the issuance of a Conditional Use Permit (CUP). An automated car wash is considered a drive-in establishment.

The table below summarizes the project's consistency with the CO development standards.

**Table 1:
Summary of Development Standards**

Standard (CO)	Requirement	Proposed	Consistent
Setbacks:			
Front	20 feet	49.5 feet	Yes
Rear	20 feet	43 feet	Yes
Side	10 feet	> 60 feet	Yes
Street Side	15 feet	> 60 feet	Yes
Height:	3 stories or 35 feet	One story, with two story tower element, 28 feet	Yes
Building Coverage:	Maximum 50%	15% (including canopy)	Yes
Parking:	5 spaces for the first 10,000 square feet of lot area and 1 space for each 3,000 square feet thereafter 16 spaces	6 general parking spaces 16 parking spaces equipped with vacuums	Yes

Chapter 18.48 (Performance Standards) of the Morgan Hill Municipal Code provides performance standards for buildings and uses to avoid any nuisance, hazard or commonly recognized offensive condition or characteristic. As designed, the proposed car wash meets all applicable performance standards, including the clear triangle for visibility on the street corner, solid waste, hazardous materials, noise and pollution.

3. Conditional Use Permit Findings

In reviewing the application for a Conditional Use Permit, the Planning Commission shall consider the following findings:

A. The site is suitable and adequate for the proposed use.

The 1.45-acre undeveloped site would be developed with an approximately 0.15 FAR density, which is below the maximum 0.6 FAR allowed within the General Plan. The site is located at Caputo Drive and Tennant Avenue.

Access to the site would be provided by two driveways: a full-access driveway along Caputo Drive, and a right-in and right-out access only driveway located along Tennant Avenue. The project driveways along Tennant Avenue and Caputo Drive would be approximately 36 feet and 26 feet wide, respectively. The driveways would comply with the City of Morgan Hill design standards.

The car wash tunnel would be oriented parallel to Tennant Avenue, with the tunnel entrance near the east project site boundary and the exit near the west project site boundary. Vehicles entering the site via the Tennant Avenue driveway would immediately turn right into the pay station lanes, while vehicles entering the site via the Caputo Drive driveway would circulate around the car wash tunnel to enter the pay station lanes. Upon exiting the tunnel, users may exit the site via Tennant Avenue or park to access the vacuums and exit via Caputo Drive.

Each pay station lane would be approximately 140 feet long, for a total of 420 feet of on-site queue storage space. Hexagon prepared a queuing analysis to estimate the expected queue storage needed at the car wash pay stations. Based on the results of the analysis, it was determined that there would be sufficient on-site queue storage at the pay station lanes to meet the queuing demand for the car wash during peak demand and vehicles would not disrupt traffic flow on Tennant Avenue.

The proposed use will not adversely affect the existing uses that are adjacent to the site.

B. The proposed use and design would not have a substantial adverse effect on traffic circulation and on the planned capacity of the street system.

Primary access to the project site will be from Tennent Avenue. Secondary access will be provided along Caputo Drive. The project is expected to draw approximately 200 customers per day. The Transportation/Circulation Section of the Initial Study provides expected Trip Generation and Operation Analysis information for the project. It is expected that the project would generate 34 trips during the AM peak hour and 58 trips during the PM peak hour. Many of the trips would be considered pass-by trips or trips that are already accounted for in the circulation system.

The level of traffic associated with the project is not expected to impact the capacity of the roadway system. Based on expected trip generation, a facility of this size does not warrant the preparation of a Transportation Impact Study in accordance with the Planning Commission Policy regarding Guidelines for Preparation of Transportation Impact Reports.

- C. **The proposed use at the location will not adversely affect the peace, health, safety, morals, or welfare of persons residing or working in the surrounding area, or impair the utility or value of property of other persons located in vicinity of the site, or be detrimental to public health, safety or general welfare.**

There are no sensitive uses near the proposed use that will be adversely impacted by the proposed car wash.

Chemicals used in the cleaning process would be bio-degradable and non-hazardous. The equipment will not generate noise above levels allowed by the Zoning Code, as determined in the Initial Study.

The project's operations would not adversely affect the peace, health, safety, morals or welfare of persons residing or working in the surrounding areas. The project would not impair the utility or value of the property of other persons located near the site and will not be detrimental to the health, safety or general welfare.

- D. **The design of the project is compatible with existing and proposed development within the district and its surroundings.**

The project is for the new construction of a 5,370 square foot automated car wash with an 895 square foot entry canopy. The size and façade of the building would be complementary to the adjacent structures. The project will be required to comply with the site development (height and setback) standards. Detailed site, architectural, and landscaping plans will be reviewed as part of the Architectural and Site Review Permit. The proposed use would be compatible with existing and proposed development within the district and its surroundings.

Conclusion

The proposed use is compatible with the surrounding uses and will provide a desired car wash service to workers and residents in the area. Staff recommends approval of the proposed Conditional Use Permit.

4. **California Environmental Quality Act (CEQA):**

An Initial Study/Mitigated Negative Declaration (IS/MND) has been completed for the project in accordance with the requirements of CEQA. The IS/MND was circulated for 30-days from March 23 to April 23, 2018. A copy of the MND and IS are attached (Attachments 6 and 7). Some topics noteworthy of discussion include Biological Resources, Noise, Hazards and Traffic. Of these topics, Biological Resources and Noise required mitigation measures to reduce potential significant impacts on the environment to a less than significant level.

a. Biological Resources

The proposed project site is located within the boundaries of the Santa Clara Valley Habitat Plan (SCVHP). The SCVHP designates the site as an Urban-Suburban developed land cover type. The Urban-Suburban land cover type is described in the SCVHP as developed areas “where the native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as one or more structures per 2.5 acres.” Typically, species covered by the SCVHP are unlikely to occur within Urban-Suburban areas. Pursuant to the SCVHP Geobrowser program, the project site is not located within a designated Plant or Wildlife Survey Area for any covered species.

Only the western burrowing owl has the potential of inhabiting the proposed project site, according to habitat requirements listed in Appendix D of the SCVHP. Burrowing owls do not require a specific vegetation cover or soil type and typically use vacated burrows dug by small mammals as nesting habitat; however, burrowing owls are also known to use artificial burrows including pipes, culverts, and piles of concrete pieces in urban areas. While the project site is not located within a Burrowing Owl Fee Zone, potential impacts to burrowing owls could occur as a result of the proposed development.

In June 2003, the City of Morgan Hill adopted the Citywide Burrowing Owl Habitat Mitigation Plan. The purpose of the plan was to create a comprehensive program to mitigate impacts to burrowing owls, a “Species of Special Concern”, and their habitat, instead of addressing such impacts on a project-by-project basis. The City has established a 30.5-acre preserve for the burrowing owl off Edmundson Avenue. Lands subject to the Citywide Burrowing Owl Habitat Mitigation Plan are those lands that are below 600 feet in elevation above sea level and support any grassland and/or mixed herbaceous vegetation upon which an activity is proposed that is defined as a “project” by CEQA. Given that the project site is located at approximately 331 feet above mean sea level (msl) and contains low enough herbaceous ground cover to support burrowing owl, the

proposed project would be subject to the City's Habitat Mitigation Plan for burrowing owl.

Should the project not comply with the mitigation requirements of the City's Burrowing Owl Mitigation Plan, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Therefore, the implementation of Mitigation Measures to reduce the impacts to the Burrowing Owl have been recommended.

b. Hazards

There are no known recognized environmental conditions (REC's) identified at the project site; however, a REC has been identified at property located west of the project site (425 Tennant Avenue). Records indicate that the manufacturing of signal flares at the site resulted in discharge of perchlorate to soils and underlying groundwater. A significant impact could result if there is contact with groundwater or if the soil surrounding the ground water includes vapor intrusion from the contamination. There is open remediation.

The measured depth to groundwater within the project vicinity is approximately 15 to 40 feet depending on the time of the year based on groundwater monitoring well data. For example, in 2014, depth to water at a well located adjacent to the site's eastern boundary was reported to be 33.02 feet. Groundwater in the project area generally flows to the southeast. Construction activities associated with the proposed project would require a maximum excavation depth of two feet for building foundations and approximately six feet and three inches for installation of the proposed water clarifier tanks associated with the car wash operations. Consequently, contaminated groundwater would not be encountered during project construction and, thus, the project would not have the potential to release hazardous materials through construction activities.

Contaminated groundwater would not pose a substantial human health risk to the proposed project due to vapor encroachment into the project site because the chemical associated with the contamination does not readily volatilize. Therefore, development of the project would not result in the creation of a significant hazard to the public or the environment requiring project mitigation measures.

c. Noise

It is expected that the project would have temporary significant impacts associated with the construction of the facility. However, the operation of the facility would not meet the thresholds of significance for noise. The primary noise source associated with the operation of the proposed project would be industrial dryers at the west end of the proposed car wash tunnel. The nearest noise sensitive use would be the existing office building located approximately 220 feet

to the north of the proposed car wash tunnel exit, where the dryers would be located. The office building is set back approximately 55 feet from the property line.

Car wash dryer noise levels would be approximately 65 dB at the property line of the office building and 63 dB at the office building façade. Standard construction practices for commercial buildings provide a typical exterior to interior noise reduction of 25 dB, and considering that the existing office building is located approximately 220 feet from the proposed car wash building, car wash dryer noise levels would comply with the City's 45 dBA Leq interior noise level standard for office buildings. In addition, the project would comply with Section 18.48.075 of the City's Municipal Code, which establishes a noise level maximum of 65-70 dB at the lot line of all uses adjacent to offices, retail uses, or other sensitive industries. As a result, noise mitigation measures would not be required for the proposed car wash operations. Mitigation has been provided for construction noise.

d. Traffic

Given that both study intersections (Butterfield/Tenant and Caputo/Tenant) currently operate acceptably according to applicable City Level of Service (LOS) standards and the proposed project would add fewer than 100 trips to the local roadway network during the AM and PM peak hours, the proposed project would not meet the City's criteria for preparation of a full traffic study and the project would not conflict with the Santa Clara VTA Congestion Management Program (CMP). The project would not cause the study intersections to exceed the LOS standards for the existing plus project conditions. Therefore, the proposed project would not conflict with an applicable plan, ordinance, policy or congestion management plan for the area related to traffic, and a less-than-significant impact would occur.

The proposed on-site circulation would be designed consistent with all applicable City roadway requirements and would provide adequate emergency access to the site. The proposed project would provide adequate queuing storage capacity to accommodate maximum projected queue lengths for the proposed car wash tunnel. The proposed project would not increase hazards due to a design feature, such as a sharp curve or dangerous intersection, or incompatible uses and would have a less than significant impact related to emergency access and hazardous design features.

A Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the project which includes all measures required to reduce potentially significant environmental impacts to a less-than-significant level. In addition, the MMRP identifies the timing of implementation; the agency responsible for implementing the mitigation; and the agency responsible for monitoring the mitigation. The MMRP has been attached (Attachment 8). The project results in no significant environmental impacts with the

inclusion of Standard Mitigation Measures for Biological Resources (special status animal species - Burrowing owl) and Noise (construction phase).

Community Engagement

The Morgan Hill community was informed about the proposed project through public notification including site signage, newspaper notice, and direct mail to property owners within 300 feet of the project.

LINKS/ATTACHMENTS:

1. MND Resolution - Caputo Huang
2. Caputo-Huang Draft Resolution and Conditions
3. Project Plans
4. Letter of Justification - Zip Thru Car Wash 16015 Caputo Dr Morgan Hill
5. Statement of Proposed Operations - Zip Thru Car Wash 16015 Caputo Dr Morgan Hill
6. Caputo-Huang MND
7. Initial Study
8. MMRP

RESOLUTION NO.

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL ADOPTING THE MITIGATED NEGATIVE DECLARATION THAT WAS PREPARED IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE CAPUTO - HUANG PROJECT (APN 817-29-027)

WHEREAS, prior to the adoption of this Resolution, the Planning Division of the City of Morgan Hill prepared an Initial Study and a Mitigated Negative Declaration for the Caputo-Huang Project (Planning File No's. UP2017-0013, EA2017-0013) in accordance with the requirements of the California Environmental Quality Act of 1970, as amended ("CEQA"), and state and local guidelines implementing CEQA; and

WHEREAS, the Caputo-Huang Project ("Project") Initial Study/Mitigated Negative Declaration analyzed the request to build and operate a drive-through, self-service and automated car wash for property located at 16015 Caputo Drive (APN 817-29-027); and

WHEREAS, in connection with the approval of a project involving the preparation of an Initial Study/Mitigated Negative declaration that identifies one or more significant environmental effects, CEQA requires the decision-making body of the lead agency to incorporate feasible mitigation measures that would reduce those significant environment effects to a less-than-significant level; and

WHEREAS, whenever a lead agency approves a project requiring the implementation of measures to mitigate or avoid significant effects on the environment, CEQA also requires a lead agency to adopt a Mitigation Monitoring and Reporting Program to ensure compliance with the mitigation measures during project implementation; and

WHEREAS, the City of Morgan Hill is the lead agency on the Project, and the Planning Commission is the decision-making body for the proposed Project; and

WHEREAS, the Planning Commission has reviewed and considered the Initial Study/Mitigated Negative Declaration and related Mitigation Monitoring and Reporting Program for the Project; and

WHEREAS, the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for the Project are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, the Project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 89.5 of the California Department of Fish and Game Code.

Resolution No.

Page 2

NOW THEREFORE BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL AS FOLLOWS:

SECTION 1. THAT THE PLANNING COMMISSION does hereby make the following findings:

- (1) It has independently reviewed and analyzed the Initial Study/Mitigated Negative Declaration and other information in the record and has considered the information contained therein, prior to acting upon the Project;
- (2) The Initial Study/Mitigated Negative Declaration prepared for the Project has been completed in compliance with CEQA and consistent with state and local guidelines implementing CEQA; and
- (3) The Initial Study/Mitigated Negative Declaration represents the independent judgment and analysis of the City as lead agency for the Project. The Community Development Director of the Community Development Department at 17575 Peak Avenue, Morgan Hill, California 95037, is the custodian of documents and records of proceedings on which this decision is based.

SECTION 2. THAT THE PLANNING COMMISSION does hereby adopt the Mitigation Monitoring and Reporting Program prepared for the Project. The Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program are: (1) on file in the Community Development Department, Planning Division, located at 17575 Peak Avenue, Morgan Hill CA 95037 and (2) available for inspection by any interested person.

PASSED AND ADOPTED THIS 24th DAY OF APRIL, 2018, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

JOHN MCKAY, Chair

Attachment: MND Resolution - Caputo Huang [Revision 1] (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Resolution No.
Page 3

AFFIDAVIT

We, _____, applicants, hereby agree to accept and abide by the terms and conditions specified in this resolution.

By: _____

Date: _____

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL APPROVING A CONDITIONAL USE PERMIT TO ALLOW A DRIVE-THROUGH, SELF-SERVICE, AUTOMATED CAR WASH WITH VACUUMS LOCATED ON THE SOUTHWEST CORNER OF CAPUTO DRIVE AND TENNANT AVENUE (817-29-027) IN THE CO ADMINISTRATIVE OFFICE ZONING DISTRICT.

WHEREAS, such request was considered by the Planning Commission at its regular meeting of April 24, 2018, at which time the Planning Commission approved Conditional Use Permit UP2017-0015: Caputo-Huang; and

WHEREAS, testimony received at a duly-noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The approved Conditional Use Permit is consistent with the Zoning Ordinance and the General Plan.

SECTION 2. The City as the lead agency for the Project has determined that the project is subject to environmental review pursuant to provisions of the California Environmental Quality Act (CEQA) Guideline Section 15070, Decision to Prepare a Negative or Mitigated Negative Declaration. An Initial Study/Mitigated Negative Declaration was prepared for the project by Raney Planning and Management, Inc. in March 2018 and identified potential significant impacts with the implementation of the project. Those impacts have been reduced to a level of less than significance with the incorporation of mitigation measures. A Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program have been adopted for the project.

SECTION 3. The approved conditional use has been found consistent with the criteria for Conditional Use Permit approval contained in Section 18.54.050 of the Zoning Code. The basis and the findings are set forth in the staff report for this item in the Planning Commission Meeting of April 24, 2018, which findings were duly considered by the Commission and are hereby adopted.

SECTION 4. The use shall be expressly conditioned on conformance to conditions incorporated herein and as attached as Exhibit "A".

**PASSED AND ADOPTED THIS 24TH DAY OF APRIL 2018, AT A REGULAR MEETING
OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:**

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

JOHN MCKAY, Chair

Date: _____

**EXHIBIT "A" STANDARD CONDITIONS
APPLICATION: UP2017-0015 CAPUTO-HUANG.**

THE FOLLOWING ARE STANDARD CONDITIONS OF APPROVAL THAT MUST BE MET PRIOR TO THE ISSUANCE OF BUILDING PERMITS AND/OR SITE DEVELOPMENT PERMITS EXCEPT AS MAY BE SPECIFIED IN THE CONDITIONS. THE APPROVAL REQUIREMENTS INCLUDE THESE REQUIREMENTS AND ANY SPECIAL CONDITIONS THAT ARE APPLIED THROUGH THE DEVELOPMENT APPROVAL PROCESS. APPLICANTS ARE REQUIRED TO SIGN THE APPROVAL CERTIFICATE/RESOLUTION FORM INDICATING THEY UNDERSTAND AND AGREE TO IMPLEMENT THESE STANDARD CONDITIONS AND ANY SPECIAL CONDITIONS APPLIED TO THEIR PERMIT APPROVAL.

ACRONYMS:

MHMC – Morgan Hill Municipal Code

MHARH – Morgan Hill Architectural Review Handbook

PLANNING DIVISION

I. TIME LIMITS

- A. The Conditional Use Permit approval granted as described in the Planning Commission Staff report dated April 24, 2018 shall remain in effect for 12 months to April 24, 2019. Failure to commence the use within this term shall result in termination of approval unless an extension of time is granted prior to the expiration date. **(MHMC 18.54.070 A, B)**
- B. In accordance with Section 18.54.090 of the Municipal Code, the Development Services Department shall conduct an annual review of the approved use for compliance with specified conditions. The Department may initiate corrective action as specified in the aforementioned Code Section if necessary to ensure compliance with said conditions. **(MHMC 18.54.090)**

II. SITE DEVELOPMENT

- A. Final site development plans and/or modifications to the exterior building shall be reviewed and approved by the Development Services Department as required through an Architectural and Site Review Permit prior to issuance of a building permit.

III. CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. An IS/MND has been prepared for this project per CEQA. All Mitigations shall be implemented as required by the Mitigation Monitoring and Reporting Program:

BIO-1: A pre-construction survey shall be conducted by a qualified Burrowing Owl biologist no more than 30 days prior to initiation of any ground disturbing (construction) activity to assure take avoidance of burrowing owls. The survey shall consist of a habitat assessment, burrow survey, owl survey, and completion of a written report. The written report shall be submitted to the Community Development Department. If owls are observed during the preconstruction survey, no impacts to the owls or their habitat will be allowed during the nesting season (February 1 to August 31).

BIO-2: Should burrowing owls be found on the site during the breeding season (February 1 through August 31), exclusion zones, with a 250-foot radius from occupied burrows, shall be established. All development-related activities shall occur outside of the exclusion area until the young have fledged.

BIO-3: If pre-construction surveys are conducted during the non-breeding season (September 1 through January 31) and burrowing owls are observed on the site, the owls may be relocated upon approval by the California Department of Fish and Wildlife, in accordance with the Burrowing Owl Mitigation Plan.

NOI-1: During construction activities associated with the proposed project, all internal combustion engines used at the project site shall be equipped with a type of muffler recommended by the vehicle manufacturer. All equipment shall be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components. In addition, the project applicant shall comply with the following:

- Noise-generating construction activities shall be limited to the daytime hours of 7:00 AM to 8:00 PM Monday through Friday and from 9:00 AM to 6:00 PM Saturday, consistent with Chapter 8.28 of the Morgan Hill Municipal Code;
- All diesel-powered equipment shall be located more than 200 feet from any noise sensitive use if the equipment is to operate for more than several hours per day; and
- Mobile equipment (haul trucks, concrete trucks, etc.) shall avoid local streets near residences and other noise-sensitive uses to the maximum extent feasible.

Furthermore, subject to equipment availability and cost considerations, the project applicant shall implement the following:

- Earth Removal: Scrapers shall be used as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
- Backfilling: Backhoes shall be used for backfilling, as such equipment is less costly and quieter than either dozers or loaders.
- Ground Preparation: Graders shall be used rather than dozers for final grading.
- Building Construction: Power saws shall be shielded or enclosed where practical to decrease noise emissions. Nail guns shall be used where possible as they are less noisy than manual hammering.
- Generators, Compressors, and Other Stationary Equipment: The project applicant shall ensure that generators, compressors and other stationary equipment that are housed in acoustical enclosures are used rather than equipment housed in weather enclosures or not housed in enclosures at all. Acoustical enclosures are often available with rented equipment. The equipment shall be placed as far from sensitive receptors as feasible.
- The project applicant shall provide a noise disturbance coordinator with a phone line and voicemail/answering machine. Signs with the noise disturbance coordinators contact information shall be posted on the project site at a highly visible location.
- Vehicle paths within the project site shall be graded smooth, as rough roads and paths can cause significant noise and vibration from trucks (particularly empty trucks) rolling over rough surfaces.

IV. OTHER CONDITIONS

- A. The Conditional Use Permit is approved solely for the operation of the car wash as described in the applicants proposed statement of operations on file with the Planning Division (Application UP2017-0015: Caputo-Huang) and as shown in the area depicted on the illustrations in the set of plans dated October 23, 2017. Any expansion, intensification, or changes to the uses approved under this Conditional Use Permit shall be permitted only upon amendment of this Conditional Use Permit or approval of a separate Conditional Use Permit application.
- B. The hours of operation are restricted to 7:00AM-9:00PM, 7 days a week.
- C. Applicant agrees to defend and indemnify and hold City, its officers, agents, employees, officials and representatives free and harmless from and against any and all claims, losses, damages, injuries, costs and liabilities arising from any suit for damages or for equitable or injunctive relief which is filed against City by reason of its approval of

this Condition Use Permit approval. In addition, applicant shall pay all pre-tender litigation costs incurred on behalf of the City including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals, but shall not be required to pay any litigation from the City. However, applicant shall continue to pay reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted. The undersigned hereby represents that they are fully empowered by the applicant as their agent to agree to provide the indemnification, defense and hold harmless obligations, and the signature below represents the unconditional agreement by applicant to be bound by such conditions.

- D. Notice is hereby given that, pursuant to the Mitigation Fee Act, the City of Morgan Hill charges certain fees (as such term is defined in Government Code Section 66000) in connection with approval of your development project for the purpose of defraying all or a portion of the cost of public facilities related to your development project (Mitigation Fee Act Fees). These fees do not include fees for processing applications for governmental regulatory actions or approvals, fees collected under development agreements, or as a part of your application for development allocations under the City's Residential Development Control System. The Mitigation Fee Act Fees applying to your project are listed in the schedule of fees provide. Notice is also hereby given that you have the opportunity to protest the imposition of the Mitigation Fee Act Fees within 90 days of the approval of the approval or conditional approval of your development project and that the 90-day approval period in which you may protest has begun.
- E. Submit two (2) signed copies of Resolution No. _____ to the Planning Division prior to issuance of building permits.

ENGINEERING DIVISION

- A. Standard conditions – Engineering conditions shall be provided with future Site Review (SR) and/or Tentative Map (SD) applications.
- B. Subdivision of land (future or proposed)
 - a. The northern portion of the property appears to be dedicated for future use. Access to that portion of land shall have joint access from the car wash's Caputo driveway approach.
 - b. No additional drive approach shall be installed on Caputo, with future development of this lot or subdivision. A deed restriction shall be recorded with the property.
 - c. Verify if there are plans to subdivide the current lot in the future.
- C. Impact Fees – Engineering impact fees are required and shall be paid prior to issuance of future Building Permits.

BUILDING DIVISION

- A. The owner or designee shall follow all applicable building codes.
- B. This building will require a structural analysis as prescribed in Chapter 34 CBC.
- C. Building Permits Required. Tenant Improvement Plans clearly showing all construction details for rated occupancy separations, accessibility, egress equipment anchoring and full compliance with California Building, Fire, Electrical, Plumbing and Mechanical Codes from a Licensed Architect or Engineer.

POLICE DEPARTMENT

- A. The applicant shall comply with applicable provisions of the City's building security ordinance. Exterior lighting shall comply with criteria specified in the Design Review Ordinance. **(MHMC 18.74.050)**
- B. Prior to the issuance of a building permit, a Security and Safety Management Plan shall be submitted and reviewed by the Morgan Hill Police Department to the satisfaction of the Chief of Police.

ZIP THRU EXPRESS

CAR WASH

16015 CAPUTO DRIVE
MORGAN HILL CALIFORNIA 95037

PROJECT DATA

ASSESSOR'S PARCEL NUMBER(S):	817-29-027	LOT COVERAGE	
ZONING:	CS - COMMERCIAL	% BUILDING:	5,000/ 43070 = 11.6%
PROJECT SITE AREA (GROSS):	63,162 SF (1.45 ACRES)	% PARKING:	22,277.8/ 43070 = 51.7%
PROJECT SITE AREA :	43,070 SF	% LANDSCAPING:	11,273.6 / 43070 = 26.7%
FUTURE DEVELOPMENT SITE AREA :	20,092 SF	% HARDSCAPE:	4320.6 / 43070 = 10%
BUILDING DATA:		FLOOR TO AREA RATIO:	
STRUCTURE	C.B.C. OCCUP.	TYPE OF CONST.	AREA
GROSS BUILDING AREA			
CAR WASH BUILDING	B	V A	5,370 SF
ENTRY CANOPY	B	V A	895 SF
TRASH ENCLOSURE	U	V B	198 SF
PARKING DATA:			
REQUIRED PARKING: 5 SPACES FOR FIRST 10,000 SF OF LOT AREA			
+1 SPACE PER 3,000 SF OF LOT AREA			= 16 REQUIRED
CAR WASH			21 CAR QUEUING TO PAY + 4 CAR QUEUING TO WASH
GENERAL PARKING:			7 STALLS INCLUDING 1 ACCESSIBLE
VACUUM PARKING:			15 STALLS + THE ACCESSIBLE STALL
			TOTAL PARKING: 22 SPACES

SITE PLAN KEYNOTES

- 1

MONUMENT SIGN
- 2

VACUUM EQUIPMENT, IN BUILDING
- 3

VACUUM ARCHES AND SHADE FABRIC BY VACUTECH LLC. (16)
- 4

PAY STATIONS WITH CANOPY AUTOMATED ATM STYLE WITH GATES
- 5

A/C PAVING.
- 6

CONCRETE PAVING

7

TRASH ENCL. CONC. WITH ROOF

8

ESCAPE LANE FOR VEHICLES UNABLE TO GO THROUGH WASH BUILDING

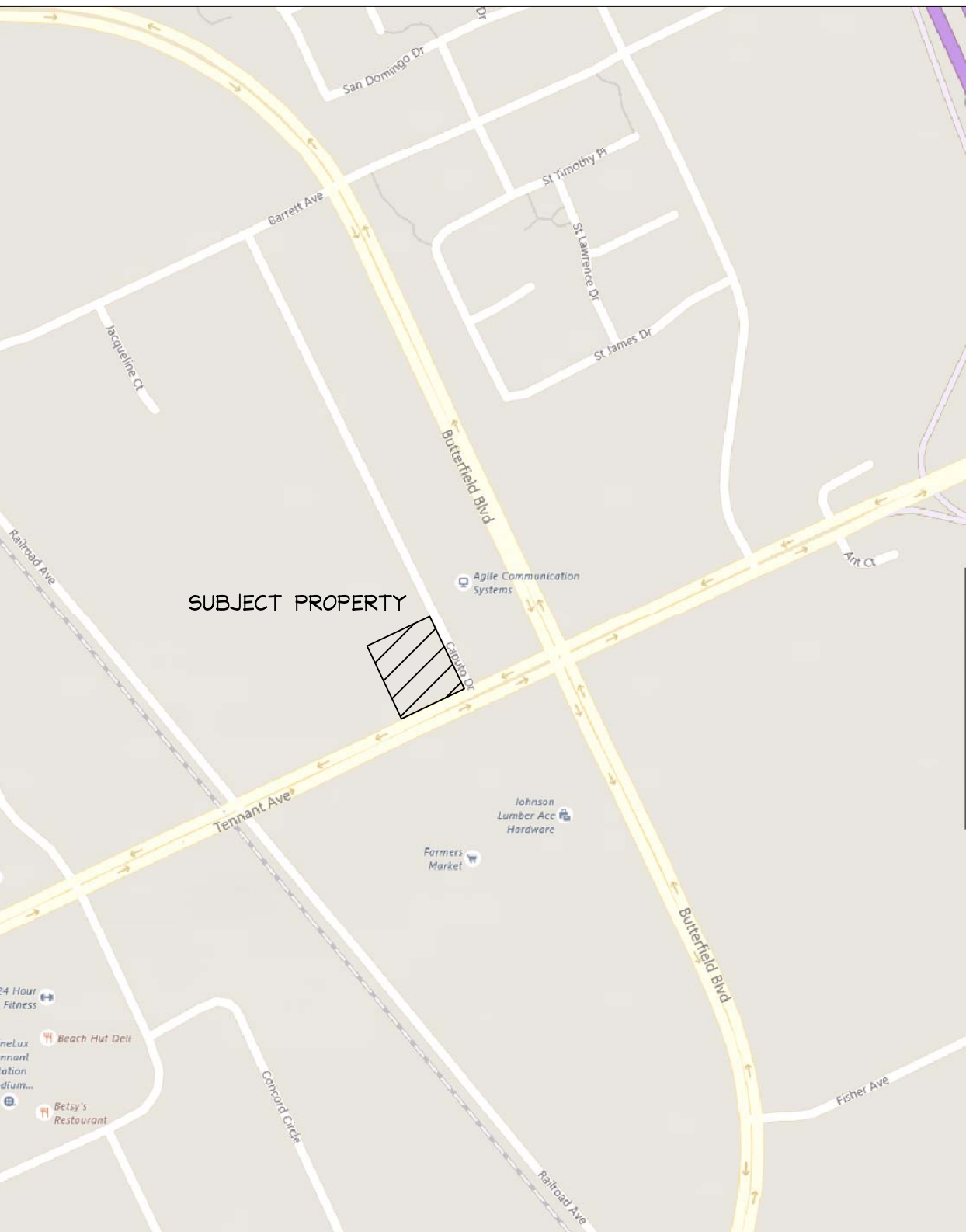
9

VENDING KIOSK

10

RECYCLING CLARIFYING TANKS

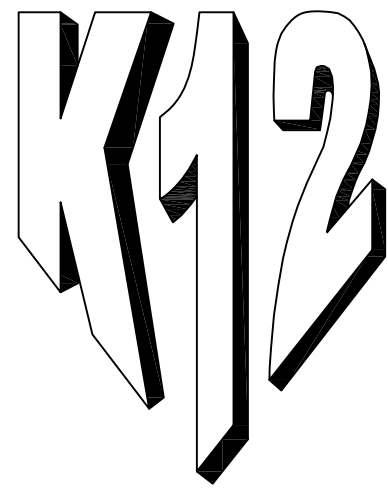
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FUTURE DEVELOPMENT AREA

VICINITY
MAP

16015 CAPUTO DRIVE
MORGAN HILL

SCALE: 1" = 500'



Architects

K12 Architects, Inc

3090 Fite Circle, #104
Sacramento, CA 95827

PH:(916) 455-6500 FAX:(916) 455-8100

CONSULTANTS:

CONTRACTOR:

PROJECT:

ZIP
THRU
EXPRESS
CAR
WASH

16015 Caputo Drive
Morgan Hill, CA 95037

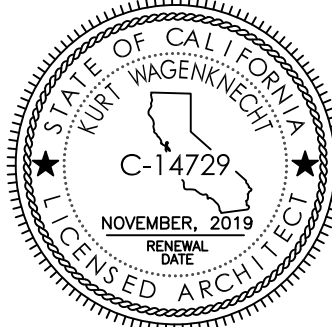
DEVELOPER:

VVI-INC
Paul Sagayaraj
1022 Banyan Ct
San Jose, CA 95131

510-468-2685

REVISIONS:

PROFESSIONAL SEALS:



PROJECT NUMBER:

17-048

PROJECT DATE:

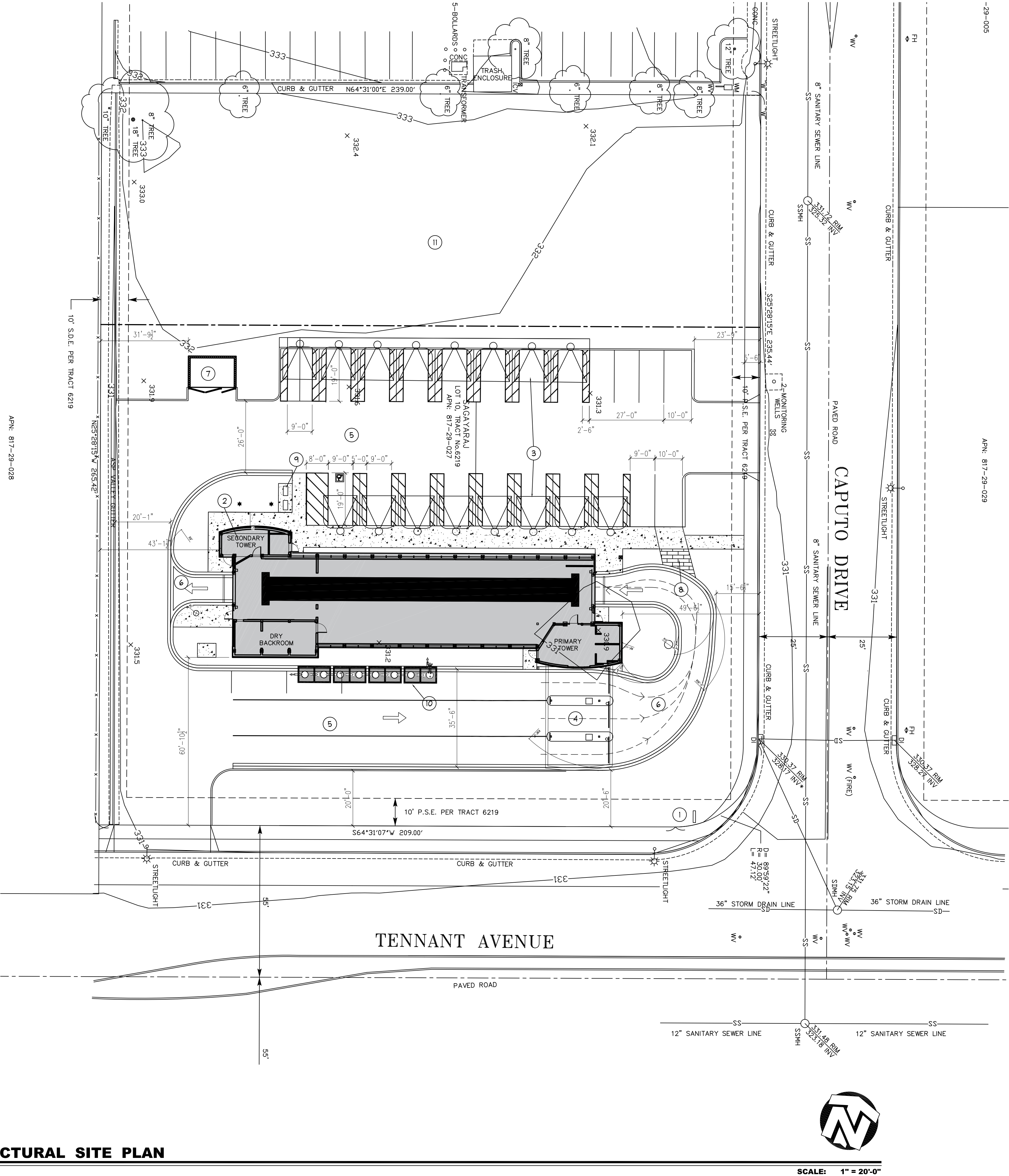
10-23-17

SHEET CONTENTS:

CONCEPTUAL
SITE PLAN

SHEET NUMBER:

A101



SCALE: 1" = 20'-0"



Architects

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CONSULTANTS:

CONTRACTOR:

PROJECT:

**ZIP
THRU
EXPRESS
CAR
WASH**

**16015 Caputo Drive
Morgan Hill, CA 95037**

DEVELOPER:

VVI-INC
1022 Banyan Ct
San Jose, CA 95131

REVISIONS:

PROFESSIONAL SEALS:

PROJECT NUMBER:	PROJECT DATE:
17-048	10-23-17

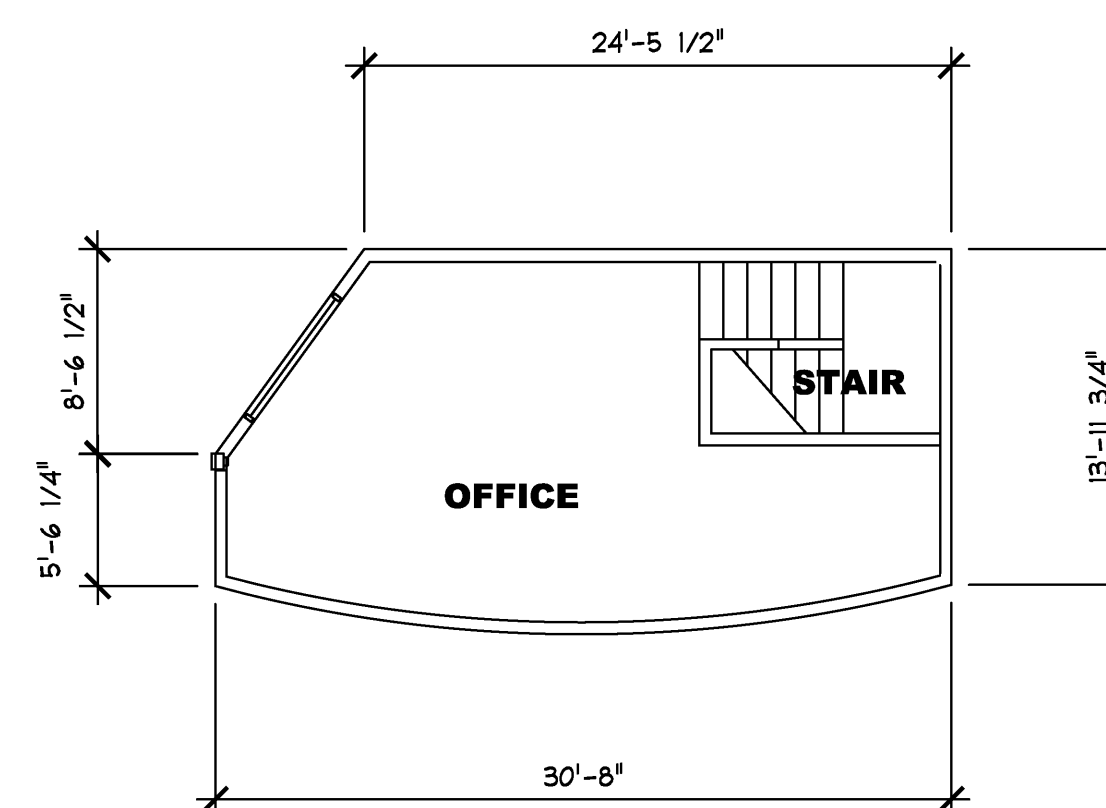
SHEET CONTENTS

CAR WASH FLOOR PLAN

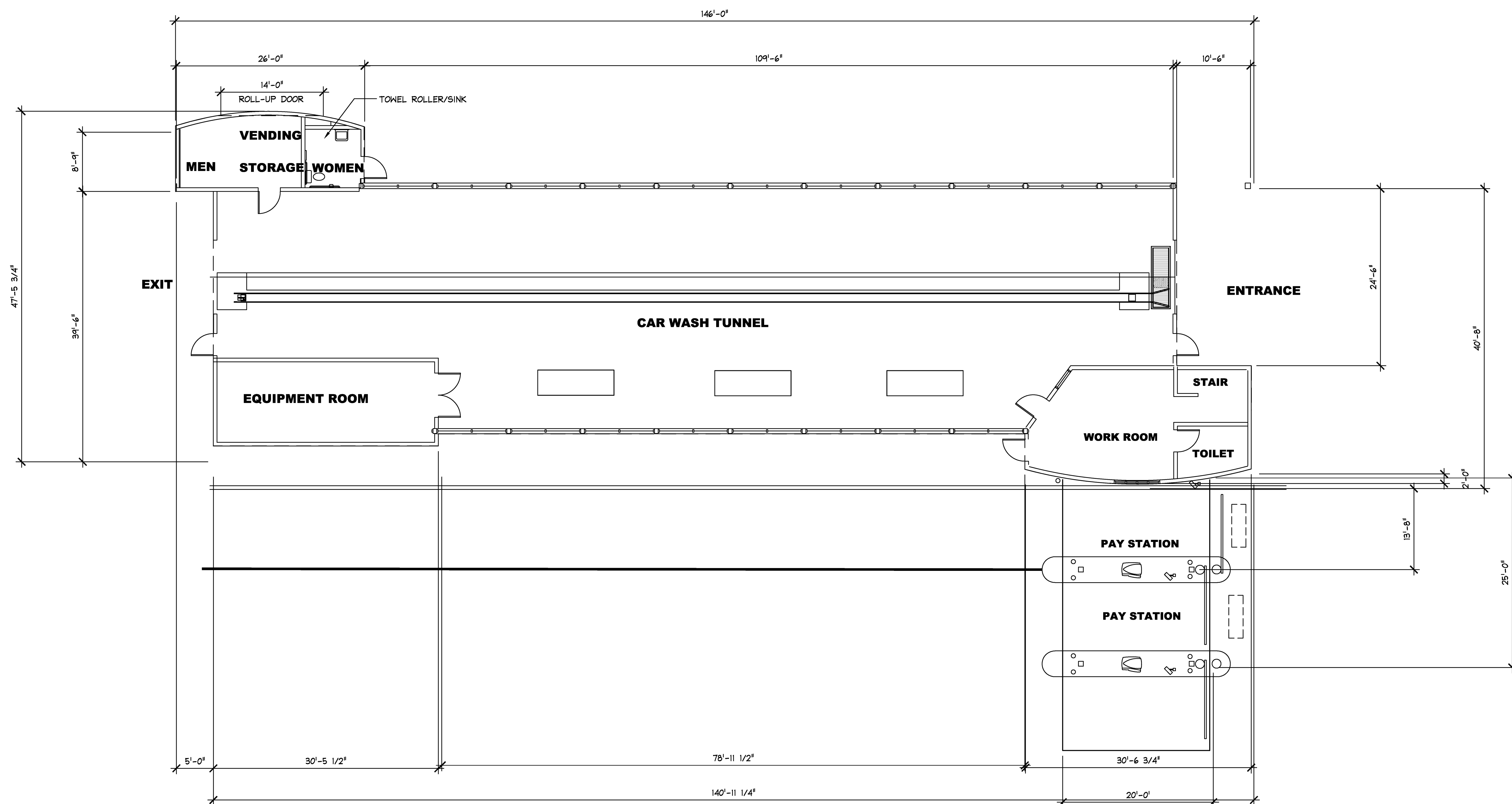
SHEET NUMBER:

A201

Packet Pg. 32



20 SECOND FLOOR PLAN



20 CAR WASH FLOOR PLAN

SCALE: 1/8" = 1'-0"





K12 Architects

K12 Architects, Inc
3090 Fife Circle, #104
Sacramento, CA 95827

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CONSULTANTS:

CONTRACTOR:

PROJECT:

**ZIP
THRU
EXPRESS
CAR
WASH**

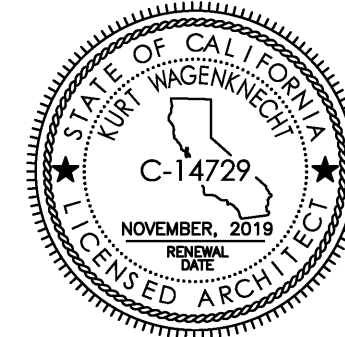
**16015 Caputo Drive
Morgan Hill, CA 95037**

DEVELOPER:

**VVI-INC
1022 Banyan Ct
San Jose, CA 95131**

REVISIONS:

PROFESSIONAL SEALS:



PROJECT NUMBER:

17-048

PROJECT DATE:

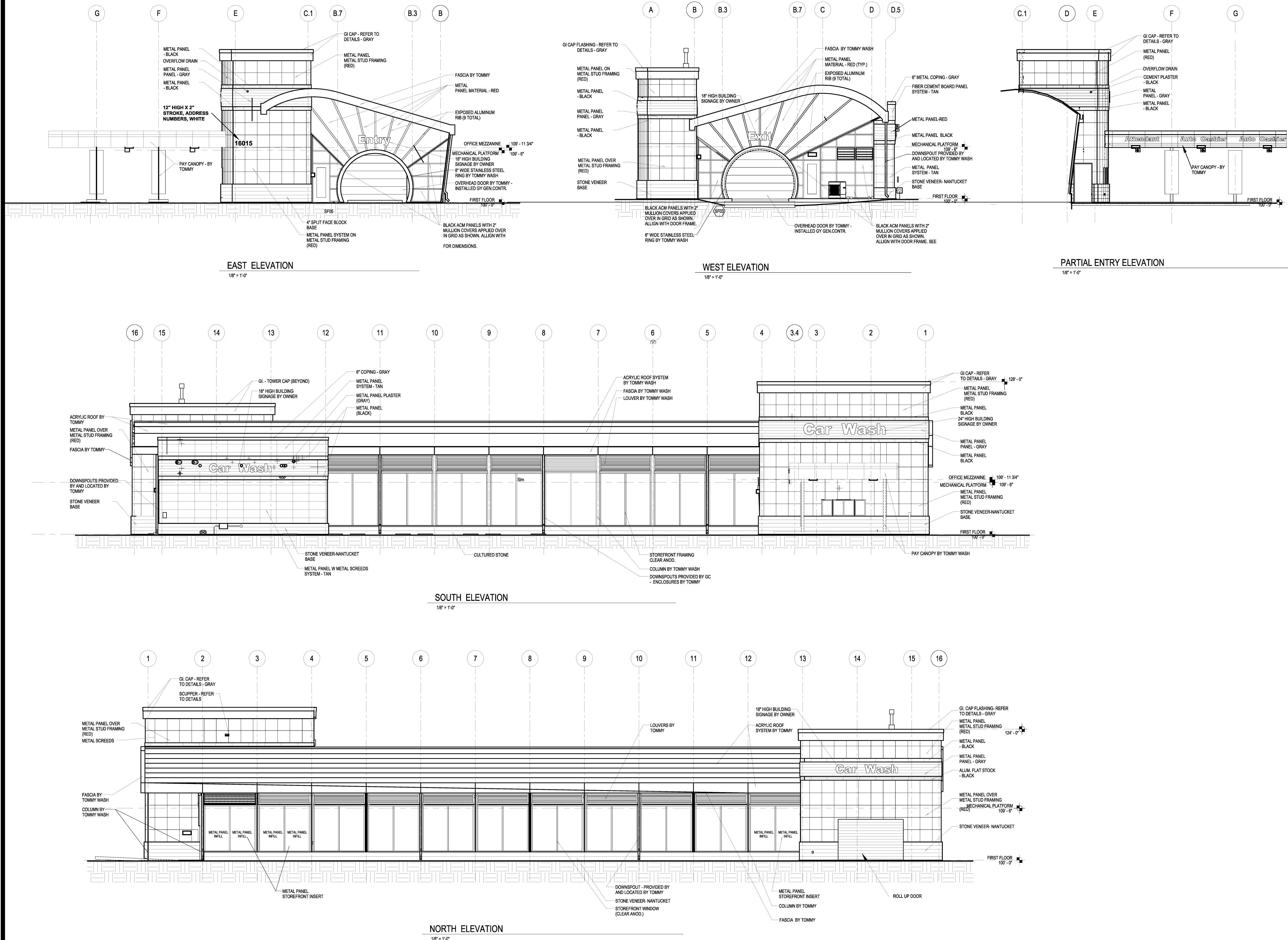
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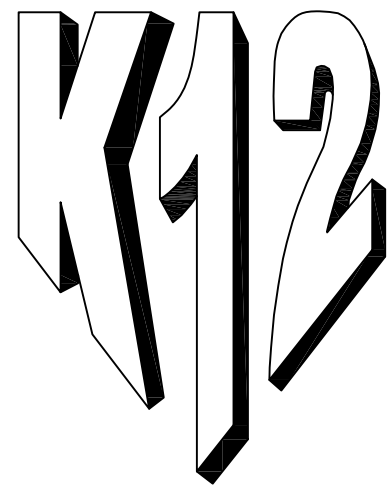
SHEET CONTENTS:

**EXTERIOR
ELEVATIONS**

SHEET NUMBER:

A301





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CONSULTANTS:

CONTRACTOR:

PROJECT:

**ZIP
THRU
EXPRESS
CAR
WASH**

**16015 Caputo Drive
Morgan Hill, CA 95037**

DEVELOPER:

**VVI-INC
Paul Sagayaraj
1022 Banyan Ct
San Jose, CA 95131

510-468-2685**

REVISIONS:

PROFESSIONAL SEALS:



PROJECT NUMBER: **17-048** PROJECT DATE: **10-23-17**

SHEET CONTENTS:

**TRASH ENCLOSURE
VACUUMS**

SHEET NUMBER:

A302

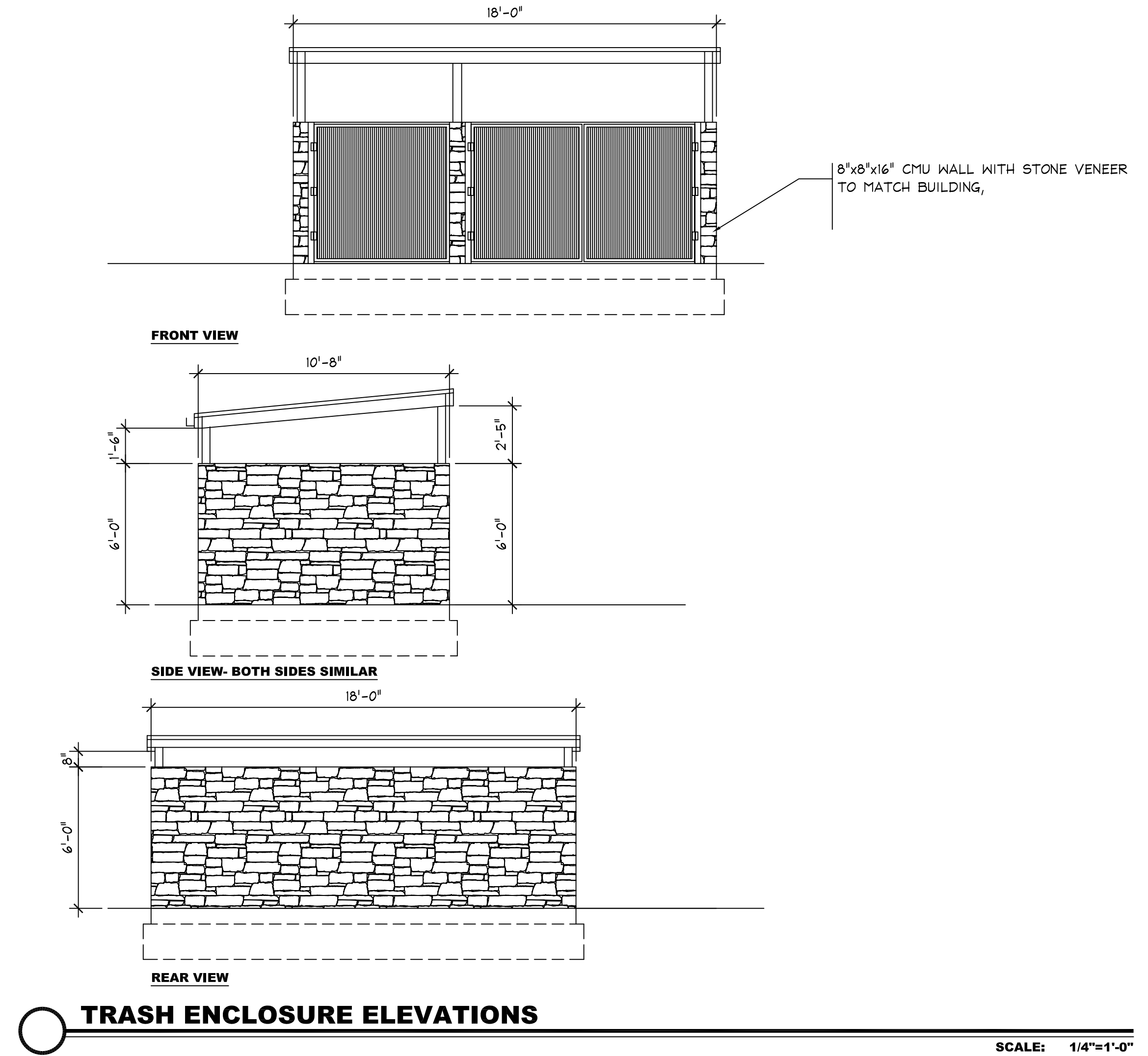
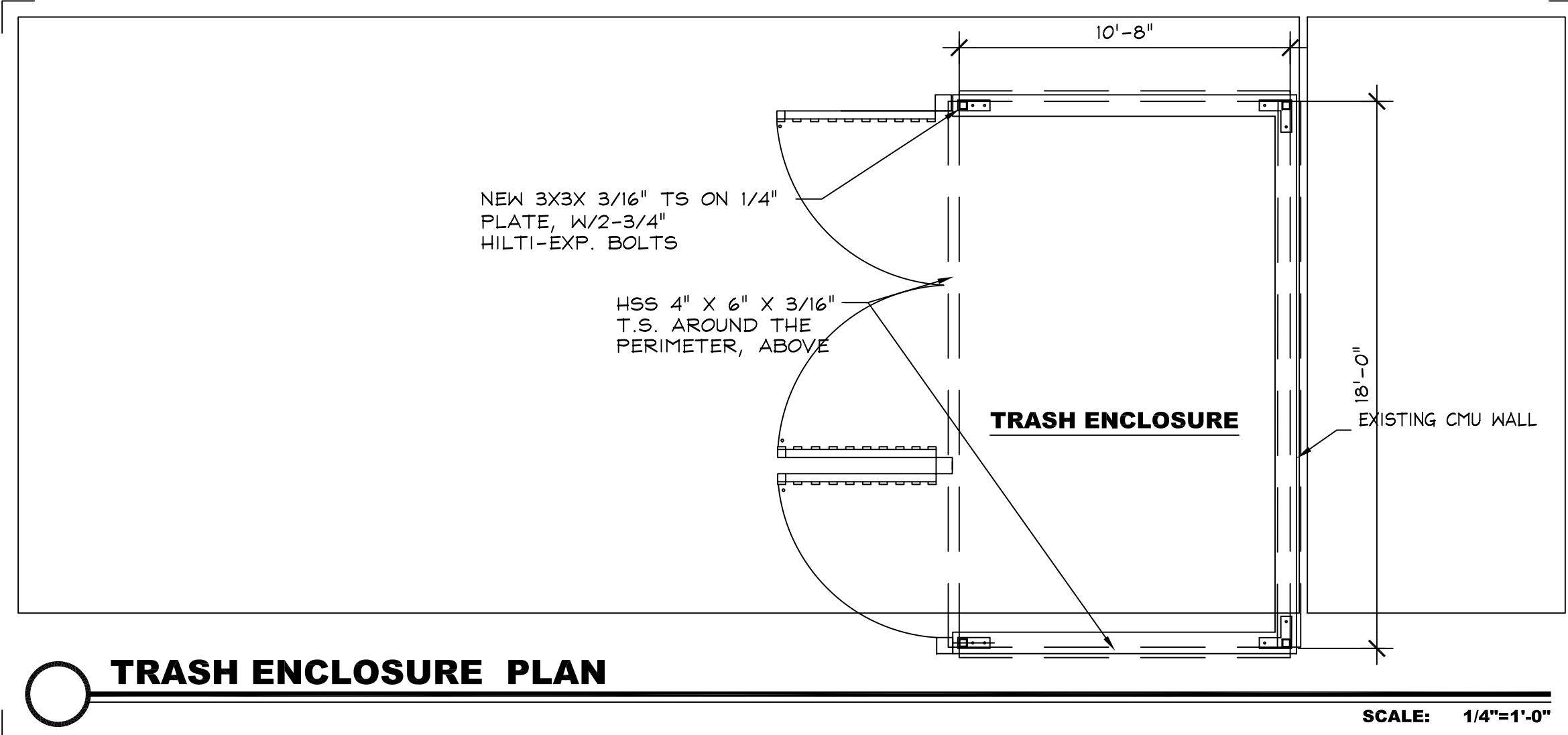
Attachment: Project Plans (1716 - UP2017-0015: Caputo-Huang- Conditional Use Permit)

VACUUM, Model R-VA2476-1116

TOP VIEW

SIDE VIEW

A.V.W. Equipment Co. Inc. 105 South 9th Avenue, Maywood, IL., 60153
Phone: 708-343-7738 Fax: 708-343-9065 email: info@avwequipment.com Website: www.avwequipment.com





SITE PLAN
SCALE: 1" = 20' - 0"

SUGGESTED PLANT LIST

TREES:				
SYMBOL	DESCRIPTION	SIZE	COUNT	
	QUERCUS ILEX HOLLY OAK	15 GAL.	5	
	PISTACHIA CHINENSIS CHINESE PISTACHE	15 GAL.	7	
	ACER RUBRUM OCTOBER GLORY RED MAPLE	15 GAL.	3	
	LAGERSTROEMIA TUSCARORA RED CRAPE MYRTLE	15 GAL.	12	

SHRUBS, VINES AND ACCENTS

BOTANICAL NAME	COMMON NAME	CONTAINER	WATER USE	SIZE
PHOTINIA FRASERI	PHOTINIA	5 GAL.	L	4' X 4'
NERIUM OLEANDER PETITE PINK	DWARF PINK OLEANDER	5 GAL.	L	4' X 4'
OLEA EUROPAEA 'LITTLE OLLIE'	DWARF OLIVE	5 GAL.	M	4' X 4'
SALVIA MICROPHYLLA 'HOT LIPS'	RED SAGE	1 GAL.	M	1' X 3'
PHORMIUM TENAX 'SUNSET'	FLAX	1 GAL.	L	3' X 2'
AGAPANTHUS AFRICANUS 'BLUE'	LILY OF THE NILE	1 GAL.	L	2' X 2'
ROSA 'RED FLORAL CARPET'	RED CARPET ROSE	1 GAL.	M	1' X 4'
GAURA LINDHEIMERI 'PASSIONATE BLUSH'	GAURA	1 GAL.	M	2' X 2'
TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GAL.	M	1' X 4'
PENISETUM ALOPECUROIDES 'HAMLYN'	DWARF FOUNTAIN GRASS	1 GAL.	L	2' X 2'
ERGERON KARVINSKIANUS	MEXICAN DAISY	1 GAL.	M	2' X 3'
CERATOSTIGMA PLUMAGINOIDES	DWARF PLUMBAGO	1 GAL.	L	2' X 3'
FESTUCA IDAHOENSIS	IDAHO FESCUE	1 GAL.	M	2' X 2'
HYPERICUM CALYCIUM	AARON'S BEARD	1 GAL.	M	1' X 2'

NOTE THAT ALL PLANTERS ARE TO BE IRRIGATED BY AN AUTOMATIC, LOW VOLUME, INLINE DRIP SYSTEM BURIED BELOW GRADE.
ALL PLANTERS WILL BE MULCHED WITH AN APPROVED BARK PRODUCT.
THE LANDSCAPE AND IRRIGATION PLANS WILL COMPLY WITH AB 1681 WATER CONSERVATION IN LANDSCAPING ACT.

JAMES
FERGUSON
CLABAUGH
LANDSCAPE
ARCHITECT
4556 SHAWN LANE
VACAVILLE, CA 95688
PHONE/FAX: 707-449-3916

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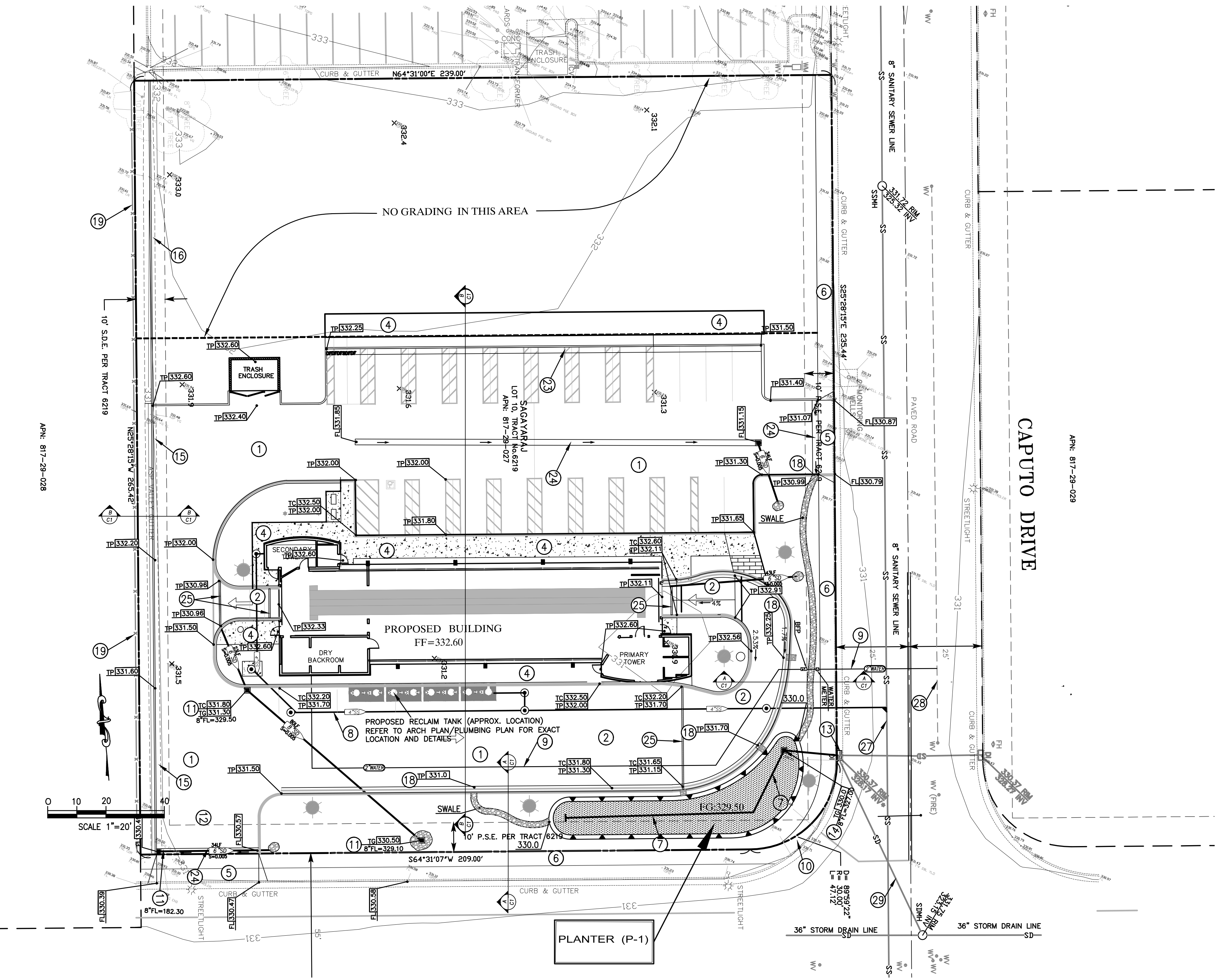
MORGAN
HILL
CARWASH

CAPUTO DR. AND TENNANT AVE.
MORGAN HILL, CA

Scale	1" = 20'-0"	REVISIONS
Date	10/20/17	No. Date
Job No.		
Designed by	J.C.	
Drawn by	J.C.	

PRELIMINARY
LANDSCAPE
PLAN

Sheet No.
L1
of 1



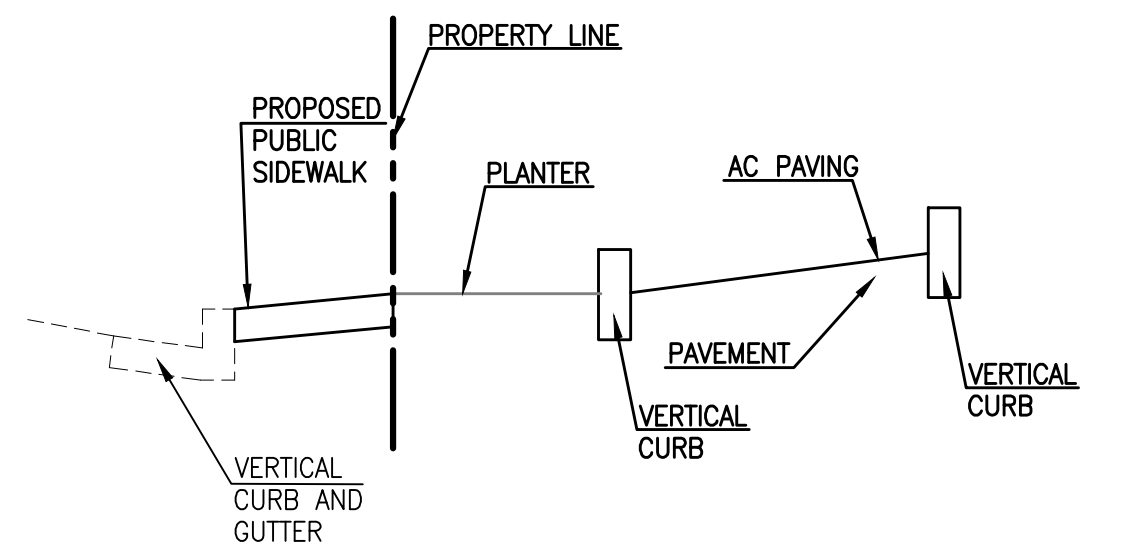
PROPOSED IMPROVEMENT NOTES:

- 1 PLACE 3.5" AC OVER 6" AB COMPACTED TO A MINIMUM 95% COMPACTION.
- 2 PLACE 6" PCC OVER 4" AB COMPACTED TO A MINIMUM 95% COMPACTION.
- 3 CONSTRUCT 6" VERTICAL CURB.
- 4 SIDEWALK, PLACE 4"(MIN)PCC OVER 4"(MIN)AB COMPACTED TO A MINIMUM 95% COMPACTION.
- 5 PLACE NEW DRIVEWAY WITH NEW SIDEWALK, CURB & GUTTER.
- 6 PLACE 5' SIDEWALK PER CITY STANDARD.
- 7 PLACE 6" PERFORATED STORMDRAIN INSIDE BIO-PLANTER.
- 8 PROPOSED SEWER SERVICE.
- 9 PROPOSED WATER SERVICE.
- 10 PROPOSED ADA RAMP PER CITY STANDARD. .
- 11 PROPOSED STORM DRAIN INLET.
- 12 PROPOSED STORM DRAIN PIPE MIN S=0.005.
- 13 EXISTING STORM DRAIN INLET TO REMAIN.
- 14 PLACE NEW CATCH BASIN TOP OF GRATE 6" ABOVE FINISH GRADE OF BIO SWALE.
- 15 REMOVE EXISTING VEE GUTTER AS REQUIRED FOR NEW CONSTRUCTION.
- 16 EXISTING VEE GUTTER TO REMAIN.
- 17 SAWCUT AND LIMIT OF WORK LINE.
- 18 PLACE 2.0' CURB OPENING.
- 19 EXISTING FENCE TO REMAIN AND PROTECTED.
- 20 REMOVE OR RELOCATE EXISTING UTILITIES AS NEEDED FOR NEW CONSTRUCTION.
- 21 EXISTING IMPROVEMENT & UTILITIES TO REMAIN AND PROTECTED.
- 22 REMOVE EXISTING FENCE & REDWOOD RETAINING WALL.
- 23 PLACE CURB & GUTTER MIN SLOPE=0.005.
- 24 2' VEE GUTTER, S=0.003 MIN.
- 25 PROPOSED TRENCH DRAIN.
- 26 CONSTRUCT NEW DRIVEWAY PER CALTRANS STANDARD PLAN A87A.
- 27 EXISTING SEWER LINE, NO EASEMENT IDENTIFIED.
- 28 EXISTING WATER LINE, NO EASEMENT IDENTIFIED
- 29 EXISTING STORM DRAIN LINE, NO EASEMENT IDENTIFIED.

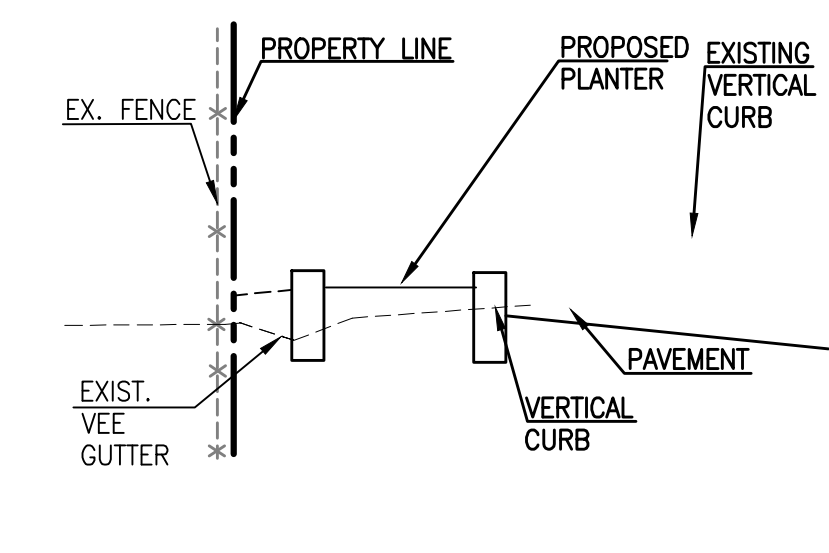
Pervious / Impervious Surface Area Table

Site Acreage (acres)	Number of Lots	Total Project Area of Disturbance (s.f.)	Existing Impervious Surface Area (s.f.)	Proposed Impervious Surface Area (s.f.)	Existing or Replaced Pervious Surface Area (s.f.)	Proposed or Replaced Pervious Surface Area (s.f.)	List of Planned Stormwater Control Measures
1.45	1	42,043	795	29,689	531	31,008	1- BIO PLANTERES

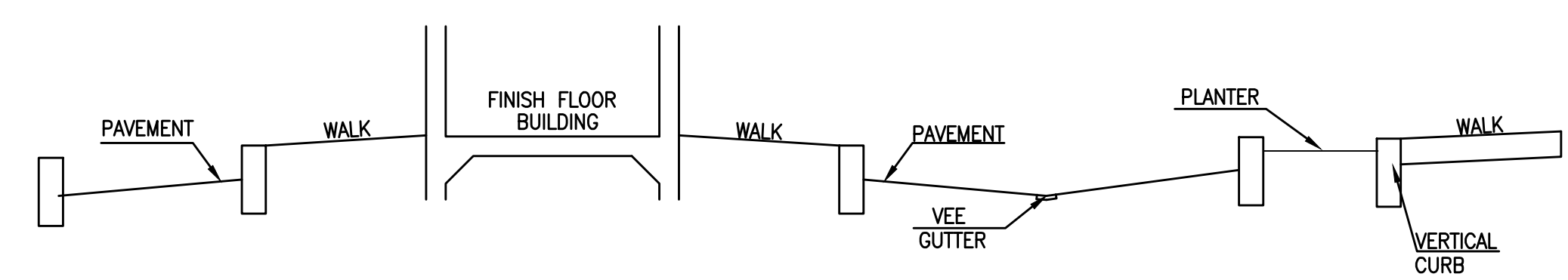
SECTION A-A



SECTION B-B

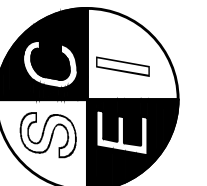


SECTION C-C



PRELIMINARY GRADING PLAN
16015 CAPUTO DRIVE
PROPOSED CAR WASH

APN: 817-29-027

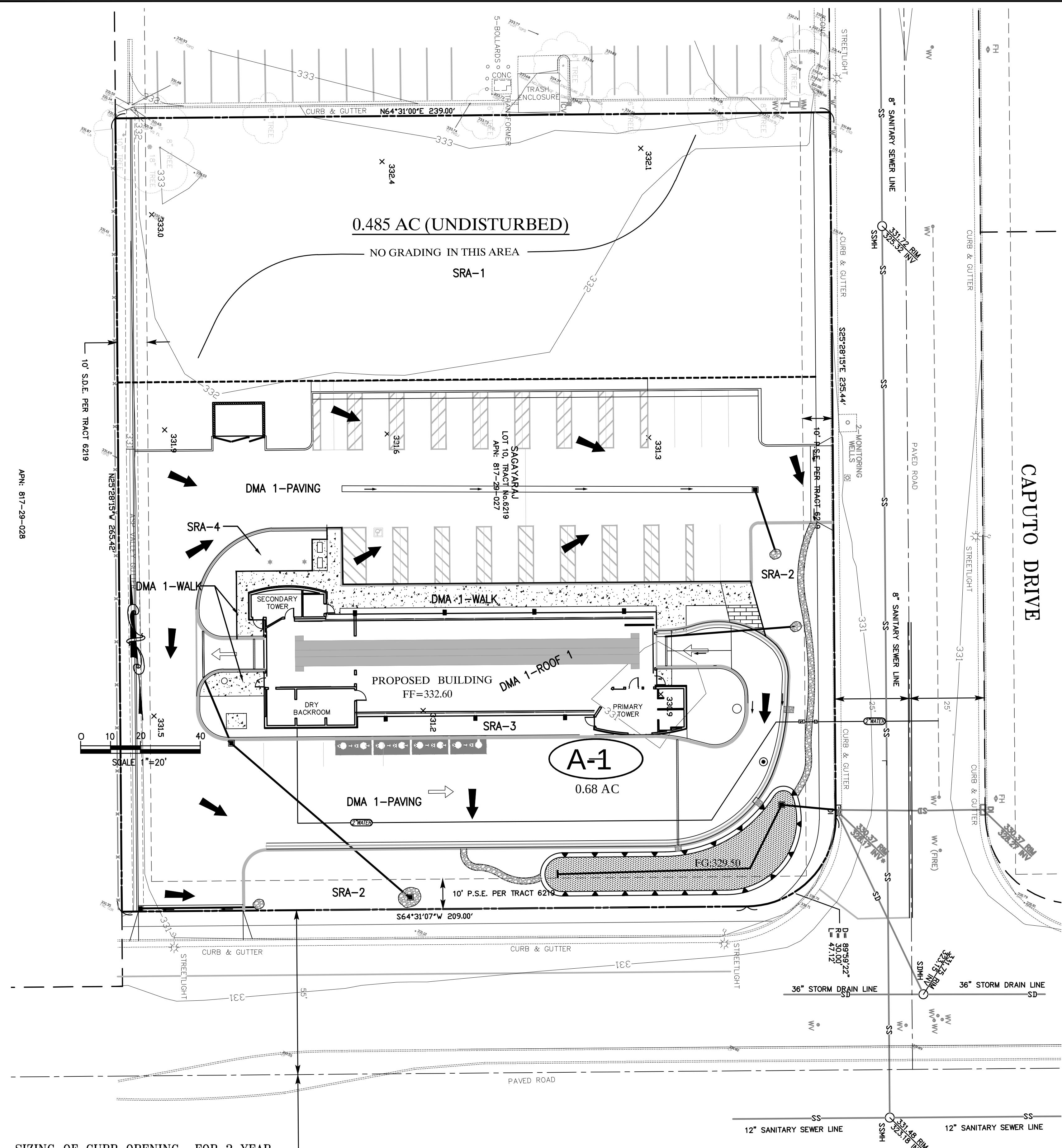


STUKAM CONSULTING
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11344 COLOMA RD. SUITE 235C
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Paul Sagayaraj
3401 EL CAMINO REAL
SANTA CLARA CA
(510) 468-2685 PHONE



BY	CSJ	DATE	REVISIONS
Δ	Δ	Δ	Δ



SIZING OF CURB OPENING FOR 2 YEAR

$Q = AV = 1.486/N \times R^{2/3} \times S^{1/2} \times A$

A = CROSS SECTIONAL AREA (CFS)
V = FLOW VELOCITY (F/S)
R = HYDRAULIC RADIUS
S = SLOPE PER FT
n = MANNING COEFFICIENT
A = 0.28 AC
Q = 0.0448 CFS
S = 0.01
 $R = a/p = 1.5 / 4 = 0.375ft$
n = 0.13
 $Q = AV = 1.486/N \times R^{2/3} \times S^{1/2} \times A$
 $Q = 1.486/0.015 \times (0.375)^{2/3} \times (0.1)^{1/2} \times 0.28$
Q = 4.56 CFS

LEGEND

----- DRAINAGE AREA BOUNDARY

(A-1) DRAINAGE AREA

→ DIRECTION OF FLOW

← OVERLAND RELEASE

RD ROOF DOWNSPOUT

MINIMUM TCMS AND BMPS FOR LAND USE OF CONCERN:

GAS STATION OR EQUIPMENT FUELING FACILITIES:

ALL NEW FUELING STATIONS OR EXPANSION OF SUCH USES SHOULD INCLUDE THE FOLLOWING BMPS:

1. INSTALL AND MAINTAIN A TREATMENT CONTROL MEASURE
2. PAVE THE FUELING AREA FLOORS WITH AN IMPERMEABLE SURFACE (I.E., PORTLAND CEMENT CONCRETE OR EQUIVALENT SMOOTH IMPERVIOUS SURFACE).
3. COVER THE FUELING AREAS WITH A CANOPY OR COVER THAT EXTENDS A MINIMUM OF TEN FEET IN EACH DIRECTION FROM EACH PUMP. ALTERNATIVELY, COVER THE FUELING AREAS WITH A CANOPY OR COVER THAT HAS MINIMUM DIMENSIONS EQUAL TO OR GREATER THAN THE AREA WITH THE GRADE BREAK OR FUEL DISPENSING AREA. (THE FUEL DISPENSING AREA IS DEFINED AS THE AREA EXTENDING A MINIMUM OF 6.5 FEET FROM THE CORNER OF EACH FUEL DISPENSER OR THE LENGTH AT WHICH THE HOSE AND NOZZLE ASSEMBLY MAY BE OPERATED PLUS A MINIMUM OF ONE FOOT, WHICHEVER IS GREATER. IN NO CASE SHOULD THE CANOPY OR COVER DRAIN ONTO THE FUELING AREA).
4. GRADE THE FUEL AREA TO PREVENT WATER DRAINING TOWARD THE FUELING AREA.
5. GRADE THE FUEL AREA WITH THE MINIMUM SLOPE NECESSARY TO PREVENT PONDING.
6. SEPARATE THE FUELING AREA FROM THE REST OF THE SITE BY A GRADE BREAK THAT PREVENTS RUN-ON OF STORM WATER TO THE MAXIMUM EXTENT PRACTICABLE.
7. DRY SWEEP THE FUELING AREA ROUTINELY.
8. STENCIL ALL ON-SITE STORM DRAINS IN CONFORMANCE WITH THE CITY'S REQUIREMENTS.
9. PREPARE A SPILL CLEANUP PLAN IN CONFORMANCE WITH THE CITY OF GILROY FIRE CODE.

SCM NAME: SCM-1
SCM TYPE: BIO-SWALE
SOIL TYPE: C

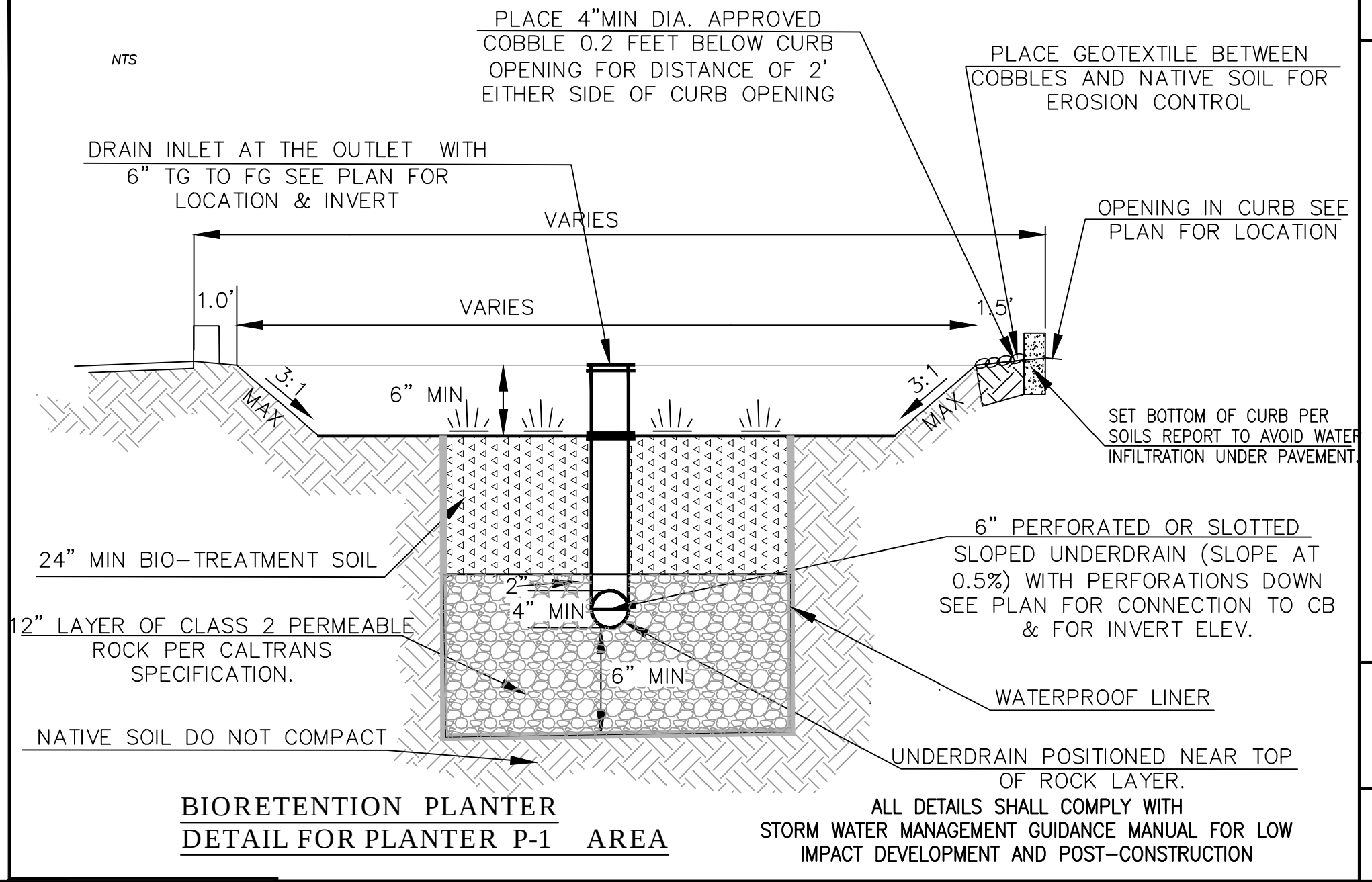
DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	IMP SIZING			
DMA 1-PAVING	22,337	AC PAVING	1.00	22,337	IMP SIZING FACTOR	RAIN ADJUST-MENT FACTOR	MINIMUM AREA	PROPOSED AREA
DMA 1-ROOF	5,167	CONVENTIONAL ROOF	1.00	5,167				
DMA 1-WALK	2,185	CONVENTIONAL ROOF	1.00	2,185				
			1.00					
			1.00					
TOTAL:				29,689	0.040	1.00	1,188	1,200

DMA NAME	DMA AREA (SQ. FT.)	POST PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA X RUNOFF FACTOR	95% STORM DEPTH (FT.)	RETENTION VOLUME (CU. FT.)
DMA 1-PAVING	22,337	AC PAVING	1.00	22,337		
DMA 1-ROOF	5,167	CONVENTIONAL ROOF	1.00	5,167		
DMA 1-WALK	2,185	CONVENTIONAL ROOF	1.00	2,185		
			1.00			
			1.00			
TOTAL:				29,689	0.12	3,562

SELF-RETAINING AREAS

DMA NAME	DMA AREA (SQ. FT.)	INCHES BERMED (IN.)
SRA-1	23,780	1
SRA-2	5,961	1
SRA-3	957	1
SRA-4	700	1
SRA-5		1
SRA-6		1
SRA-7		1
SRA-8		1
SRA-9		1

STORMWATER CONTROL MEASURES USED		
SITE DESIGN	STORMWATER TREATMENT	SOURCE CONTROLS
1. DISCONNECT DOWNSPOUTS! 2. MINIMIZE CHANGE IN RUNOFF HYDROGRAPH	BIO-SWALE! STORMWATER BIORETENTION FILTRATION PLANTER	1. BENEFICIAL LANDSCAPING (MINIMIZES IRRIGATION, RUNOFF) PESTICIDES & FERTILIZERS PROMOTES TREATMENT) 2. KRISTAR UPLIO MANHOLE 2. MAINTENANCE (STREET SWEEPING CATCH BASIN CLEANING 3. STORM DRAIN SIGNAGE.



REVISIONS

DATE	BY	CSJ

REGISTERED PROFESSIONAL ENGINEER
FRED T. SIDDONS
No. 56122
Expires 12-31-16
Civil
STATE OF CALIFORNIA

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PRELIMINARY STORMWATER CONTROL PLAN
16015 CAPUTO DRIVE
PROPOSED CAR WASH
817-29-027

CITY OF MORGAN HILL
JOB NO. 2017-020
Designed: FTS
Checked: FTS
Date: 10-01-17

CALIFORNIA
SHEET
C2
Of 2 SHEETS
JOB NUMBER:
2017-020

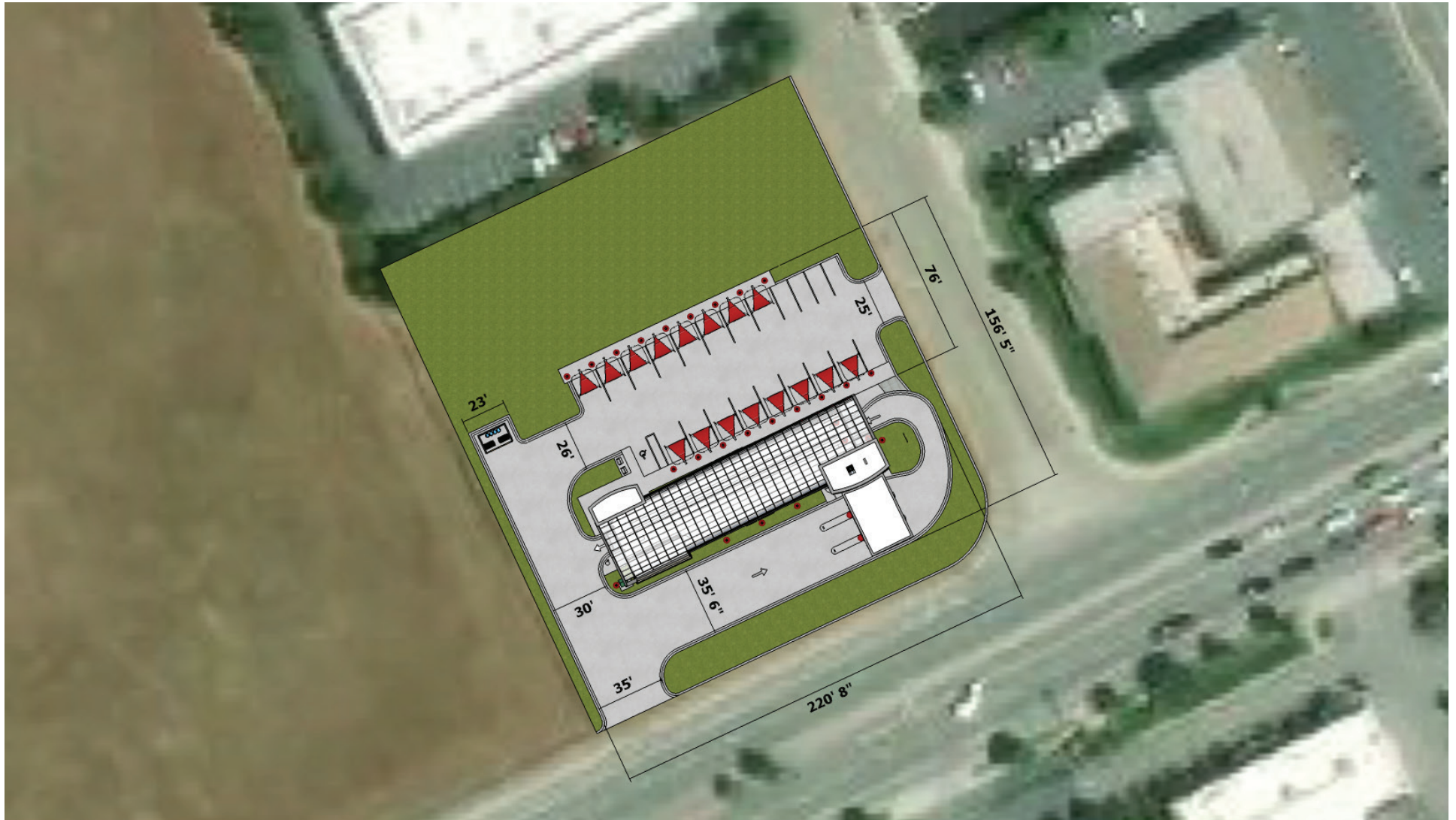
Customer **Paul Sagayaraj**
Location **16015 Caputo Dr - Morgan Hill, CA**
Date **10/17/17**
Revision **2**

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Customer **Paul Sagayaraj**
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Date **10/17/17**
Revision **2**

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Site Plan

130' Tunnel | 16 Vacuums | 3 Pay Lanes

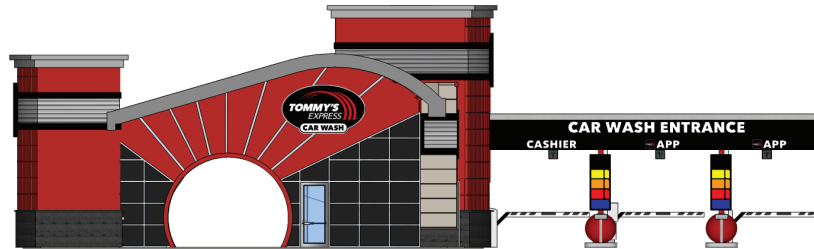
Attachment: Project Plans (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Customer **Paul Sagayaraj**
 Location **16015 Caputo Dr - Morgan Hill, CA**
 Date **10/17/17**
 Revision **2**

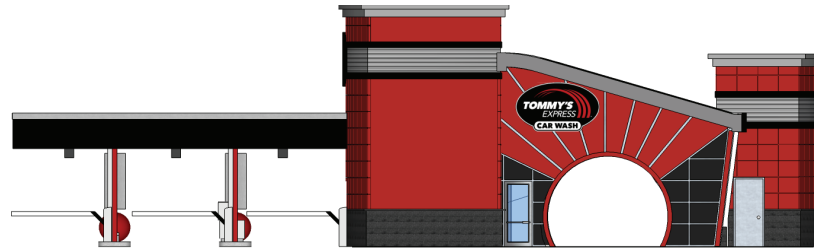
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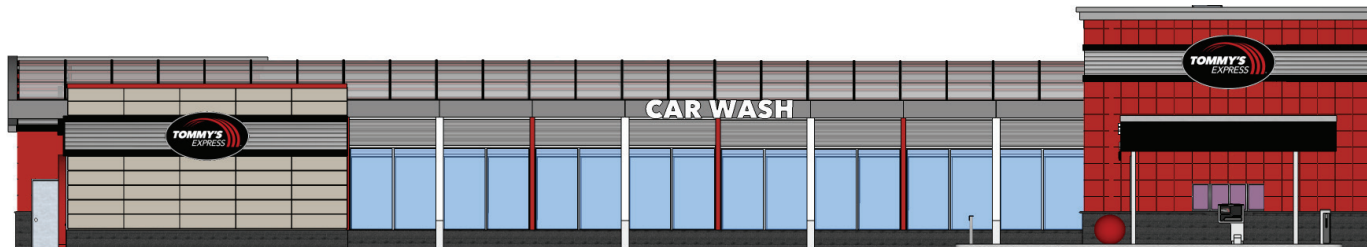
3.c



Exit End Elevation



Entry End Elevation



Front Elevation



Back Elevation

130' Tunnel | 16 Vacuums | 3 Pay Lanes

Attachment: Project Plans (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Customer **Paul Sagayaraj**
Location **16015 Caputo Dr - Morgan Hill, CA**
Date **10/17/17**
Revision **2**

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Letter of Justification

1. Is the site suitable and adequate for the proposed use?

This is an allowed use within the current zoning. The site is large enough for the car wash and for an additional future project. We will meet all current lot/building ratios for the portion of the site that we are developing. Based on the current site plan we have come up with, we have about 20,0000 sq. ft. left vacant at the back of the parcel on Caputo Drive.

2. Would the proposed use and design have a substantial adverse effect on traffic circulation and on the planned capacity of the street system?

The site is located on a main arterial street to highway 101. The car wash will not increase the traffic as it has a low trip generation as most people do not drive to a car wash just to get one, it is usually gotten as a part of their general route of travel.

While most traffic will enter the site from Tennant Ave it will exit onto Caputo where it is at a controlled intersection back onto Tennant.

3. Would the proposed use adversely affect the peace, health, safety, or general welfare of persons residing or working in the surrounding area; or Impair the utility or value of property of other persons located in the vicinity of the site; or Be detrimental to the public health, safety or general welfare?

No, we will be providing a service that is not found in this area as yet and in general all people in the area will benefit from the car wash. There is no residential areas where sound may be a problem. The traffic noise along Tennant Ave should be louder than the sounds that are generated in this site.

4. Is the design of the project compatible with the existing and proposed development within the district and its surroundings?

Yes, we are proposing a very distinct building looking building with metal siding and glass. It will be one of the nicer buildings in the area.

5. Will the proposed use allow retail sales of groceries, food, or beverage items upon automobile service station premises?

There are no food or grocery sales associated with the car wash. There is a small area for car washing items in a vending machine.



Statement of Proposed Operations

We are proposing a state of the Art, Distinctive looking self-service exterior Express Car wash at 16015 Caputo Drive, Morgan Hill, CA. We believe that the Car Wash would serve the best interests of the residents of the Morgan Hill city. Customers will be able to wash their cars as they drive through the facility. Once they complete the wash, customers have a choice of exiting the facility or use the vacuums to clean the interior of their cars.

We plan to be open from 7am to 9pm every day to accommodate customer's need to wash car before or after work. At any given time, we plan to have 4 employees on site to assist in the operations. Employees themselves do not physically get involved in cleaning the car, instead they ensure proper operation of equipment, cleaning, maintenance and customer service. The car wash provides enough onsite queuing and parking facilities to customers.

We anticipate about 200 cars to be washed on a daily basis. The car wash will feature state of the art equipment and building to process cars. All of the cleaning will be done as the vehicle is moved through the car wash by conveyor belts. We plan to use chemicals provided by Zep, who carry the industry renowned brand names like Blue Coral, Black Magic and Armor All brands. The chemicals we plan to use are non-hazardous and bio-degradable. We plan to re-cycle up to 60% of water for use in the wash process.



PLANNING DIVISION

17575 Peak Avenue Morgan Hill CA 95037 (408) 778-6480 Fax (408) 779-7236
 Website Address: www.morgan-hill.ca.gov

MITIGATED NEGATIVE DECLARATION

I. DESCRIPTION OF PROJECT:

Date: April 24, 2018

Application #s: UP2017-0013, EA2017-0015: Caputo-Huang

APNs: 817-29-027

Project Title: Zip-Through Car Wash

Project Location: The project site is located at 16015 Caputo Drive on a 1.45-acre site in the City of Morgan Hill, CA.

Project Proponent

Paul Sagayaraj Amaldoss Henry
 1022 Banyan Ct.
 San Jose, CA 95131

Project Description: A Conditional Use Permit is requested by the applicant, Paul Sagayaraj Amaldoss Henry, to construct a 5,370 square foot automated car wash with a 895 square foot entry canopy, a 198 square foot trash enclosure and 16 vacuum station parking spaces on a vacant 1.45-acre property. The facility plans to operate daily and provide self-service and automated exterior car wash services, which means the customer remains in the vehicle for the duration of the service. The parking lot contains vacuum stations for self-service interior cleaning. The project also requires shallow excavation for underground storage tanks. These tanks will contain water and allow for reuse within the car wash.

Approximately 43,070 square feet of the property will be developed with the car wash facility and associated parking lot. The remaining 20,092 square feet of the parcel will remain undeveloped. The car wash will be located along the front of the parcel facing Tennant Avenue and includes a queuing and payment area, one car wash tunnel, and 16 vacuum stations in parking spaces. The maximum height of the new building will be 28 feet.

The business expects four full-time employees to be present on-site during daily operations. The employees monitor and maintain the equipment, and provide customer service as necessary, but do not physically clean the cars.

Attachment: Caputo-Huang MND (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

II. DETERMINATION

In accordance with the City of Morgan Hill procedures for compliance with the California Environmental Quality Act (CEQA), the City has completed an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. On the basis of that study, the City makes the following determination:

- Although the project, as proposed, could have had a significant effect on the environment, there will not be a significant effect in this case because mitigation measures will be included in the project, and, therefore, this **MITIGATED NEGATIVE DECLARATION** has been prepared.

III. MITIGATION AND AVOIDANCE MEASURES:

A. Biological Resources

BIO-1: A pre-construction survey shall be conducted by a qualified Burrowing Owl biologist no more than 30 days prior to initiation of any ground disturbing (construction) activity to assure take avoidance of burrowing owls. The survey shall consist of a habitat assessment, burrow survey, owl survey, and completion of a written report. The written report shall be submitted to the Community Development Department. If owls are observed during the preconstruction survey, no impacts to the owls or their habitat will be allowed during the nesting season (February 1 to August 31).

BIO-2: Should burrowing owls be found on the site during the breeding season (February 1 through August 31), exclusion zones, with a 250-foot radius from occupied burrows, shall be established. All development-related activities shall occur outside of the exclusion area until the young have fledged.

BIO-3: If pre-construction surveys are conducted during the non-breeding season (September 1 through January 31) and burrowing owls are observed on the site, the owls may be relocated upon approval by the California Department of Fish and Wildlife, in accordance with the Burrowing Owl Mitigation Plan.

B. Noise

NOI-1: During construction activities associated with the proposed project, all internal combustion engines used at the project site shall be equipped with a type of muffler recommended by the vehicle manufacturer. All equipment shall be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components. In addition, the project applicant shall comply with the following:

- Noise-generating construction activities shall be limited to the daytime hours of 7:00 AM to 8:00 PM Monday through Friday and from 9:00 AM to 6:00 PM Saturday, consistent with Chapter 8.28 of the Morgan Hill Municipal Code;

- All diesel-powered equipment shall be located more than 200 feet from any noise sensitive use if the equipment is to operate for more than several hours per day; and
- Mobile equipment (haul trucks, concrete trucks, etc.) shall avoid local streets near residences and other noise-sensitive uses to the maximum extent feasible.

Furthermore, subject to equipment availability and cost considerations, the project applicant shall implement the following:

- Earth Removal: Scrapers shall be used as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
- Backfilling: Backhoes shall be used for backfilling, as such equipment is less costly and quieter than either dozers or loaders.
- Ground Preparation: Graders shall be used rather than dozers for final grading.
- Building Construction: Power saws shall be shielded or enclosed where practical to decrease noise emissions. Nail guns shall be used where possible as they are less noisy than manual hammering.
- Generators, Compressors, and Other Stationary Equipment: The project applicant shall ensure that generators, compressors and other stationary equipment that are housed in acoustical enclosures are used rather than equipment housed in weather enclosures or not housed in enclosures at all. Acoustical enclosures are often available with rented equipment. The equipment shall be placed as far from sensitive receptors as feasible.
- The project applicant shall provide a noise disturbance coordinator with a phone line and voicemail/answering machine. Signs with the noise disturbance coordinators contact information shall be posted on the project site at a highly visible location.
- Vehicle paths within the project site shall be graded smooth, as rough roads and paths can cause significant noise and vibration from trucks (particularly empty trucks) rolling over rough surfaces.

III. FINDING

The City of Morgan Hill hereby finds that the proposed project could have a significant effect on the environment; however, there would not be a significant effect in this case because mitigation measures summarized above and described in the initial study will reduce the impacts to a less-than-significant level.

Jennifer Carman,
Community Development Director

Date: _____

INITIAL STUDY

ZIP THRU EXPRESS CAR WASH PROJECT (CAPUTO-HUANG) MORGAN HILL, CALIFORNIA

PREPARED FOR
CITY OF MORGAN HILL
DEVELOPMENT SERVICES DEPARTMENT
17575 PEAK AVENUE
MORGAN HILL, CA 95037

MARCH 2018

PREPARED BY



1501 Sports Drive, Suite A, Sacramento, CA 95834

TABLE OF CONTENTS

SECTION 1. PROJECT INFORMATION	1
SECTION 2. PROJECT DESCRIPTION	1
SECTION 3. SOURCES.....	10
SECTION 4. EVALUATION OF ENVIRONMENTAL IMPACTS	12
I. AESTHETICS.....	16
II. AGRICULTURE AND FOREST RESOURCES.....	20
III. AIR QUALITY.....	21
IV. BIOLOGICAL RESOURCES.....	30
V. CULTURAL RESOURCES.....	34
VI. GEOLOGY AND SOILS.....	37
VII. GREENHOUSE GAS EMISSIONS.....	40
VIII. HAZARDS AND HAZARDOUS MATERIALS.....	42
IX. HYDROLOGY AND WATER QUALITY.....	47
X. LAND USE AND PLANNING.....	55
XI. MINERAL RESOURCES.....	57
XII. NOISE.....	58
XIII. POPULATION AND HOUSING.....	64
XIV. PUBLIC SERVICES.....	65
XV. RECREATION.....	66
XVI. TRANSPORTATION/CIRCULATION.....	67
XVII. TRIBAL CULTURAL RESOURCES.....	76
XVIII. UTILITIES AND SERVICE SYSTEMS.....	77
XIX. MANDATORY FINDINGS OF SIGNIFICANCE.....	81

FIGURES

Figure 1: Regional Project Location	2
Figure 2: Project Vicinity Map	3
Figure 3: Conceptual Site Plan	4
Figure 4: Preliminary Grading Plan.....	5
Figure 5: Proposed Car Wash Building Floor Plan	7
Figure 6: Proposed Car Wash Building Elevations	8
Figure 7: Preliminary Landscaping Plan.....	9
Figure 8: Existing View of Project Site Looking North from Tennant Avenue.....	18
Figure 9: Existing View of Project Site Looking South from Caputo Drive.....	19
Figure 10: Preliminary Stormwater Control Plan	50
Figure 11: Study Intersection Locations and Project Trip Distribution/Assignment	70
Figure 12: Proposed Site Access and Internal Site Circulation	73

TABLES

Table 1: BAAQMD Thresholds of Significance	22
Table 2: Maximum Construction Emissions (lbs/day)	23
Table 3: Unmitigated Maximum Operational Emissions	24
Table 4: Proposed IMP Sizing Calculations	51
Table 5: Effects of Vibration on People and Buildings	61
Table 6: Vibration Levels for Various Construction Equipment.....	61
Table 7: Trip Generation Estimates	69
Table 8: Existing and Existing Plus Project Conditions Intersection LOS.....	71
Table 9: PM Peak Hour Queue Analysis	75

APPENDICES

Appendix A: CalEEMod Modeling Results
Appendix B: Phase 1 Environmental Site Assessment
Appendix C: Trip Generation and Operations Analysis

SECTION 1. PROJECT INFORMATION

- 1.1 Project Title:** Zip Thru Express Car Wash Project (Caputo-Huang)
- 1.2 Lead Agency Contact:** Emily Foley
Contract Planner
Morgan Hill, CA
17575 Peak Avenue
Morgan Hill, CA 95037
- 1.3 Project Location:** 16015 Caputo Drive
Morgan Hill, CA
APN 817-29-027
- 1.4 Project Applicant:** Paul Sagayaraj Amaldoss Henry
VVI-INC
1022 Banyan Court
San Jose, CA 95131
(510) 468-2685
- 1.5 Current Zoning:** Administrative Office (CO)
- 1.6 Current General Plan Designation:** Commercial

SECTION 2. PROJECT DESCRIPTION

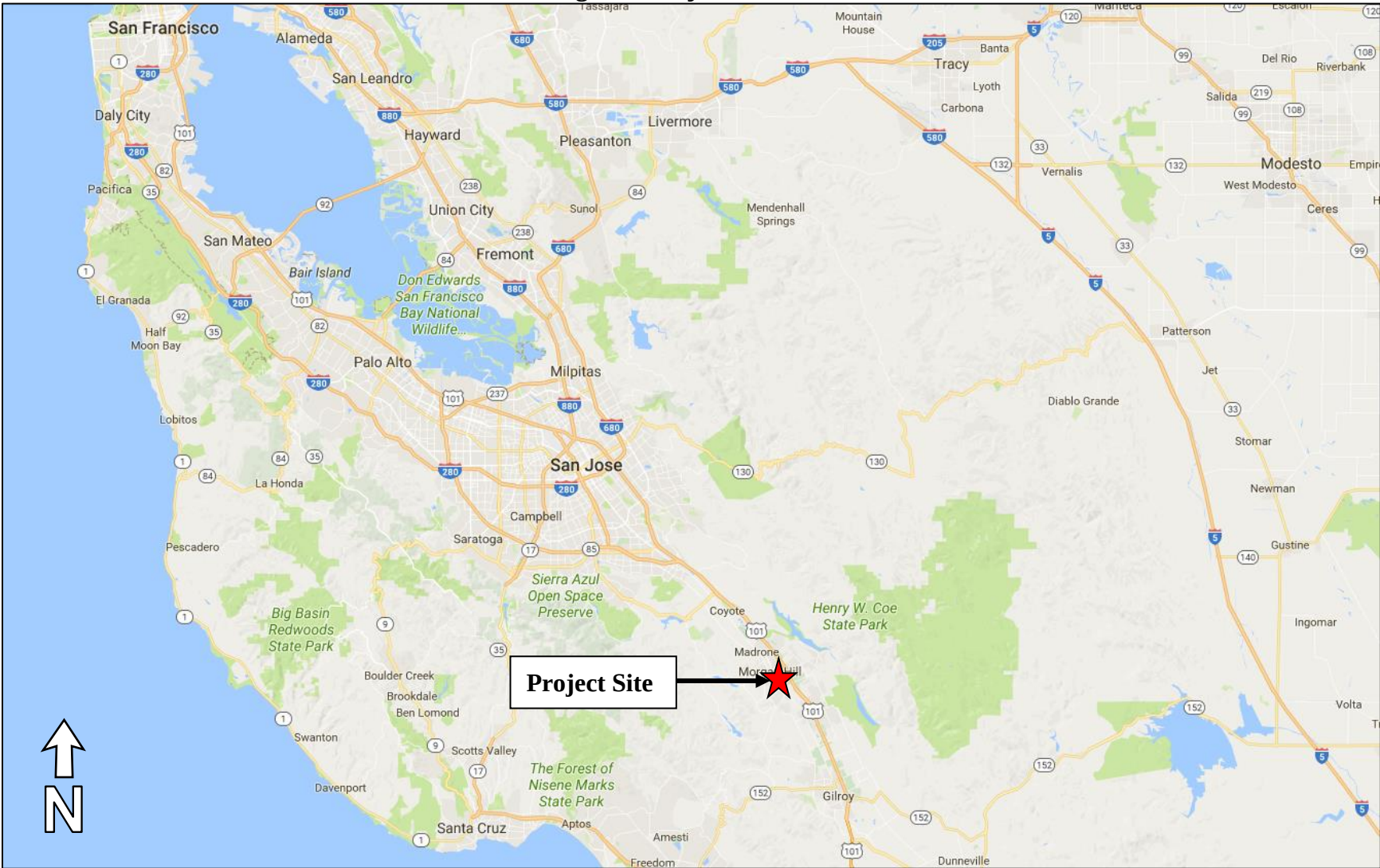
2.1 Project Location and Setting

The Zip Thru Express Car Wash (proposed project) site comprises an approximately one-acre portion of a 1.45-acre property identified by Assessor's Parcel Number (APN) 817-29-027. The project site is located at 16015 Caputo Drive in the City of Morgan Hill, California (see Figure 1 and Figure 2). Currently, the project site is vacant and is regularly disked to prevent weed growth. The site is bounded by Caputo Drive to the east, Tennant Avenue to the south, vacant land to the west, and a parking lot associated with an office building to the north. Additional office uses are located to the east of the project site across Caputo Drive. A hardware store (Ace Hardware) and a grocery store (Farmer's Market) are located across Tennant Avenue to the south of the site. A small number of ornamental shrubs and trees are located along the subject property's northern boundary between the property and the adjacent parking lot.

2.2 Project Components

The proposed project would include site preparation, grading, and construction of a car wash on the project site (see Figure 3 and Figure 4). Overall, approximately 43,070 square feet (sf) (0.99-acre) of the subject parcel would be developed as part of the project, while the remaining 20,092

Figure 1
Regional Project Location



Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Figure 2
Project Vicinity Map



Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Figure 3
Conceptual Site Plan

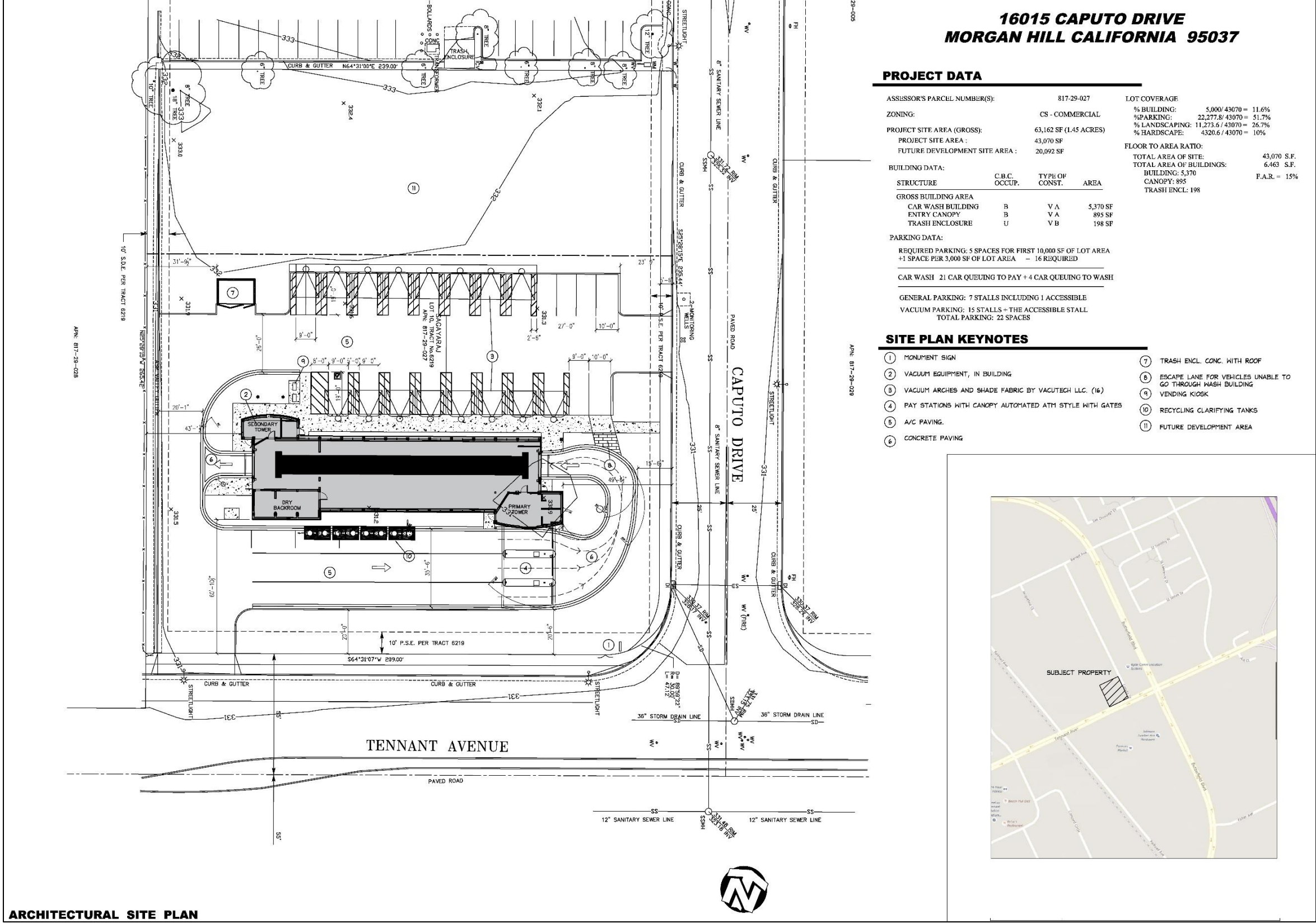
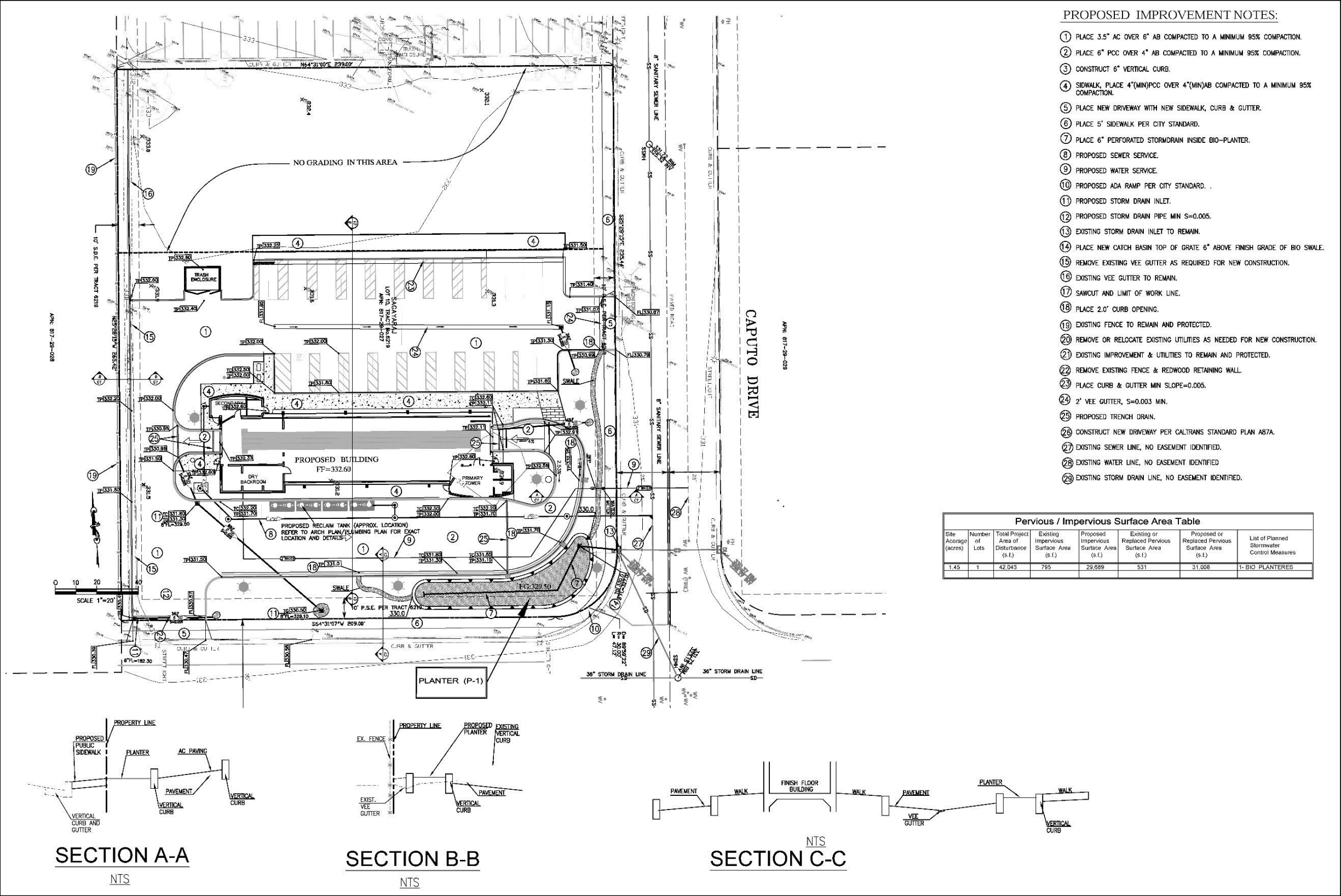


Figure 4
Preliminary Grading Plan



sf (0.46-acre) would be left vacant and undeveloped with the exception of limited landscaping improvements along the Caputo Drive frontage. The 0.46-acre area would not be used for construction equipment staging.

The proposed project site is zoned Administrative Office (CO); the City's zoning code requires that a Conditional Use Permit be obtained for service commercial uses within areas zoned CO. The proposed project would be considered a type of commercial use and, thus, would require a Conditional Use Permit. The project would be consistent with the site's current General Plan land use and zoning designations. The proposed site improvements, car wash operations, access and circulation, utility infrastructure, and requested project entitlements are discussed in detail below.

Proposed Site Improvements

The proposed car wash would consist of a 5,370-sf car wash building, an 895-sf entry canopy, and a 198-sf trash enclosure. The car wash building would be primarily one story, with the exception of a small second-floor office space at the southeast portion of the building, and would consist of a car wash tunnel with various automated car washing equipment, various equipment storage rooms, and restroom facilities (see Figure 5 and Figure 6). Two pay stations would be located at the entry canopy at the southeast corner of the building. To the north of the car wash building, the project would include a total of 22 parking stalls, including seven stalls for general parking and 15 stalls equipped with commercial wet/dry vacuums.

Landscaping would be provided along the project frontages at Tennant Avenue and Caputo Drive, as well as along the north and west site boundaries (see Figure 7). In addition, landscaping elements would be provided along the east, south, and west sides of the proposed car wash building.

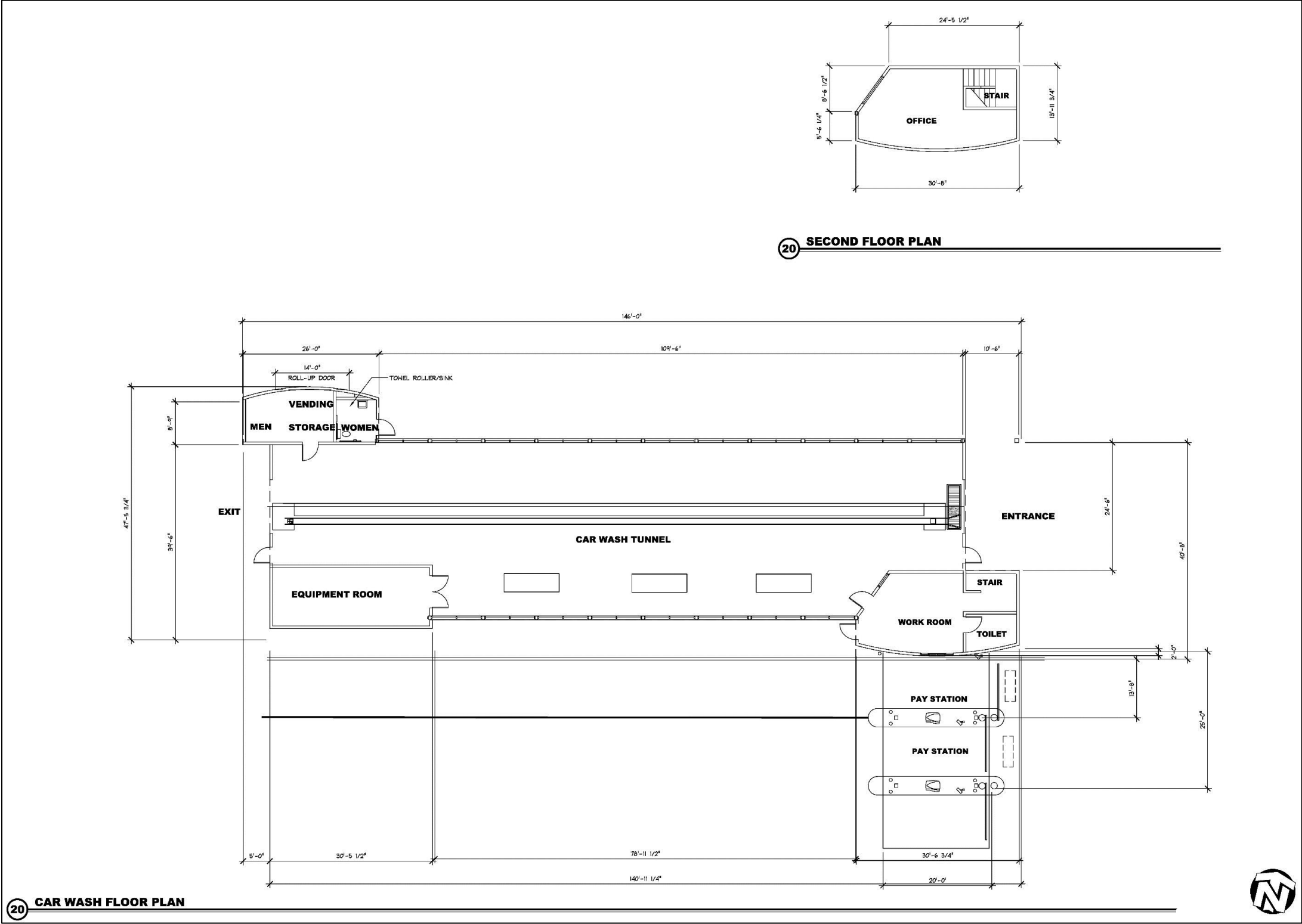
Proposed Operations

The proposed project would be open from 7:00 AM to 9:00 PM daily and would employ approximately four employees at any given time. Such employees would be responsible for maintaining proper operation of equipment, cleaning, maintenance, and customer service. Employees would not be responsible for physically cleaning cars; rather, the car wash facility would use conveyor belts to transport vehicles (approximately 200 per day) through each step of an automated cleaning process. Chemicals used in the cleaning process would be bio-degradable and non-hazardous. Approximately 60 percent of the water used in the washing process would be recycled for later use on-site.

Access and Circulation

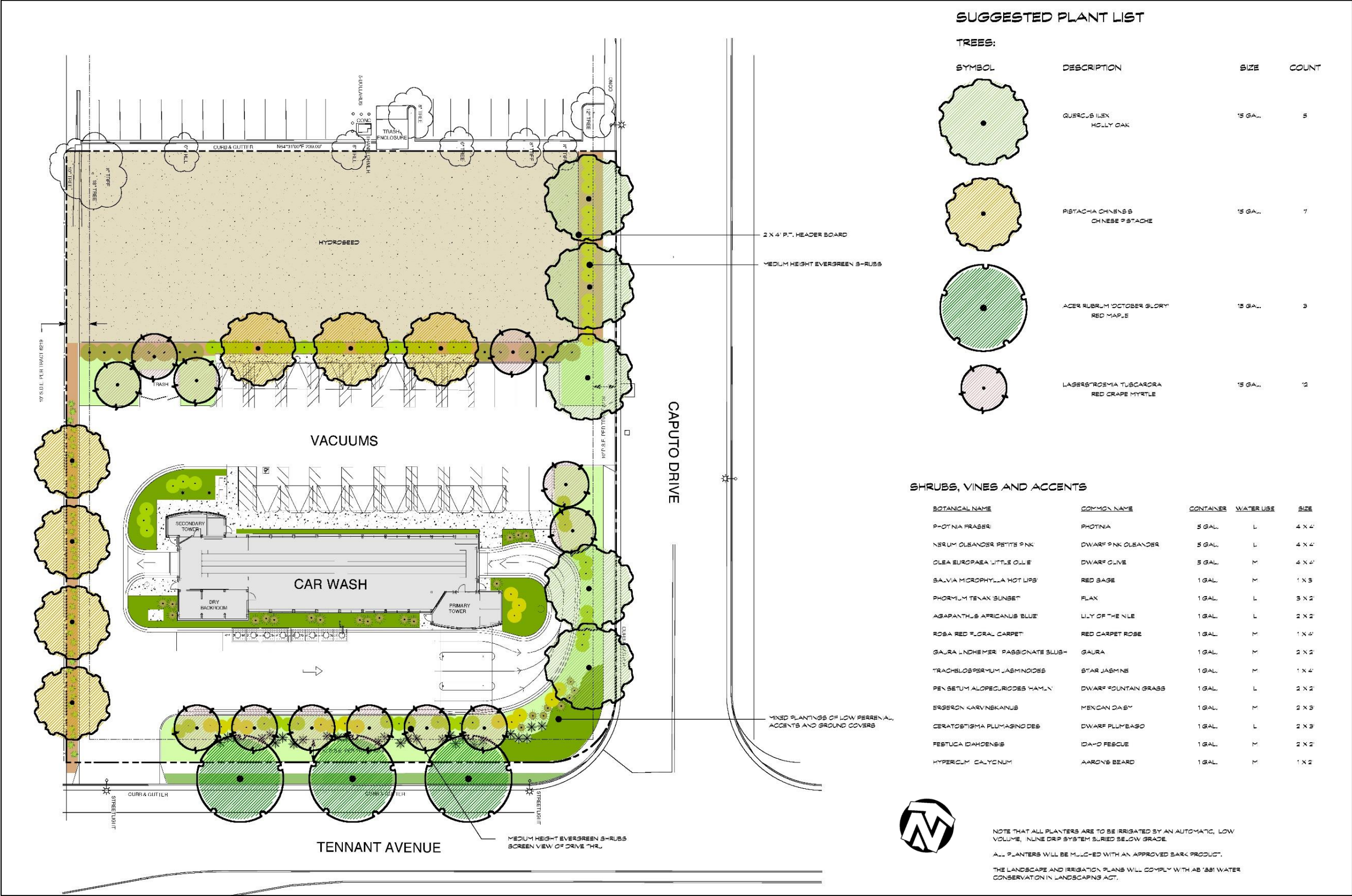
Primary access to the proposed project site would be from Tennant Avenue. Upon entering the site, vehicles would travel through a set of proposed pay stations before entering the east end of the car wash tunnel. Vehicles exiting the west end of the car wash tunnel would travel through the parking/vacuuming area at the north portion of the site before exiting onto Caputo Drive.

Figure 5
Proposed Car Wash Building Floor Plan



[illegible]

Figure 7
Preliminary Landscaping Plan



Utilities and Service Systems

Water and wastewater service for the proposed development would be provided by the City through connections to existing infrastructure located in Caputo Drive to the east of the site (see Figure 4). As noted above, a portion of the water used in the car wash process would be recycled for use on-site prior to eventual discharge to the City's sanitary sewer system.

Stormwater would be collected by new curb inlets and drain inlets throughout the site and flow to a series of self-retaining areas (SRAs) and a bio-retention basin located at the southeast portion of the site. The bio-retention basin would treat and detain all on-site runoff prior to discharging to the City's existing 36-inch stormwater drain located at the site's southeastern boundary along Tennant Avenue.

Requested/Required Entitlements

The proposed project would require City adoption of the IS/MND and Mitigation Monitoring and Reporting Program (MMRP). In addition, per Section 18.34.030 of the City's Municipal Code, the project would require approval of a Conditional Use Permit to develop the proposed car wash within a CO zoning district.

Subsequent to approval of the aforementioned entitlements, the applicant would be required to obtain an Architectural and Site Review Permit for approval of a site plan, building elevations, and landscape plans.

2.3 Surrounding Land Uses

The immediate existing surrounding land uses and developments are as follows:

- North - Office buildings.
- West - N/A (vacant land)
- East - Office buildings (east of Caputo Drive)
- South - Commercial buildings (south of Tennant Avenue).

SECTION 3. SOURCES

The following documents are referenced information sources utilized by this analysis:

1. Association of Bay Area Governments. *Dam Failure Inundation Hazard Map for Morgan Hill*. 1995. Available at: http://www.mhcert.com/prepare/dam_failure.shtml. Accessed January 2018.
2. Association of Bay Area Governments. *Resilience Program*. Available at: <http://gis.abag.ca.gov/website/Hazards/?hlyr=liqSusceptibility>. Accessed January 2018.
3. Bay Area Air Quality Management District. *Air Quality Standards and Attainment Status*. Available at: <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status>. Accessed November 2017.

4. Bay Area Air Quality Management District. *California Environmental Quality Act, Air Quality Guidelines*. May 2017.
5. California Air Pollution Control Officer's Association (CAPCOA). *California Emissions Estimator Model, User's Guide, Version 2016.3.2*. November 2017.
6. California Department of Conservation. *Santa Clara County Important Farmland Map 2014*. Published October 2016.
7. California Department of Resources Recycling and Recovery (CalRecycle). *Facility Information Toolbox (FacIT), Facility Operations: Johnson Canyon Sanitary Landfill*. Available at:
<http://www.calrecycle.ca.gov/FacIT/Facility/Operations.aspx?FacilityID=18565>. Accessed June 2016.
8. California Environmental Protection Agency, California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
9. City of Morgan Hill. *2035 General Plan, City of Morgan Hill*. Adopted July 2016.
10. City of Morgan Hill. *Bikeways, Trails, Parks and Recreation Master Plan*. Adopted July 20, 2017.
11. City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.
12. City of Morgan Hill. *Citywide Burrowing Owl Mitigation Plan*. August 2003.
13. City of Morgan Hill. *Emergency Operations Plan*. June 6, 2013.
14. City of Morgan Hill. *Housing Element*. Adopted February 18, 2015.
15. City of Morgan Hill. *Morgan Hill 2035 Final Environmental Impact Report*. Adopted July 2016.
16. City of Morgan Hill. *Morgan Hill Architectural Review Handbook*. February 2008.
17. City of Morgan Hill. *Municipal Code*. Available at: <http://www.morgan-hill.ca.gov/655/Municipal-Code>. Accessed January 2018.
18. City of Morgan Hill. *Revised Regional Stormwater Management Plan*. February 22, 2010.
19. Department of Conservation. *State of California, Special Studies Zones, Mt. Madonna Quadrangle, Revised Official Map*. Effective January 1, 1976.
20. Harris and Lee Environmental Sciences, LLC. *All Appropriate Inquiry-Phase 1 Environmental Site Assessment, 16015 Caputo Drive, Morgan Hill, CA 95037, APN 817-29-027*. October 2, 2017.

21. Hexagon Transportation Consultants, Inc. *Zip Thru Car Wash Trip Generation and Operations Analysis*. February 7, 2018.
22. Native American Heritage Commission. *Zip Thru Express Car Wash Project, Santa Clara County*. January 26, 2018.
23. Natural Resources Conservation Service. *Calculated Coefficients of Linear Extensibility*. Available at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/office/ssr10/tr/?cid=nrcs144p2_074840. Accessed January 2018.
24. Northwest Information Center. *Record search results for the proposed Zip Thru Express Car Wash Project located at 16015 Caputo Drive, Morgan Hill, Santa Clara County, APN 817-29-027*. February 12, 2018.
25. Salinas Valley Solid Waste Authority. *Annual Report 2014-15*. 2015. Available at: <http://svswa.org/wp-content/uploads/2014-2015-Annual-Report-Final4.pdf>. Accessed November 2017.
26. Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.
27. Santa Clara Valley Habitat Agency. Geobrowser. Available at: <http://www.hcpmaps.com/habitat/>. Accessed January 2018.
28. Santa Clara Valley Habitat Agency. *Final Santa Clara Valley Habitat Plan*. August 2012.
29. Santa Clara Valley Transportation Authority. *2015 Congestion Management Plan*. October 2015.
30. Santa Clara Valley Water District. *C1: Anderson Dam Seismic Retrofit**. Available at: <https://www.valleywater.org/project-updates/dam-reservoir-projects/anderson-dam-seismic-retrofit>. Accessed February 2018.
31. South County Regional Wastewater Authority. *Biennial Budget Transmittal – FY 14 & FY 15*. April 3, 2013.

SECTION 4. EVALUATION OF ENVIRONMENTAL IMPACTS

4.1 Background and Introduction

The mitigation measures prescribed for environmental effects described in this Initial Study/Mitigated Negative Declaration (IS/MND) would be implemented in conjunction with the project, as required by CEQA. The mitigation measures would be incorporated into the project through project conditions of approval. The City would adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the project.

In July of 2016, the City of Morgan Hill adopted the 2035 General Plan,¹ as well as an associated Environmental Impact Report (EIR) for the updated General Plan.² The General Plan EIR is a program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 *et seq.*). The General Plan EIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan. Per the General Plan, the site is anticipated for development with commercial uses. The proposed project would be consistent with the General Plan; therefore, in accordance with Section 15152 of the CEQA Guidelines, this IS/MND will tier from the previously certified EIR (SCH# 2015022074) prepared for the City's General Plan where appropriate. According to Section 15152, the lead agency should limit the tiered negative declaration to effects which (1) were not examined as significant effects on the environment in the prior EIR or (2) are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less Than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| ☐ Aesthetics | ☐ Agriculture and Forest Resources | ☐ Air Quality |
| ☒ Biological Resources | ☐ Cultural Resources | ☐ Geology and Soils |
| ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials | ☐ Hydrology and Water Quality |
| ☐ Land Use and Planning | ☐ Mineral Resources | ☒ Noise |
| ☐ Population and Housing | ☐ Public Services | ☐ Recreation |
| ☐ Transportation and Circulation | ☐ Tribal Cultural Resources | ☐ Utilities and Service Systems |
| ☐ Mandatory Findings of Significance | | |

¹ City of Morgan Hill. *2035 General Plan, City of Morgan Hill*. Adopted July 2016.

² City of Morgan Hill. *Morgan Hill 2035 Final Environmental Impact Report*. Adopted July 2016.

DETERMINATION

On the basis of this initial study:

- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Emily Foley, Contract Planner
Printed Name

Date

City of Morgan Hill
For

ENVIRONMENTAL CHECKLIST

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended, as appropriate, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	✗	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	✗
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	✗	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	✗	☐
a. The existing General Plan does not designate official scenic view corridors or vistas. However, according to the General Plan, the hillsides that surround the City to the east and west are considered scenic. The project site is located in a commercial area, is bordered by existing development to the north, east, and south, and is not located on a hillside or in the vicinity of a hillside. While distant views of eastern hills can be seen through the project site from public viewpoints, including Tennant Avenue and Caputo Drive, the hills are partially obscured by existing development and landscaping features. Based upon such considerations, and the fact that the General Plan does not designate any official scenic vistas within the City of Morgan Hill, the project would have a <i>less-than-significant</i> impact to a scenic vista.				
b. Scenic gateways to the City include Pacheco Pass, Hecker Pass, US 101 south of Gilroy, and the Coyote greenbelt area north of Morgan Hill. According to the California Department of Transportation (Caltrans) map of Santa Clara County prepared for the Scenic Highway Mapping System, officially designated State scenic highways do not occur in the project vicinity. Because the proposed project is not located in the vicinity of any State scenic highway or scenic gateway identified by the City, the proposed project would not damage any scenic resources within a State scenic highway. Therefore, <i>no impact</i> related to damaging scenic resources within a State scenic highway would occur.				
c. Currently, the proposed project site consists of ruderal vegetation and exposed soil (see Figure 8 and Figure 9). A small number of ornamental shrubs and trees are located along the site's northern boundary between the site and the adjacent parking lot. Due to the vacant nature of the project site, development of the site with a car wash facility and associated improvements would change the character of the site from an undeveloped lot to a built condition. Development of the site with commercial uses, however, would be consistent with the existing commercial development that surrounds the site to the north, east, and south. In addition, the project would include landscaping elements along the project frontages at Tennant Avenue and Caputo Drive that would partially screen views of the proposed car wash facility from areas to the east and south of the site.				

In addition, the proposed project would require approval of a Conditional Use Permit. Per Section 18.54.010 of the City's Municipal Code, the purpose of Conditional Use Permits is to allow a proper integration into the community of uses which may only be suitable in specific locations in a zoning district, or only if such uses are designed or laid out in a particular manner on the site or are subjected to specific conditions. For Conditional Use Permit applications, the City's Planning Commission takes into consideration a variety of factors, including the compatibility of a proposed project's design with adjacent uses in the project vicinity.

In addition, the project would be subject to Architectural and Site Review pursuant to Chapter 18.74 of the City's Municipal Code, which would include review of the project's design by the City's Community Development Director. The Architectural and Site Review process would ensure that the project would meet the minimum standards for architecture, site planning, and landscaping established in the City's Architectural Review Handbook for commercial and industrial developments, which would ensure that the visual quality of the proposed project is consistent with City standards.³ The Community Development Director, Planning Commission, or City Council, may require conditions of approval as part of a design permit in order to create or maintain substantial conformance with all applicable provisions within the Architectural Review Handbook.

Because the project would be consistent with the existing surrounding visual character and quality of the surrounding area, and would undergo review by the City's Planning Commission, a **less-than significant** impact would occur related to degradation of the existing visual character of the site and its surroundings.

- d. The proposed project site does not contain any existing sources of light or glare. As such, development of the proposed project would increase the amount of light including, but not limited to, headlights on vehicles accessing the proposed car wash, exterior light fixtures, and parking lot lighting. However, the site is surrounded by existing commercial development that currently generates light and glare in the area. In addition, new sources of lighting would be required to comply with the commercial/industrial lighting standards specified in the City's Architectural Review Handbook. Specifically, all lighting, including security lighting, would be required to shield to minimize glare upon neighboring properties and public rights-of-way in accordance with Sections 15.40.310 and 15.40-420 of the City's Municipal Code. Compliance with such would help to ensure that the light and glare created by the proposed project would be consistent with the levels of light and glare currently emitted in the surrounding developed environment. Therefore, the proposed project would not introduce new sources of substantial light or glare to the site which would adversely affect day or nighttime views in the area, and a **less-than-significant** impact would occur.

³ City of Morgan Hill. *Morgan Hill Architectural Review Handbook*. February 2008.

Figure 8
Existing View of Project Site Looking Northeast from Tennant Avenue



Figure 9
Existing View of Project Site Looking Southwest from Caputo Drive



Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	✗
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	✗
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✗
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✗
e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	☐	☐	☐	✗
a,e. Currently, the proposed project site is located adjacent to commercial land uses and is not currently used for agricultural purposes. The site is designated as “Urban and Built-Up Land” on the Santa Clara County Important Farmland map. ⁴ Given the designation of the site as Urban and Built-Up Land, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use. Therefore, no impact would occur as a result of the proposed project.				
b. The proposed project site is not under a Williamson Act contract and is not zoned for agricultural uses. Therefore, buildout of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.				
c,d. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have no impact with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.				

⁴ California Department of Conservation. *Santa Clara County Important Farmland Map 2014*. Published October 2016.

III. AIR QUALITY.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✗	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	✗	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	✗	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✗	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	✗	☐
a-c. The City of Morgan Hill is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for the State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM _{2.5}), and State respirable particulate matter 10 microns in diameter (PM ₁₀) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM _{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM _{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation. The USEPA has not yet approved a request for redesignation of the SFBAAB; therefore, the SFBAAB remains in nonattainment for 24-hour PM _{2.5} .				

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the USEPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2017 Clean Air Plan (CAP), adopted on April 19, 2017. The 2017 CAP was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM₁₀

standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2017 CAP. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures to be implemented in the region to attain the State and federal AAQS within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. For development projects, BAAQMD establishes significance thresholds for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀, and PM_{2.5}, expressed in pounds per day (lbs/day) and tons per year (tons/yr). The thresholds are listed in Table 1. Thus, by exceeding the BAAQMD's mass emission thresholds for operational emissions of ROG, NO_x, or PM₁₀, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Table 1			
BAAQMD Thresholds of Significance			
Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10

Source: BAAQMD, CEQA Guidelines, May 2017.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2 - a Statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, vehicle mix, trip length, average speed, etc. In addition, the model assumes compliance with the most recent 2016 Title 24 Standards. Where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumed the following:

- Construction would commence in October of 2018;
- Construction would occur over an approximately 7-month period;
- A total of 0.99-acre would be disturbed during site preparation and grading;
- 13.78 cubic yards of soil would be exported during grading;
- An average daily trip rate of 85.66 trips per 1,000 sf was assumed, based on the analysis completed for the proposed project by Hexagon Transportation Consultants, Inc.; and
- The proposed car wash facility would have a yearly indoor water demand of 1,680,000 gallons.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well. All CalEEMod results are included in Appendix A to this IS/MND.

Construction Emissions

According to the CalEEMod results, the proposed project would result in maximum construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project's construction emissions would be below the applicable thresholds of significance.

Table 2			
Maximum Construction Emissions (lbs/day)			
Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	3.17	54	NO
NO _x	14.04	54	NO
PM ₁₀ (exhaust)	0.87	82	NO
PM ₁₀ (fugitive)	0.88	None	N/A
PM _{2.5} (exhaust)	0.81	54	NO
PM _{2.5} (fugitive)	0.44	None	N/A
<i>Source: CalEEMod, January 2018 (see Appendix A).</i>			

Although thresholds of significance for mass emissions of fugitive dust PM₁₀ and PM_{2.5} have not been identified by the City of Morgan Hill or BAAQMD, the proposed project's estimated fugitive dust emissions have been included for informational purposes. All projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's Basic Construction Mitigation Measures, which include the following:

1. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
2. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
3. All vehicle speeds on unpaved roads shall be limited to 15 mph.
4. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
5. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
6. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

7. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The BAAQMD measures listed above have been incorporated and adopted into Section 18.48.025 of the City's Municipal Code. Accordingly, the City requires that all new development conform to the measures. The proposed project's required implementation of the BAAQMD's Basic Construction Mitigation Measures listed above for the proposed project's construction activities, would help to further minimize construction-related emissions.

Because the proposed project would be below the applicable thresholds of significance for construction emissions, the proposed project would not be considered to result in a significant air quality impact during construction.

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum operational criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project's operational emissions would be below the applicable thresholds of significance. As such, the proposed project would not result in a significant air quality impact during operations.

Table 3					
Unmitigated Maximum Operational Emissions					
Pollutant	Proposed Project Emissions		Threshold of Significance		Exceeds Threshold?
	lbs/day	tons/yr	lbs/day	tons/yr	
ROG	1.11	0.18	54	10	NO
NO _x	2.52	0.45	54	10	NO
PM ₁₀ (exhaust)	0.02	0.00	82	15	NO
PM ₁₀ (fugitive)	0.97	0.17	None	None	N/A
PM _{2.5} (exhaust)	0.02	0.00	54	10	NO
PM _{2.5} (fugitive)	0.26	0.05	None	None	N/A

Source: CalEEMod, January 2018 (see Appendix A).

Cumulative Emissions

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 1 represent the levels at which a project's individual

emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 1, the proposed project's emissions would be cumulatively considerable, resulting in a significant adverse cumulative air quality impact to the region's existing air quality conditions. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be expected to result in a cumulatively considerable contribution to the region's existing air quality conditions.

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2017 CAP. According to BAAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be considered to conflict with or obstruct implementation of regional air quality plans.

Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, impacts would be considered ***less than significant***.

- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptor to the project site would be the Satellite Healthcare dialysis center located approximately 425 feet north of the proposed development area. The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and Toxic Air Contaminants (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

Based on traffic counts conducted as part of the Trip Generation and Operations Analysis prepared for the proposed project, all of the intersections in the project area experience traffic levels far below 44,000 vehicles during AM and PM peak hour periods, and project-generated traffic would not increase traffic volumes at an affected intersection to more than 44,000 vehicles per hour.⁵ In addition, as discussed in Section XVI, Transportation and Circulation, of this Initial Study, the proposed project would not conflict with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP).⁶ Areas where vertical and/or horizontal mixing is limited due to tunnels, underpasses, or similar features do not exist in the project area. Therefore, based on the BAAQMD's screening criteria for localized CO emissions, the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

⁵ Hexagon Transportation Consultants, Inc. Zip Thru Car Wash Trip Generation and Operations Analysis. February 7, 2018.

⁶ Santa Clara Valley Transportation Authority. *2015 Congestion Management Plan*. October 2015.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the proposed project would not generate any substantial pollutant concentrations during operations. However, short-term, construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Specifically, as noted above, construction would occur over an approximately seven-month period. Grading activities, when emissions would be most intensive, would occur over the period of approximately one day. The exposure period typically analyzed in health risk assessments is 30 years or greater, which is substantially longer than the seven-month construction period associated with the proposed project. In addition, all grading activities would not occur within the northern 0.46-acre portion of the site closest to the Satellite Healthcare facility.

All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. In addition, the project applicant would be required to prepare, and include on all site development and grading plans, a management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project. Per Section 18.48.005 of the City's Municipal Code, the management plan must include all applicable BAAQMD rules and regulations, as well as the City's standard conditions for construction activity, listed below:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take

corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The City of Morgan Hill Community Development Department would ensure that the conditions listed above would be noted on project construction drawings prior to issuance of a building permit or approval of improvement plans.

During construction, only portions of the proposed development area would be disturbed at a time. Operation of construction equipment would occur on such portions of the site intermittently throughout the course of a day over the overall construction period. In addition, Chapter 8.28 of the City's Municipal Code prohibits construction activities between 8:00 PM and 7:00 AM, Monday through Friday, and between 6:00 PM and 9:00 AM on Saturdays. Construction activities may not occur on Sundays or federal holidays. Because construction equipment on-site would not operate for any long periods of time and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the nearest sensitive receptor would not be exposed to pollutants for a permanent or substantially extended period of time.

Due to the varying distances from working construction areas and equipment usage to the Satellite Healthcare facility to the north of the project site, sensitive receptors at the facility would be exposed to varying concentrations of DPM emissions throughout the construction period. According to BAAQMD, research conducted by CARB indicates that DPM is highly dispersive in the atmosphere and is reduced by 70 percent at a distance of approximately 500 feet. In addition, the City of Morgan Hill is located within the Santa Clara Valley, which, according to the BAAQMD, has prevailing north-northwesterly winds. Because the Satellite Healthcare facility is located to the north of the site, the prevailing winds in the area would help to direct potential pollutants generated at the project site away from the nearby sensitive receptors. Thus, emissions at the project site would be substantially dispersed at the nearest sensitive receptor.

Considering the short-term nature of construction activities, the regulated and intermittent nature of the operation of construction equipment, and the highly dispersive nature of DPM, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. For the aforementioned reasons, project construction would not be expected to expose sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO or TACs from construction or operation. Therefore, the proposed project would result in a ***less-than-significant*** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

- e. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses.

Construction activities often include diesel-fueled equipment and heavy-duty diesel trucks, which can create odors associated with diesel fumes, which could be found to be objectionable. However, as discussed above, construction activities would be temporary, and operation of construction equipment would be regulated and intermittent. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Accordingly, substantial objectionable odors would not occur during construction activities or affect a substantial number of people.

It should be noted that BAAQMD regulates objectionable odors through Regulation 7, Odorous Substances, which does not become applicable until the Air Pollution Control Officer (APCO) receives odor complaints from ten or more complainants within a 90-day period. Once effective, Regulation 7 places general limitation on odorous substances and specific emission limitations on certain odorous compounds, which remain effective until such time that citizen complaints have been received by the APCO for one year. The limits of Regulation 7 become applicable again when the APCO receives odor complaints from five or more complainants within a 90-day period. Thus, although not anticipated, if odor complaints are made after the proposed project is developed, the BAAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors, and a ***less-than-significant*** impact related to objectionable odors would result.

IV. BIOLOGICAL RESOURCES.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	✗	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	✗	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	✗	☐
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	☐	✗
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	✗	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	✗	☐
a. The proposed project site is located within the boundaries of the Santa Clara Valley Habitat Plan (SCVHP). Currently, the project site is vacant and is regularly disked to prevent weed growth. A small number of ornamental shrubs and trees are located along the subject property's northern boundary between the property and the adjacent parking lot. The observed site conditions are consistent with the SCVHP, which designates the site as an Urban-Suburban developed land cover type. The Urban-Suburban land cover type is described in the SCVHP as developed areas "where the native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as one or more structures per 2.5 acres." ⁷ Typically, species covered by the SCVHP are unlikely to occur within Urban-Suburban areas. Per the Santa Clara Valley Habitat				

⁷ Santa Clara Valley Habitat Agency. *Final Santa Clara Valley Habitat Plan* [pg. 3-100]. August 2012.

Agency Geobrowser program, the project site is not located within a designated Plant or Wildlife Survey Area for any covered species.⁸

Notwithstanding the above, only the western burrowing owl has the potential of inhabiting the proposed project site, according to habitat requirements listed in Appendix D of the SCVHP. Burrowing owls do not require a specific vegetation cover or soil type and typically use vacated burrows dug by small mammals as nesting habitat; however, burrowing owls are also known to use artificial burrows including pipes, culverts, and piles of concrete pieces in urban areas. While the project site is not located within a Burrowing Owl Fee Zone, potential impacts to burrowing owls could occur as a result of the proposed development.

In June 2003, the City of Morgan Hill adopted the Citywide Burrowing Owl Habitat Mitigation Plan.⁹ The purpose of the plan was to create a comprehensive program to mitigate impacts to burrowing owls, a “Species of Special Concern”, and their habitat, instead of addressing such impacts on a project-by-project basis. As a result of this plan, the City has established a 30.5-acre preserve for burrowing owl off of Edmundson Avenue. Lands subject to the Citywide Burrowing Owl Habitat Mitigation Plan are those lands that are below 600 feet in elevation above sea level and support any grassland and/or mixed herbaceous vegetation upon which an activity is proposed that is defined as a “project” by CEQA. Given that the project site is located at approximately 331 feet above mean sea level (msl) and contains low enough herbaceous ground cover to support burrowing owl, the proposed project would be subject to the City’s Habitat Mitigation Plan for burrowing owl.

Should the project not comply with the mitigation requirements of the City’s burrowing owl mitigation plan, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

- IV-1. A pre-construction survey shall be conducted by a qualified Burrowing Owl biologist no more than 30 days prior to initiation of any ground disturbing (construction) activity to assure take avoidance of burrowing owls. The survey shall consist of a habitat assessment, burrow survey, owl survey, and completion of a written report. The written report shall be submitted to the Community Development Department. If owls are observed during the preconstruction survey, no impacts to the owls or their habitat will be allowed during the nesting season (February 1 to August 31).*

⁸ Santa Clara Valley Habitat Agency. Geobrowser. Available at: <http://www.hcpmaps.com/habitat/>. Accessed January 2018.

⁹ City of Morgan Hill. *Citywide Burrowing Owl Mitigation Plan*. August 2003.

- IV-2. *Should burrowing owls be found on the site during the breeding season (February 1 through August 31), exclusion zones, with a 250-foot radius from occupied burrows, shall be established. All development-related activities shall occur outside of the exclusion area until the young have fledged.*
- IV-3. *If pre-construction surveys are conducted during the non-breeding season (September 1 through January 31) and burrowing owls are observed on the site, the owls may be relocated upon approval by the California Department of Fish and Wildlife, in accordance with the Burrowing Owl Mitigation Plan.*
- b,c. The proposed project site consists primarily of disturbed ruderal vegetation and is surrounded to the north, east, and south by existing development. Water features do not exist on the project site or in the vicinity of the site. The site would, therefore, not be considered a riparian habitat, a wetland, or a sensitive natural community. Accordingly, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, or on federally-protected wetlands, and a ***less-than-significant*** impact would occur.
- d. The project site is located within a designated commercial area. A vacant, undeveloped parcel is located to the west of the site; however, the parcel is bordered by existing development or roadways to the north, east, and south. Thus, the parcel does not provide a continuous corridor for wildlife movement. As noted above, the project does not contain streams or other waterways that could be used by migratory fish or as a wildlife corridor for other wildlife species. As such, the project would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Thus, ***no impact*** would occur.
- e. Section 12.32.030 of the City of Morgan Hill's Municipal Code requires the approval of a tree removal permit before the removal of any tree with a circumference greater than 40 inches or any indigenous tree (Oak, Sycamore, California Bay, Madrone, or Alder) with circumference greater than 18 inches. Currently, ornamental trees are located along the site's northern boundary.

However, as discussed previously, with the exception of limited landscaping improvements (hydroseeding) along the project site's frontage at Caputo Drive, the northern 0.46-acre portion of the project site would not be graded or otherwise disturbed as part of the proposed project. Rather, development would be limited to the southern portion of the project site, and tree removal would not be required. Therefore, the proposed project would have a ***less-than-significant*** impact related to conflicting with local policies or ordinances protecting biological resources, particularly related to Chapter 12.32 of the City's Municipal Code.

- f. The SCVHP was developed through a partnership between Santa Clara County, the cities of San José, Morgan Hill, and Gilroy, the Santa Clara Valley Water District (SCVWD), the Santa Clara VTA, the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (CDFW). The SCVHP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The SCVHP provides take authorization for 18 listed and non-listed species (i.e. covered species). In addition, the SCVHP includes conservation measures to protect the covered species covered by the SCVHP, as well as a conservation strategy designed to mitigate impacts on covered species and contribute to the recovery of the species in the study area.

As noted previously, the SCVHP designates the project site as an Urban-Suburban developed land cover type. Typically, species covered by the SCVHP are unlikely to occur within Urban-Suburban areas. Per the Santa Clara Valley Habitat Agency Geobrowser program, the project site is not located within a designated Plant or Wildlife Survey Area for any covered species.¹⁰ In addition, the project site is not located within a designated fee zone area. Therefore, the proposed project would not conflict with the SCVHP, and a *less-than-significant* impact would occur.

¹⁰ Santa Clara Valley Habitat Agency. Geobrowser. Available at: <http://www.hcpmaps.com/habitat/>. Accessed January 2018.

V. CULTURAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	✗	
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	☐	✗	☐
c. Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?	☐	☐	✗	☐
d. Disturb any human remains, including those interred outside of formal cemeteries.	☐	☐	✗	☐
a. The proposed project site does not currently contain any permanent structures. Per a records search of the California Historic Resources Information System (CHRIS) performed by the North Central Information Center (NWIC) for cultural resource site records and survey reports within the proposed project area, the State Office of Historic Preservation Directory does not list recorded buildings or structures in or adjacent to the project site.¹¹ Therefore, the proposed project would not cause any adverse change in the significance of a historical resource, and a <i>less-than-significant</i> impact would occur.				
b-d. According to the CHRIS search, the site has not been subject to a previous cultural resource study and does not contain any recorded archaeological resources. Based on the environmental setting of the site, the potential for unrecorded Native American resources to occur within the project site is relatively low. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File returned negative results.¹² However, while unlikely, the possibility exists for previously unknown resources to be found on-site during grading and excavation associated with development of the proposed project. In the event that such resources are unearthed, the following City standard measures related to the protection of archaeological resources, as detailed in Section 18.75.110 of the City's Municipal Code, would be implemented: 1. An archaeologist shall be present on-site to monitor all ground-disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: a. Work at the location of the find will halt immediately within thirty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation				

¹¹ Northwest Information Center. *Record search results for the proposed Zip Thru Express Car Wash Project located at 16015 Caputo Drive, Morgan Hill, Santa Clara County, APN 817-29-027*. February 12, 2018.

¹² Native American Heritage Commission. *Zip Thru Express Car Wash Project, Santa Clara County*. January 26, 2018.

- of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;
- b. If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
 - c. If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and
 - d. If the resource cannot be avoided, the archaeologist shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the community development director. The action plan shall be in conformance with California Public Resources Code 21083.2.
2. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans,
 - a. If human remains are encountered they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
 - b. Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
 - c. Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
 3. In the event that known or suspected Native American remains are encountered or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.
 4. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols,

or if on-site at the time of discovery, by the monitoring archaeologist (typically twenty-five to fifty feet for single burial or archaeological find).

5. The exclusion zone shall be secured (e.g., twenty-four-hour surveillance) as directed by the city or county if considered prudent to avoid further disturbances.
6. The contractor foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
 - a. The city of Morgan Hill Community Development Director,
 - b. The contractor's point(s) of contact,
 - c. The coroner of the county of Santa Clara (if human remains found), and
 - d. The Native American Heritage Commission (NAHC) in Sacramento.
7. The coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American, the Coroner has twenty-four hours to notify the NAHC.
8. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.).
9. Within twenty-hour hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose,
10. Within twenty-four hours of their notification by the NAHC, the MLD may recommend to the City's community development director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out.
11. If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Compliance with the above standard conditions of approval would ensure that construction of the proposed project would have a ***less-than-significant*** impact related to unique archeological, paleontological, and geological resources, as well as the disturbance of human remains.

VI. GEOLOGY AND SOILS.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault?	☐	☐	✗	☐
ii. Strong seismic ground shaking?	☐	☐	✗	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	✗	☐
iv. Landslides?	☐	☐	✗	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	✗	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	✗	☐
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code?	☐	☐	✗	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	✗
ai-iv. Active faults do not cross the site, and the site is not mapped within an Alquist-Priolo Earthquake Fault Zone. ¹³ Therefore, the proposed project would not be subject to risks related to fault rupture. Furthermore, the site is not located within the vicinity of any steep slopes that would be subject to landslide risk, and is not located within an area requiring special investigation for landslides or liquefaction hazards. According to the Association of Bay Area Governments (ABAG) Resilience Program's interactive Hazards Map, the project site is located in an area of relatively low liquefaction susceptibility. ¹⁴				

Due to the proximity of the site area to nearby active faults, including but not limited to the Hayward, Calaveras, and the San Andreas fault zones, strong ground shaking could occur at the site as a result of an earthquake on any one of the faults. However, the proposed car wash facility would be subject to all applicable regulations within the California Building Code (CBC) and Chapter 15.08 of the City's Municipal Code, which provide standards to protect property and public safety by regulating the design and construction of foundations,

¹³ Department of Conservation. *State of California, Special Studies Zones, Mt. Madonna Quadrangle, Revised Official Map*. Effective January 1, 1976.

¹⁴ Association of Bay Area Governments. *Resilience Program*. Available at: <http://gis.abag.ca.gov/website/Hazards/?hlyr=liqSusceptibility>. Accessed January 2018.

building frames, and other building elements. Therefore, a ***less-than-significant*** impact would occur related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides.

- b. The development of the proposed project site would cause ground disturbance of top soil related to construction activity. The ground disturbance would be limited to the areas proposed for grading and excavation, including the building pads; curb, gutter, and sidewalk improvement areas; and drainage, sewer, and water infrastructure alignments. After grading and excavation and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Per the General Plan EIR, new development within the City that disturbs one or more acres of land is required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs) to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. Accounting for the development of the southern 0.99-acre portion of the subject property, as well as proposed landscaping along the Caputo Drive frontage within the northern portion of the property, it is anticipated that the proposed project would disturb approximately one acre and, thus, would be subject to such requirements. In addition, per Chapter 13.30 of the City's Municipal Code, the project applicant would be required to submit a sediment and erosion control plan to the City of Morgan Hill, Public Works Department, prior to the approval of improvement plans and issuance of building permits. The plan(s) shall be acceptable and conform to City standards to prevent significant sediment and soil erosion during construction and include the standards and guidelines found in the California Stormwater Quality Association, Stormwater Best Management Practice Handbook. Based on the above, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a ***less-than-significant*** impact would occur.

- c-d. As noted previously, the proposed project site would not be subject to substantial landslide or liquefaction hazards. In addition, as noted in the General Plan EIR, the CBC and Chapter 15.08 of the City's Municipal Code provide standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, and other building elements.

Per the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey program, the mapped soils within the project site consist of Arbuckle gravelly loam, zero to two percent slopes, with a linear extensibility rating of 1.3 percent. Per the NRCS, soils with a linear extensibility rating of less than three percent are characterized by a relatively low shrink-swell class (i.e., low expansive potential).¹⁵ Therefore, the proposed project would not be located on a geologic unit or soil that is

¹⁵ Natural Resources Conservation Service. *Calculated Coefficients of Linear Extensibility*. Available at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/office/ssr10/tr/?cid=nrcs144p2_074840. Accessed January 2018.

unstable or be located on expansive soil as defined in Table 18-1B of the Uniform Building Code, and a ***less-than-significant*** impact would occur.

- e. The proposed development would connect to existing City-maintained sewer infrastructure and would not include the use of septic tanks. Accordingly, ***no impact*** would occur related to soils incapable of adequately supporting the use of septic tanks.

VII. GREENHOUSE GAS EMISSIONS.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	✗	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✗	☐

- a,b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO_{2e}/yr).

The proposed project is located within the jurisdictional boundaries of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 MTCO_{2e}/yr. BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. If a project would generate GHG emissions above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations.

The proposed project's GHG emissions were quantified using CalEEMod using the same assumptions as presented in the Air Quality section of this IS/MND, and compared to the 1,100 MTCO_{2e}/yr threshold of significance. The proposed project's required compliance with the current California Building Energy Efficiency Standards Code was assumed in the modeling. In addition, the CO₂ intensity factor within the model was adjusted to reflect the

Pacific Gas & Electric Company's anticipated progress towards statewide renewable portfolio standard goals. All CalEEMod results are included in Appendix A.

According to the CalEEMod results, the proposed project would result in unmitigated operational GHG emissions of 272.63 MTCO_{2e}/yr, which is below the 1,100 MTCO_{2e}/yr threshold of significance. Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD has adopted a threshold of significance for construction-related GHG emissions. Nevertheless, to provide a conservative estimate of emissions, the proposed project's total construction GHG emissions have been added to annual operational emissions. Construction would occur over approximately seven months and result in total GHG emissions of 113.20 MTCO_{2e}. If the total construction emissions are added to the annual operational emissions, the project's total GHG emissions would equal 385.83 MTCO_{2e}/yr, which remains below BAAQMD's threshold of significance for operational emissions. Accordingly, the proposed project would not have a significant impact related to GHG emissions during construction.

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and impacts would be considered ***less than significant***.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	✗	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☐	✗	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	✗
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	✗
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	✗
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	✗
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✗	☐
h. Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	✗
a. Commercial uses such as the proposed car wash are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. As noted previously, chemicals used in the proposed car wash cleaning process would be bio-degradable and non-hazardous. Various commercial cleaning products, fertilizers, and herbicides would likely be used in the course of general site upkeep and landscaping, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount utilized on the site, routine use of such products would not represent a substantial risk to public health or the environment. Therefore, the project would not create a significant hazard to the public or the environment				

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

through the routine transport, use, or disposal of hazardous materials, and a ***less-than-significant*** impact would occur.

- b. Construction activities associated with the proposed project would involve the use of various products such as concrete, paints, and adhesives. In addition, heavy-duty construction equipment operating on the project site would contain hydraulic fluid, diesel fuel, and other petroleum products. Small quantities of such potentially toxic substances would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials.

A Phase 1 Environmental Site Assessment (ESA) was prepared for the proposed project by Harris and Lee Environmental Sciences, LLC (see Appendix B).¹⁶ The Phase 1 ESA included research and review of relevant regulatory information and historical documentation, a site reconnaissance survey, and a search of environmental site radius reports. According to the Phase 1 ESA, the site was used as agricultural farmland from at least 1939 until the mid-1970's; however, from the mid 1970's to present, the site ceased to be used for agricultural purposes and remained vacant and undeveloped. Historical recognized environmental conditions (RECs) were not identified in connection with previous site uses.

Based on a review of surrounding properties in the project site vicinity, the Phase I ESA noted a REC associated with a property located west of the site at 425 Tennant Avenue. Records indicate that Olin and Standard Fusee manufactured signal flares on the property from 1956 to 1995, which resulted in discharge of perchlorate to soils and underlying groundwater. The site is currently status "Open – Remediation" as of April 8, 2004. Per the Phase 1 ESA, groundwater contaminated with perchlorate levels ranging from 11.1 to 24.5 micrograms per liter (ug/L) have migrated under the proposed project site. California's maximum contaminant level for perchlorate in groundwater is 6 ug/L. Olin Corporation is the responsible party for remediation of the contamination.

As part of the *California Building Industry Association v. Bay Area Air Quality Management District* case (CBIA case), the California Supreme Court granted limited review to the question: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? In the opinion published on December 17, 2015, the Supreme Court looked closely at the language and legislative intent in CEQA, and found that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*California Building Industry Assn. v. Bay Area Air*

¹⁶ Harris and Lee Environmental Sciences, LLC. *All Appropriate Inquiry-Phase 1 Environmental Site Assessment*, 16015 Caputo Drive, Morgan Hill, CA 95037, APN 817-29-027. October 2, 2017.

Quality Management Dist. (2015) 62 Cal.4th 369, 377-378.) As a result, the existence of contaminated soil or groundwater within the vicinity of a proposed project is not, “without any accompanying disturbance or other physical change” to the contamination, considered “a significant impact requiring CEQA review and mitigation.” (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 781 [holding development of a project on a site identified on the Cortese list and that included contaminated soil would only constitute a significant impact for the purposes of CEQA if the proposed project disturbed the contaminated soil].) Considering the analysis presented below, construction and operation of the proposed project, specifically the potential to expose construction workers to contaminated groundwater, is not anticipated to exacerbate the existing perchlorate contamination.

Per the preparer of the Phase I ESA, the measured depth to groundwater within the project vicinity is approximately 15 to 40 feet depending on the time of the year based on groundwater monitoring well data. For example, in 2014, depth to water at a well located adjacent to the site’s eastern boundary was reported to be 33.02 feet.¹⁷ Groundwater in the project area generally flows to the southeast.¹⁸ Construction activities associated with the proposed project would require a maximum excavation depth of two feet for building foundations and approximately six feet and three inches for installation of the proposed water clarifier tanks associated with the car wash operations. Consequently, contaminated groundwater would not be encountered during project construction and, thus, the project would not have the potential to release hazardous materials through construction activities. Per the Phase 1 ESA, it is the opinion of Harris and Lee Environmental Sciences, LLC. that the proposed project is unlikely to pose a human health risk during construction of the proposed project.

The Phase I ESA included a Vapor Encroachment Screening (VES) of the subject property to determine whether a Vapor Encroachment Condition (VEC) is present or likely to be present on the property. The VES was performed in general accordance with *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* adopted by ASTM International in Method E2600-15.

The VES process as described in ASTM Standard E2600-15 is a two-tiered screening process. Tier 1 VES focuses on known or suspected contaminated properties located within the area of concern (AOC). The ASTM Standard E2600-15 defines the AOC for petroleum release sites as the area within one-tenth mile (528 feet) around the subject property. For non-petroleum release sites (for example, solvent release sites), the AOC is defined as the area within one-third mile (1,760 feet) around the subject property. In accordance with the Tier 1 VES process, a search distance test was performed to determine whether known or suspected contaminated properties are located within the AOC. Tier 2 VES uses a plume test and critical distance determination to evaluate whether vapors from the contaminated property might migrate and encroach on the subject property. The critical distance between the subject property and a contaminated plume is defined by E2600-15 as 30 feet for

¹⁷ AMEC Environmental & Infrastructure, Inc. *2013 Annual Cleanup Progress Status Report and Fourth Quarter 2013 Groundwater Monitoring Report, Olin Site, Morgan Hill, California* [Table B1, Well MP-04-038]. January 2014.

¹⁸ Harris and Lee Environmental Sciences, LLC. *All Appropriate Inquiry-Phase 1 Environmental Site Assessment, 16015 Caputo Drive, Morgan Hill, CA 95037, APN 817-29-027* [pg. 17]. October 2, 2017.

dissolved petroleum hydrocarbons, and 100 feet for free-product petroleum hydrocarbons and non-petroleum chemicals of concern (COC). Contaminated groundwater plumes within such distances may constitute a VEC to the subject property.

Based on the results of the VES, evidence was not found for a likely VEC on the subject property. The chemical of concern, perchlorate, does not readily volatilize; as such, perchlorate is unlikely to pose a vapor intrusion risk at the project site. Therefore, the proposed project would not upset any existing contaminated groundwater beneath the site through the use of groundwater.

Based on the above, the project site is not associated with any historical RECs that would pose a risk to the proposed project. While the groundwater underlying the project site has been determined to be contaminated with perchlorate, excavation activities associated with the proposed project would not reach the depth of the groundwater table. Per the Phase 1 ESA, contaminated groundwater would not pose a substantial human health risk to the proposed project due to vapor encroachment into the project site. Therefore, development of the proposed project would result in a **less-than-significant** impact related to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

- c. The nearest school relative to the project site is the Barrett Elementary School, located approximately 0.37-mile northeast of the site at 895 Barrett Avenue. Development of the project site with a car wash facility would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials within one-quarter mile of an existing or proposed school. Thus, **no impact** would result.
- d. Per the Phase 1 ESA, the proposed project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, **no impact** would result from implementation of the proposed project.
- e,f. The public airport nearest to the project site is the San Martin Airport, which is located approximately 2.85 miles southeast of the project site at 13030 Murphy Avenue. The project site is located well outside of the Airport Influence Area (AIA) identified in the South County Airport Comprehensive Land Use Plan.¹⁹ In addition, the project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not result in an airport-related safety hazard for people residing or working in the project area, and **no impact** would occur.
- g. Implementation of the proposed project would not result in any substantial modifications to the City's existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. In addition, the project would not conflict with the City's Emergency Operations Plan.²⁰ Therefore, the project would not

¹⁹ Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.

²⁰ City of Morgan Hill. *Emergency Operations Plan*. June 6, 2013.

impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

- h. Per the City's Wildland Urban Interface map, the proposed project site is not located in a High or Very High Fire Hazard Severity Zone.²¹ In addition, buildout of the site with residential uses has been previously considered by the City, and the site is situated within a developed area. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and ***no impact*** would occur.

²¹ City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.

IX. HYDROLOGY AND WATER QUALITY.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	☐	✗	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	✗	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	✗	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	✗	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	✗	☐
f. Otherwise substantially degrade water quality?	☐	☐	✗	☐
g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	✗	☐
h. Place within a 100-year floodplain structures which would impede or redirect flood flows?	☐	☐	✗	☐
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	☐	☐	✗	☐
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	✗
a,f. The proposed project's potential to result in water quality impacts during construction and operations is discussed in further detail separately below.				

Construction

Construction would require grading, excavation, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. All such activities

have the potential to affect water quality and contribute to localized violations of water quality standards if storm water runoff from construction activities enters receiving waters.

Construction activities such as grading, excavation, and trenching for site improvements would result in the disturbance of on-site soils. The exposed soils have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Impacts from construction-related activities would generally be short-term and of limited duration.

Water quality degradation is regulated by the federal NPDES Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the NPDES permitting program is administered by the State Water Resources Control Board (SWRCB) through nine Regional Water Quality Control Boards (RWQCBs). As discussed in Section VI, Geology and Soils, of this IS/MND, new development within the City that disturbs one or more acres of land is required to comply with the NPDES General Construction Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs) to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. Accounting for the development of the southern 0.99-acre portion of the subject property, as well as proposed landscaping along the Caputo Drive frontage within the northern portion of the property, it is anticipated that the proposed project would disturb approximately one acre and, thus, would be subject to the State NPDES General Permit conditions.

The proposed project would also be subject to all regional and local water quality regulations. In order to meet water quality objectives for the region, the City of Morgan Hill, City of Gilroy, and County of Santa Clara have prepared and are implementing a Revised Regional Storm Water Management Plan (SWMP). The SWMP incorporates the efforts of the City of Morgan Hill, the City of Gilroy, and the unincorporated portion of Santa Clara County, within the watershed of the Pajaro River and Monterey Bay, to meet the Phase II Storm Water Permit requirements for small municipal separate storm sewer systems (MS4s). The Upper Pajaro River Watershed is located within the jurisdiction of the Central Coast Regional Water Quality Control Board (CCRWQCB). The City of Morgan Hill implements the SWMP through an extensive program that entails: 1) the establishment of SWMP goals for the City; 2) public education and outreach; 3) public involvement and participation; 4) illicit discharge control; 5) construction site storm water runoff control; 6) post-construction storm water management in development; and 7) pollution prevention. For construction activities, the SWMP presents Best Management Practices (BMPs) that are required for the control of storm water runoff quality during

construction. The project's required compliance with the SWMP and NPDES would ensure that construction activities would not result in degradation of downstream water quality.

Operation

After project completion, impervious surfaces on the project site could contribute incrementally to the degradation of downstream water quality during storm events. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported via stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, pesticides, oil and grease, nutrients, metals, and bacteria, as well as trash and other debris deposited within the proposed vehicle parking/vacuuming area. In addition, stormwater runoff could cause soil erosion if not properly addressed, and provide a more lucrative means of transport for pollutants to enter the waterways.

The proposed project would be managed in accordance with Resolution R3-2013-0032 issued by the California Regional Water Quality Control Board, Central Coast Region. This resolution formally adopts post-construction stormwater management requirements for development projects in the Central Coast Region. The requirements identify 10 Watershed Management Zones (WMZs) in the covered area, and specify stormwater management requirements for each zone, depending on the size of the development project. Because the proposed project site is located in an area classified as WMZ-1, stormwater management at the project site must include site design and runoff features to limit the amount of runoff from the project site as well as on-site water quality treatment to reduce pollutant loads in the stormwater runoff using a Low Impact Development (LID) treatment system such as biofiltration. In WMZ-1, the treatment system must retain 95 percent of the runoff from the project site and also maintain peak runoff flows such that they do not exceed pre-project flows.

Per the Preliminary Stormwater Control Plan (SWCP) prepared for the proposed project, on-site stormwater runoff from impervious areas would be collected by new curb inlets and drain inlets throughout the site and flow to a series of SRAs and a bio-retention basin located at the southeast portion of the site (see Figure 10). The bio-retention basin would treat and detain all on-site runoff prior to discharging to the City's existing stormwater drain located at the site's southeastern boundary.

As shown in Table 4 below, the proposed bio-retention basin and SRAs, termed integrated management practices (IMPs), would be appropriately sized to treat runoff from all drainage management areas (DMAs) within the proposed development area.

Figure 10
Preliminary Stormwater Control Plan

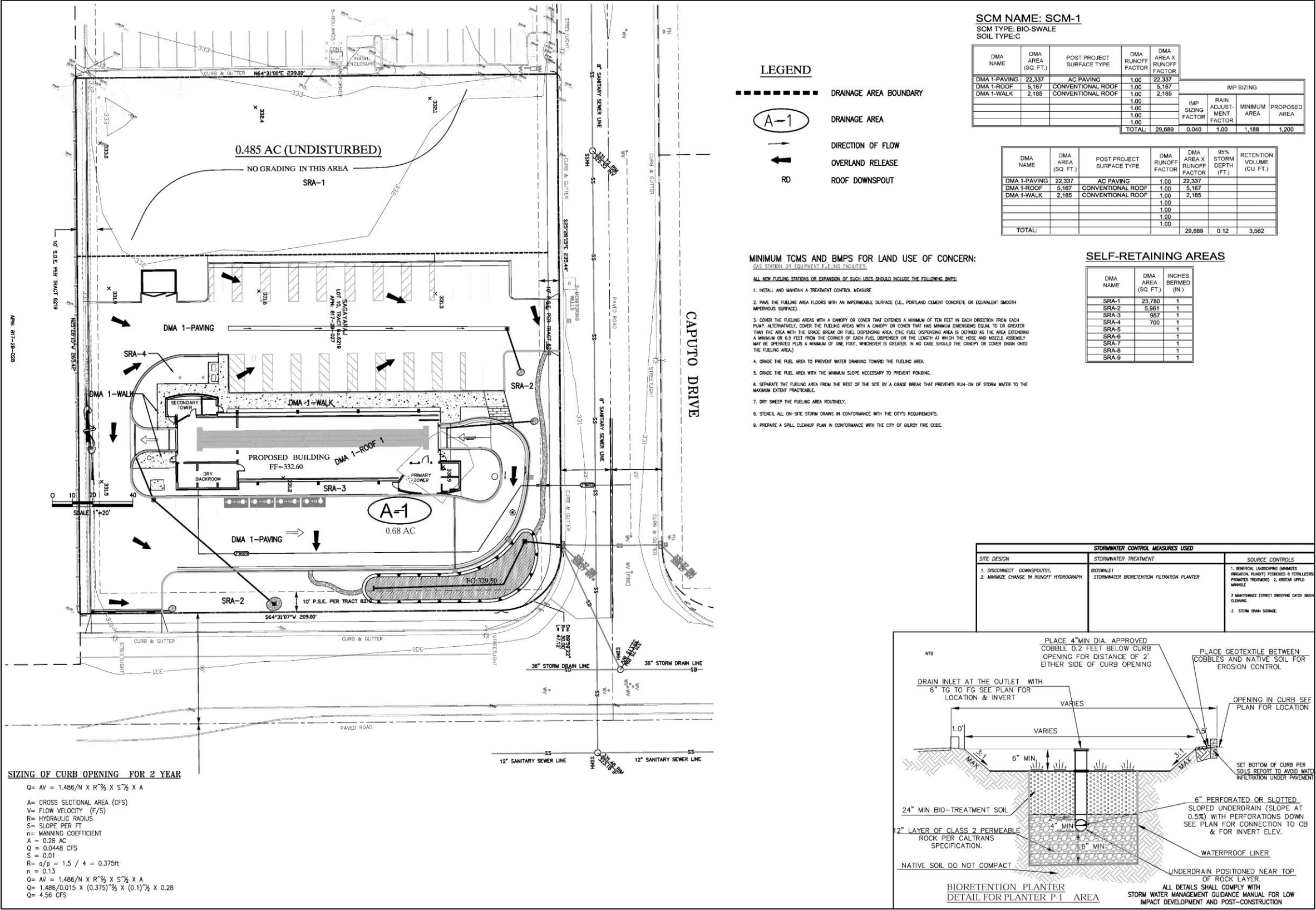


Table 4 Proposed IMP Sizing Calculations					
DMA Name	DMA Area (sf)	IMP Sizing			
		IMP Sizing Factor	Rain Adjustment Factor	Minimum Area (sf)	Proposed Area (sf)
DMA 1 – Paving	22,337	0.040	1.00	1,188	1,200
DMA 2 – Roof	5,167				
DMA 3 – Walk	2,185				
Total	26,689				

The design, construction, operation, and maintenance of the system would be addressed in a final SWCP to be submitted to the City of Morgan Hill in accordance with the stormwater management requirements adopted by Resolution R3-2013-0032. The SWCP would demonstrate how the proposed IMPs would meet the specified water quality, runoff retention, and peak flow management requirements. Prior to operation of the project, the stormwater controls would be field verified by the City of Morgan Hill to confirm design of the controls in accordance with the specified standards, and the controls would be subject to later operation and maintenance inspections by the City.

Per Section 18.71.030A of the City's Municipal Code, the proposed project would be subject to the City's Post Construction Stormwater Pollution Prevention Ordinance. As such, the proposed project would be required to comply with the design standards set forth in Section 18.71.110, and select and implement BMPs to the satisfaction of the City in accordance with the requirements contained in the most recent versions of the following documents:

1. City of Morgan Hill Stormwater Post Construction Best Management Practices Development Standards for new development and redevelopment;
2. California Storm Water Quality Association Best Management Practice Handbooks;
3. City of Gilroy, City of Morgan Hill and County of Santa Clara Regional Stormwater Management Plan (SWMP), as approved by the Central Coast Regional Water Quality Control Board; and
4. City of Morgan Hill Hydro-modification Management Plan, as approved by the Central Coast Regional Water Quality Control Board.

The final design of the proposed drainage system would be reviewed and approved by the City of Morgan Hill Public Works Department, which would ensure that the proposed drainage system complies with the City's Post Construction Stormwater Pollution Prevention Ordinance with respect to incorporating sufficient permanent stormwater treatment control BMPs. Therefore, water quality standards or waste discharge requirements would not be violated and water quality would not be degraded as a result of the proposed project operations.

Conclusion

Based on the above discussions, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality during construction or operations. Therefore, a ***less-than-significant*** impact would occur.

- b. Per the General Plan EIR, the City's water supplies currently consist entirely of groundwater. Approximately 25 percent of the City's supply is extracted from the Coyote Valley subarea of the Santa Clara Subbasin, and approximately 75 percent is extracted from the Llagas Subbasin. The proposed project site is located within the Llagas Subbasin. Neither of the subbasins are in a condition of overdraft, and groundwater levels are not expected to drop.²² It should be noted that water supply is discussed in Section XVIII, Utilities and Service Systems, of this IS/MND.

Major recharge facilities within the Llagas Subbasin include the Uvas and Chesbro Reservoirs, in-stream recharge in Llagas and Uvas Creeks, the Madrone Channel, the San Pedro and Main Avenue groundwater recharge ponds, and the Uvas-Llagas pipeline which is capable of diverting water from Uvas Reservoir to Llagas Creek. The proposed project site is not located within the vicinity of any of the aforementioned recharge areas.

Given that groundwater levels within the subbasin underlying the project site are currently stable, and that the proposed project site would not be located adjacent to a major groundwater recharge area, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). Thus, a ***less-than-significant*** impact would occur.

- c-e. As previously mentioned, the proposed project site consists of vacant, undeveloped land with ruderal vegetation. The site is surrounded by existing commercial development to the north, east, and south, and does not include a stream or river on-site or in the immediate vicinity. Implementation of the proposed project would result in additional impervious surfaces. However, as discussed above, the project would include a system of storm drains and IMPs to collect, treat, and detain runoff from all on-site impervious areas. Treated runoff would subsequently be discharged to the City's existing storm drain located at the site's southeastern boundary along Caputo Drive. The IMPs would treat and retain 95 percent of the runoff from the project site and also maintain peak runoff flows such that they do not exceed pre-project flows in accordance with the stormwater management requirements adopted by Resolution R3-2013-0032. As such, the project would not significantly increase stormwater flows into the City's existing system.

The final drainage system design for the project would be subject to review and approval by the City of Morgan Hill Public Works Department, who would determine whether the proposed drainage system for the project is consistent with the City's Storm Drainage

²² City of Morgan Hill. *Morgan Hill 2035 Final Environmental Impact Report* [pg. 4.9-18]. Adopted July 2016.

Master Plan and standard stormwater-related conditions of approval. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Thus, a ***less-than-significant*** impact would occur.

- g,h. According to FEMA Flood Insurance Rate Map number 06085C0607H, the proposed project site is located within Zone X. Zone X is defined as the area between the limits of the 100-year floodplain and the 500-year floodplain (i.e. 0.2 percent annual chance flood hazard). As such, the proposed project would not be placing housing or structures within the 100-year floodplain and 100-year flood impacts to housing and flood flows would be considered ***less than significant***.
- i. The Association of Bay Area Governments (ABAG) has compiled dam failure inundation hazard maps submitted to the State Office of Emergency Services by dam owners throughout the Bay Area. The map for the City of Morgan Hill shows that the project site is within the dam failure inundation hazard zone for Anderson Reservoir.²³

The dams in Santa Clara County are managed by the Santa Clara Valley Water District (SCVWD). The dams are inspected twice each year and are continuously monitored for seepage and settling and inspected immediately following significant earthquakes. A seismic stability evaluation performed in 2007 on Anderson Dam indicated that the downstream and upstream embankments could become unstable during a very large magnitude earthquake and the rupture of faults underlying the dam may have adverse impact on the outlet pipes and intake structure. The SCVWD has initiated a capital project, the Anderson Dam Seismic Retrofit Project (ADSRP), to complete the planning, design, and construction of the seismic retrofit of the dam. Construction work for the ADSRP is planned to start in 2020.²⁴

In order to protect the public from potential effects until the ADSRP is complete, a storage restriction of approximately 45 feet below the dam crest has been put in place, with a reduced storage capacity of 61,810 acre-feet. The SCVWD and regulatory agencies (California Division of Safety of Dams and the Federal Energy Regulatory Commission) have approved the restriction and believe that the restriction would be sufficient to prevent the uncontrolled release of water in case of dam failure after a major earthquake.

Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, and impacts would be ***less than significant***.

²³ Association of Bay Area Governments. *Dam Failure Inundation Hazard Map for Morgan Hill*. 1995. Available at: http://www.mhcert.com/prepare/dam_failure.shtml. Accessed January 2018.

²⁴ Santa Clara Valley Water District. *C1: Anderson Dam Seismic Retrofit**. Available at: <https://www.valleywater.org/project-updates/dam-reservoir-projects/anderson-dam-seismic-retrofit>. Accessed February 2018.

- j. A seiche is defined as a wave generated by rapid displacement of water within a reservoir or lake, due to an earthquake that triggers land movement within the water body or land sliding into or beneath the water body. The project site is not located near a water body that is susceptible to seiche hazard. Furthermore, the distance to the nearest coastline does not subject the site to tsunami hazards, resulting in ***no impact***.

X. LAND USE AND PLANNING.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	✗
b. Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	✗	☐
c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?	☐	☐	✗	☐

- a. The proposed project site is currently vacant and undeveloped and is surrounded by existing commercial development to the north, east, and south. Implementation of the proposed project would be consistent with the surrounding uses. Residential uses that could be considered an ‘established community’ are not located within the project site vicinity. As such, development of the proposed project would not physically divide an established community. Therefore, **no impact** would occur.
- b. Currently, the proposed project site is designated Commercial per the City’s General Plan and zoned CO. The proposed project would be consistent with land use and planning General Plan policies, including Policy CNF-15.1, which directs the City to encourage a mix of commercial and office development to meet the needs of City residents. In addition, because the project site is not located in the vicinity of any existing car wash facilities, the project would be consistent with Policy CNF-16.2, which limits repetitive ancillary commercial uses, such as fast food restaurants and service stations, on lands around all interchanges.

With City approval of a Conditional Use Permit for the proposed car wash facility, the proposed project would be consistent with the site’s land use and zoning designations. Per Section 18.54.050 of the City’s Municipal Code, the Planning Commission shall only approve a Conditional Use Permit application if the following criteria are met:

1. The site is suitable and adequate for the proposed use;
2. The proposed use and design would not have a substantial adverse effect in traffic circulation and on the planned capacity of the street system;
3. The proposed use at the location requested will not:
 - a. Adversely affect the peace, health, safety, morals or welfare of persons residing or working in the surrounding area; or
 - b. Impair the utility or value of property of other persons located in the vicinity of the site; or
 - c. Be detrimental to public health, safety or general welfare;
4. The design of the project is compatible with existing and proposed development within the district and its surroundings.

Given that the proposed project would be required to meet the criteria listed above, development of the project would result in a ***less-than-significant*** impact regarding any potential conflict with local or regional planning.

- c. The project site is located within the boundaries of the SCVHP. As discussed in detail in the Biological Resources section of this IS/MND (Question ‘f’), the proposed project would comply with all applicable provisions of the SCVHP. Therefore, the proposed project would have a ***less-than-significant*** impact regarding a conflict with an applicable habitat conservation plan or natural communities plan.

XI. MINERAL RESOURCES.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	✗
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	✗
a,b. The City's General Plan does not identify any regionally or locally important mineral resources within the City of Morgan Hill. The <i>Santa Clara County General Plan</i> does identify mineral resources of importance; however, the project site is not in proximity to the quarries currently in operation. Consequently, the proposed project would not result in the loss of a known mineral resource that would be of value to the region nor would the project result in the loss of locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, <i>no impact</i> to mineral resources would occur as a result of the proposed project.				

XII. NOISE.*Would the project result in:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	✗	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	✗	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	✗	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	✗	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	✗
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	✗
a,c. The following section includes a discussion of noise standards and criteria applicable to the proposed project, as well as potential traffic noise and non-transportation noise sources associated with the proposed project.				

Noise Standards and Criteria

Chapter 9, Safety, Service, and Infrastructure, of the City's General Plan contains the following policies pertaining to new commercial developments such as the proposed project:

SSI-8.3 Commercial and Industrial Noise Level Standards. Evaluate interior noise levels in commercial and industrial structures on a case-by-case basis based on the use of the space.

SSI-8.4 Office Noise Level Standards. Interior noise levels in office buildings should be maintained at 45 dBA L_{eq} (hourly average) or less, rather than 45 dBA L_{dn} (daily average).

SSI-8.5 Traffic Noise Level Standards. Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5

dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn} , or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

- SSI-8.6 Stationary Noise Level Standards. Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.

Traffic Noise

As discussed in Chapter XVI, Transportation and Circulation, traffic generated by the proposed project would be limited to 34 trips during the AM peak hour and 58 trips during the PM peak hour. Given the relatively modest increase in vehicle trips occurring as a result of the project, project traffic would not result in a substantial traffic noise level increase in the project area. Furthermore, the proposed project site is located within an area designated and zoned for commercial development; land uses typically considered to be noise-sensitive receptors, such as single-family residences, are not located within the project vicinity.

Non-Transportation Noise

Based on a noise study performed for a similar car wash facility, the primary non-transportation noise source associated with the proposed project would be industrial dryers at the west end of the proposed car wash tunnel.²⁵ At a distance of 30 feet from the exit of the car wash, a dryer reference noise level of 80 decibels (dB) was used. The nearest noise-sensitive use would be the existing office building located approximately 220 feet to the north of the proposed car wash tunnel exit, where the dryers would be located. The office building is set back approximately 55 feet from the property line.

Assuming standard spherical spreading loss (-6 dB per doubling of distance), car wash dryer noise levels would be approximately 65 dB at the property line of the office building and 63 dB at the office building façade. Given that standard construction practices for commercial buildings provide a typical exterior to interior noise reduction of 25 dB, and considering that the existing office building is located approximately 220 feet from the proposed car wash building, car wash dryer noise levels would comply with the City's 45 dBA L_{eq} interior noise level standard for office buildings. In addition, the project would comply with Section 18.48.075 of the City's Municipal Code, which establishes a noise level maximum of 65-70 dB at the lot line of all uses adjacent to offices, retail uses, or other sensitive industries. As a result, noise mitigation measures would not be required for the proposed car wash operations.

²⁵ Bollard Acoustical Consultants, Inc. Environmental Noise Assessment: Gateway West/Arena Blvd Retail Development [pg. 16]. July 27, 2017.

Conclusion

Based on the above, traffic noise and industrial dryer noise associated with long-term operation of the proposed project would not conflict with the City's applicable noise level standards or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. In addition, noise level increases associated with development of the project site with commercial uses such as the proposed project have been previously analyzed in the City's General Plan EIR, which concluded that a less-than-significant impact would occur with respect to long-term operational noise impacts from General Plan buildout. Therefore, a ***less-than-significant*** impact would occur.

- b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 5, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures.

As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

The proposed project would only cause elevated vibration levels during construction, as the proposed project would not involve any uses or operations that would generate substantial groundborne vibration. Although noise and vibration associated with the construction phases of the project would add to the noise environment in the immediate project vicinity, construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Because the proposed project would not cause continuous, long-term vibrations, the project would not be expected to result in extended annoyance to the nearby sensitive receptors.

Table 5
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
in/sec	mm/second		
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of “architectural” damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of “architectural” damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize “architectural” damage
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.

The primary vibration-generating activities associated with the proposed project would occur during grading, placement of utilities, and construction of foundations. Table 6 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with project construction would be the use of vibratory compactors.

Table 6
Vibration Levels for Various Construction Equipment

Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Large Bulldozer	0.089	0.029
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029
Jackhammer	0.035	0.011
Vibratory Hammer	0.070	0.023
Vibratory Compactor/roller	0.210	0.070

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

Use of vibratory compactors/rollers could be required during construction of the proposed on-site parking areas and driveways. However, such activity would not occur within 50 feet of the existing structures located to the north, east, and south of the project site. At a

distance of 50 feet or greater from the vibration source, groundborne vibrations associated with construction equipment would be less than 0.2 in/sec PPV, and, thus, would not cause architectural damage to structures or annoyance to nearby sensitive receptors. Based on the above, the proposed project would not expose people to or generate excessive groundborne vibration or groundborne noise levels, and impacts would be ***less than significant***.

- d. Construction activities associated with development of the southern portion of the project site would result in temporarily increased noise levels from grading, paving, building construction activities, and trenching for utilities. However, because noise levels dissipate with distance from the source, noise levels received by the nearest sensitive receptor, considered to be the office building located approximately 220 feet to the north of the proposed development area, would be substantially reduced. In addition, Chapter 8.28 of the Morgan Hill Municipal Code prohibits construction activities between 8:00 PM and 7:00 AM, Monday through Friday, and between 6:00 PM and 9:00 AM on Saturdays. Construction activities may not occur on Sundays or federal holidays. The Morgan Hill Municipal Code does not specify any short-term noise level limits. Furthermore, construction activities related to the proposed project would include the use of sound-dampening equipment such as mufflers, air-inlet silencers, shrouds, shields, or other noise-reducing features where appropriate.

Enforcement of time restrictions specified in the Morgan Hill Noise Ordinance and the use of noise-dampened equipment would be required to ensure that the temporary or periodic increase in ambient noise levels in the project vicinity associated with construction of the proposed project would not be considered substantial. Therefore, in the absence of such measures, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a ***less-than-significant*** level.

XII-1. During construction activities associated with the proposed project, all internal combustion engines used at the project site shall be equipped with a type of muffler recommended by the vehicle manufacturer. All equipment shall be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components. In addition, the project applicant shall comply with the following:

- *Noise-generating construction activities shall be limited to the daytime hours of 7:00 AM to 8:00 PM Monday through Friday and from 9:00 AM to 6:00 PM Saturday, consistent with Chapter 8.28 of the Morgan Hill Municipal Code;*
- *All diesel-powered equipment shall be located more than 200 feet from any noise-sensitive use if the equipment is to operate for more than several hours per day; and*
- *Mobile equipment (haul trucks, concrete trucks, etc.) shall avoid local streets near residences and other noise-sensitive uses to the maximum extent feasible.*

Furthermore, subject to equipment availability and cost considerations, the project applicant shall implement the following:

- *Earth Removal: Scrapers shall be used as much as possible for earth removal, rather than the noisier loaders and hauling trucks.*
- *Backfilling: Backhoes shall be used for backfilling, as such equipment is less costly and quieter than either dozers or loaders.*
- *Ground Preparation: Graders shall be used rather than dozers for final grading.*
- *Building Construction: Power saws shall be shielded or enclosed where practical to decrease noise emissions. Nail guns shall be used where possible as they are less noisy than manual hammering.*
- *Generators, Compressors, and Other Stationary Equipment: The project applicant shall ensure that generators, compressors and other stationary equipment that are housed in acoustical enclosures are used rather than equipment housed in weather enclosures or not housed in enclosures at all. Acoustical enclosures are often available with rented equipment. The equipment shall be placed as far from sensitive receptors as feasible.*
- *The project applicant shall provide a noise disturbance coordinator with a phone line and voicemail/answering machine. Signs with the noise disturbance coordinators contact information shall be posted on the project site at a highly visible location.*
- *Vehicle paths within the project site shall be graded smooth, as rough roads and paths can cause significant noise and vibration from trucks (particularly empty trucks) rolling over rough surfaces.*

- e,f. The public airport nearest to the project site is the San Martin Airport, which is located approximately 2.85 miles southeast of the project site at 13030 Murphy Avenue. The project site is located well outside of the AIA identified in the South County Airport Comprehensive Land Use Plan.²⁶ In addition, the project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic, and **no impact** would occur.

²⁶ Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.

XIII. POPULATION AND HOUSING.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	✗	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✗
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✗
a. The proposed project would include the construction of a car wash facility and associated improvements. The project site is located in a developed area and would not include the extension of major infrastructure. Given the nature and scale of the development proposed, the project would not be anticipated to create a large number of jobs or result in a large influx of new residents to the project area. Specifically, the proposed project would employ approximately four full-time workers, which would not induce substantial job growth in the project area. The project's anticipated increase in employment would be consistent with growth projections produced by the Association of Bay Area Governments (ABAG). In addition, the proposed project would be consistent with the land use and zoning designations for the site, and, thus, would be consistent with the buildout intensity anticipated for the site in the City's adopted General Plan and analyzed in the General Plan EIR. Therefore, the proposed project would result in a less-than-significant impact with respect to direct or indirect induction of population growth in the area.				
b,c. The proposed project site does not contain any existing residences. As such, the proposed project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur.				

XIV. PUBLIC SERVICES.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Fire protection?	☐	☐	✖	☐
b. Police protection?	☐	☐	✖	☐
c. Schools?	☐	☐	✖	☐
d. Parks?	☐	☐	✖	☐
e. Other Public Facilities?	☐	☐	✖	☐

- a-e. The City of Morgan Hill contracts with CAL FIRE (State Department of Forestry and Fire Protection) for fire protection services. Three fire stations are located within the City boundaries: El Toro Station, located at 18300 Old Monterey Road; Dunne-Hill Station, located at 2100 Dunne Avenue; and the CAL FIRE station at 15670 Monterey Street. The nearest fire station (CAL FIRE) is located approximately 0.9-mile southwest of the site by way of Tennant Avenue and Monterey Road.

The incremental increase in demand associated with the proposed project would not necessitate new or physically altered facilities and would not be substantial enough that the current response times could not be maintained. Accordingly, the response time from the CAL FIRE station would be anticipated to be within the City's preferred response time of five minutes or less. The project site is also located within the Morgan Hill Police Department's normal patrol routes, and, thus, police response times would be comparable to nearby existing developments. Given that the proposed project would be consistent with the site's current General Plan land use and zoning designations, increases in demand for fire and police protection services associated with development of the project site as proposed have been previously considered in the City's General Plan and analyzed in the General Plan EIR, which concluded that impacts to fire and police protection facilities associated with General Plan buildout would be less than significant. Furthermore, the project applicant would be required to pay development impact fees, which are used to help pay for infrastructure, including fire facilities, police facilities, and other public facilities needed to support new development within the City. The proposed project would not include the construction of housing and, thus, would not substantially increase demand for schools, parks, or other public facilities.

Based on the above, the project would have a **less-than-significant** impact with respect to creating adverse physical environmental impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, parks, schools, and other public facilities.

XV.RECREATION.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	✗
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	✗
a,b. The proposed project would not include residential development. As such, the project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities. In addition, the project does not include the construction of recreational facilities. Therefore, no impact would occur with regard to recreational resources.				

XVI. TRANSPORTATION/CIRCULATION.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	✗	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	✗	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	✗
d. Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	✗	☐
e. Result in inadequate emergency access?	☐	☐	✗	☐
f. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	✗	☐
a,b. US Highway 101 (US 101) provides regional access to the City of Morgan Hill and the proposed project site. Local access is provided by Tennant Avenue, Caputo Drive, and Butterfield Boulevard.				

In order to evaluate the magnitude of traffic that would be added to the roadway system due to the proposed project and to determine whether a comprehensive traffic study is required for the proposed project, a Trip Generation and Operations Analysis was prepared for the proposed project by Hexagon Transportation Consultants, Inc. (Hexagon) (see Appendix C).²⁷ The City of Morgan Hill requires the completion of a full traffic impact analysis if one of the following criteria are met:

1. Generates 100 or more net new peak hour trips; except that projects located in the 14-block Downtown Core area are exempt from this requirement. Net new peak hour trips are defined as the number of trips generated by the proposed development

²⁷ Hexagon Transportation Consultants, Inc. *Zip Thru Car Wash Trip Generation and Operations Analysis*. February 7, 2018.

minus trips generated by existing development on the project site (consistent with Santa Clara VTA policy).

2. Adds 50 to 99 net new peak hour trips to the roadway system where nearby intersections are currently operating at or below the City's LOS standard, or projected to operate at or below the City's LOS standard with traffic added by approved developments; except that projects located in the 14-block Downtown Core area are exempt from the requirement. Adjacent or nearby intersections are defined as intersections to which the proposed development or proposed land use change adds 10 or more vehicle peak hour trips per lane.
3. Creates a transportation issue that City staff requests to have analyzed.

The Trip Generation and Operations Analysis consists of an evaluation of trip generation and peak-hour intersection level of service (LOS) analysis at the Tennant Avenue/Butterfield Boulevard and Caputo Drive/Tennant Avenue intersections. Traffic conditions were evaluated for the following scenarios:

- **Existing Conditions.** Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from new peak-hour turning-movement counts conducted in January 2018.
- **Existing Plus Project Conditions.** Existing plus project peak-hour traffic volumes were estimated by adding to the existing traffic volumes the additional traffic that would be generated by the proposed project. Existing Plus Project conditions were evaluated relative to existing conditions in order to determine the effects of the proposed project on existing traffic conditions.

Trip Generation

Per the Trip Generation and Operations Analysis, and consistent with the Institute of Transportation Engineers (ITE) Manual, vehicle trips generated by the proposed car wash were estimated using the ITE trip generation rates for automated car washes.

It is likely that a portion of the trips to the proposed car wash would be trips that would already be on the adjacent roadways, but would utilize the car wash while passing by, referred to as pass-by trips. Therefore, estimated project trips were reduced to account for the capture of pass-by trips. Because data is not available specific to pass-by-trip percentage associated with car wash facilities, pass-by trip reductions for comparable land uses were investigated. For comparison, ITE data shows that trips generated by gasoline/service stations typically include between 20 to 60 percent of pass-by trips during the PM peak-hour, with an average of 42 percent of the total PM peak-hour trips consisting of pass-by trips. Trips generated by retail land uses typically consist of approximately 25 percent pass-by trips during the PM peak hour. Given that the proposed car wash would be located adjacent to a major roadway that links local streets to US 101, a large number of pass-by trips could be captured by the proposed car wash. However, to provide a conservative estimate, only a 25 percent pass-by reduction was applied to the estimated trips for the proposed car wash during the PM peak hour.

Based on the ITE trip generation rates and after applying the above pass-by trip reduction, the proposed project would generate an estimated 34 trips during the AM peak hour and 58 trips during the PM peak hour (see Table 7). Such trips were assigned to the local roadway network based on traffic patterns in the study area and on the locations of complementary land uses. Figure 11 shows the project trip distribution and the assignment of project trips at the study intersections.

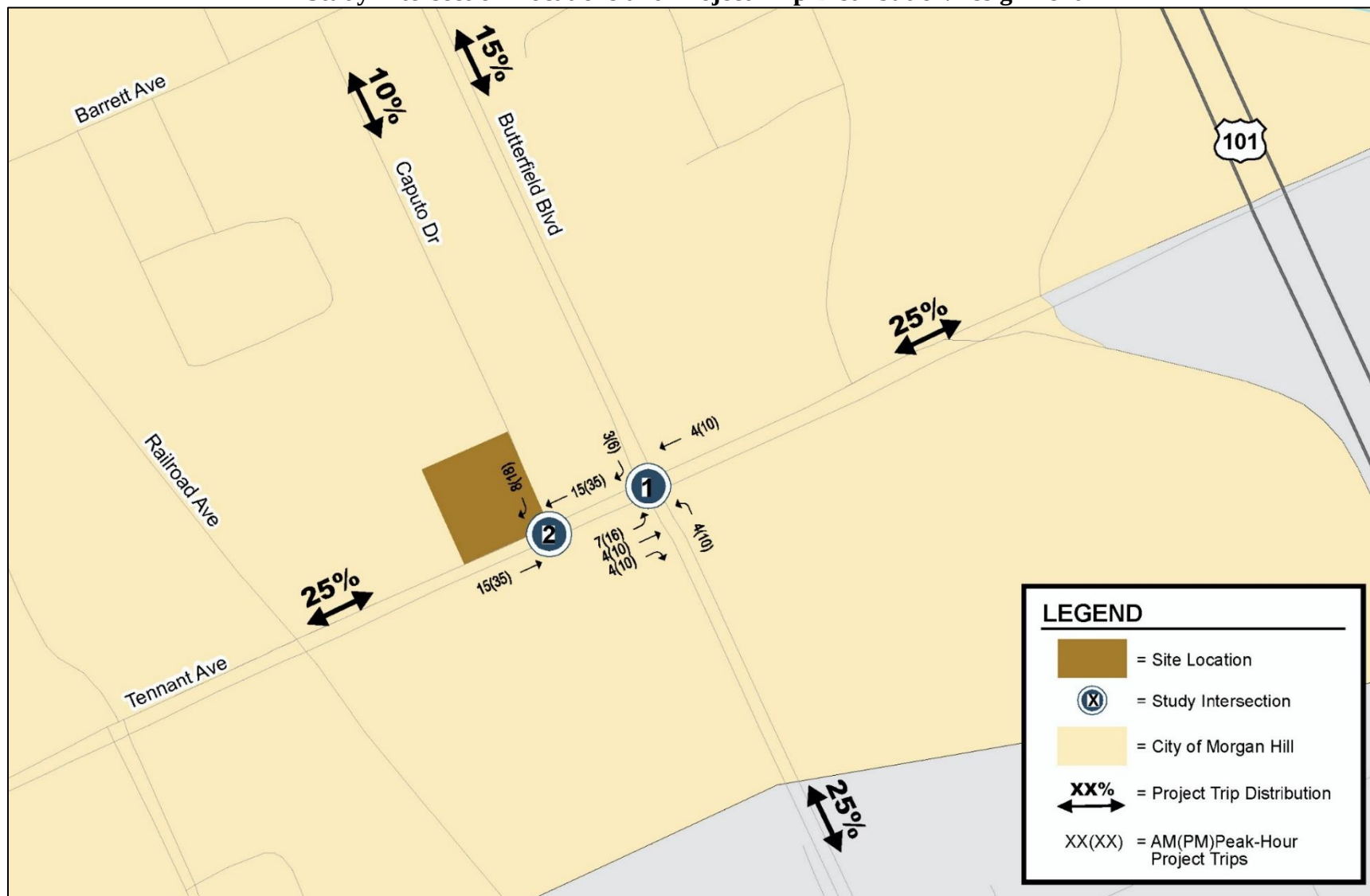
Table 7										
Trip Generation Estimates										
Land Use	ITE Code	Size	AM Peak Hour				PM Peak Hour			
			Rate	In	Out	Total	Rate	In	Out	Total
Self-Service Mechanical Car Wash	#948 – Automated Car Wash	1	34.44	17	17	34	77.50	39	39	78
<i>PM Pass-By Trip Reduction (25%)</i>								-10	-10	-20
Total Project Trips:				17	17	34		29	29	58
<i>Source: Hexagon Transportation Consultants, Inc., 2018.</i>										

Thresholds of Significance

Signalized intersection operations and impacts are evaluated based on the jurisdiction's LOS standards (i.e., minimum threshold for acceptable operations). All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of the following:

- **LOS F** for Downtown intersections and segments including at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Street;
- **LOS E** for the following intersections and freeway zones:
 - Main Avenue and Del Monte Avenue;
 - Main Avenue and Depot Street;
 - Dunne Avenue and Del Monte Avenue;
 - Dunne Avenue and Monterey Avenue;
 - Dunne Avenue and Church Street;
 - Dunne Avenue and Depot Street;
 - Cochrane Road and Monterey Road;
 - Tennant Avenue and Monterey Road;
 - Tennant Avenue and Butterfield Boulevard;
 - Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane Road/DePaul Drive;
 - Dunne Avenue Freeway Zone: from Walnut Grove Drive/East Dunne Avenue to Condit Road/East Dunne Avenue; and
 - Tennant Avenue Freeway Zone: from Butterfield Boulevard/Tennant Avenue to Condit Road/Tennant Avenue.

Figure 11
Study Intersection Locations and Project Trip Distribution/Assignment



Source: Hexagon Transportation Consultants, Inc., 2018.

Based on the above, the applicable LOS thresholds for the Butterfield Boulevard/Tennant Avenue and Caputo Drive/Tennant Avenue intersections are LOS E and LOS D, respectively.

Study Intersection Operations

Traffic conditions at both study intersections were analyzed for the weekday AM and PM peak hours of traffic. The weekday AM peak hour of traffic generally falls within the 7:00 to 9:00 AM period and the weekday PM peak hour is typically in the 4:00 to 6:00 PM period. The AM and PM peak hours represent the most congested traffic conditions occurring on a typical weekday.

Table 8 below summarizes operations at the study intersections under Existing and Existing Plus Project conditions, with critical delay presented in seconds. Critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most “green time” and have the greatest effect on overall intersection operations. The changes in critical delay and critical volume to capacity ratio (V/C) between Existing and Existing Plus Project conditions are used to identify significant impacts. As shown in the table, both study intersections currently operate acceptably during both the AM and PM peak hours.

Table 8								
Existing and Existing Plus Project Conditions Intersection LOS								
Intersection	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project Conditions			
			Delay	LOS	Delay	LOS	Increase in Delay	Increase in V/C
1. Butterfield Blvd/Tennant Ave	E	AM	23.9	C	24.0	C	0.2	0.006
		PM	37.3	D	37.4	D	0.0	0.002
2. Caputo Dr/Tennant Ave	D	AM	0.1	B	0.2	B	0.1	0.014
		PM	0.2	B	0.3	B	0.1	0.023
Source: Hexagon Transportation Consultants, Inc., 2018.								

Under Existing Plus project conditions, the addition of project traffic would not degrade operations at either study intersection or increase average intersection delay by more than 1.0 second during the AM and PM peak hours. Therefore, the proposed project would not conflict with the City’s LOS standards.

Conclusion

Given that both study intersections currently operate acceptably per applicable City LOS standards and the proposed project would add fewer than 100 trips to the local roadway network during the AM and PM peak hours, the proposed project would not meet the City’s criteria for preparation of a full traffic study and the project would not conflict with the Santa Clara VTA Congestion Management Program (CMP).²⁸ Furthermore, the proposed

²⁸ Santa Clara Valley Transportation Authority. 2015 Congestion Management Plan. October 2015.

project would not cause either of the study intersections to exceed any applicable City LOS standards under Existing Plus Project Conditions. Therefore, the proposed project would not conflict with an applicable plan, ordinance, policy or congestion management plan for the area related to traffic, and a ***less-than-significant*** impact would occur.

- c. The proposed project would not involve any uses or operations that would cause any changes in air traffic patterns, including increases in traffic levels or changes in location that would result in any safety risks. Therefore, ***no impact*** related to air traffic patterns would occur as a result of the proposed project.
- d,e. The following discussion includes an analysis of site access, on-site circulation, and queuing lengths associated with the proposed car wash facility.

Site Access

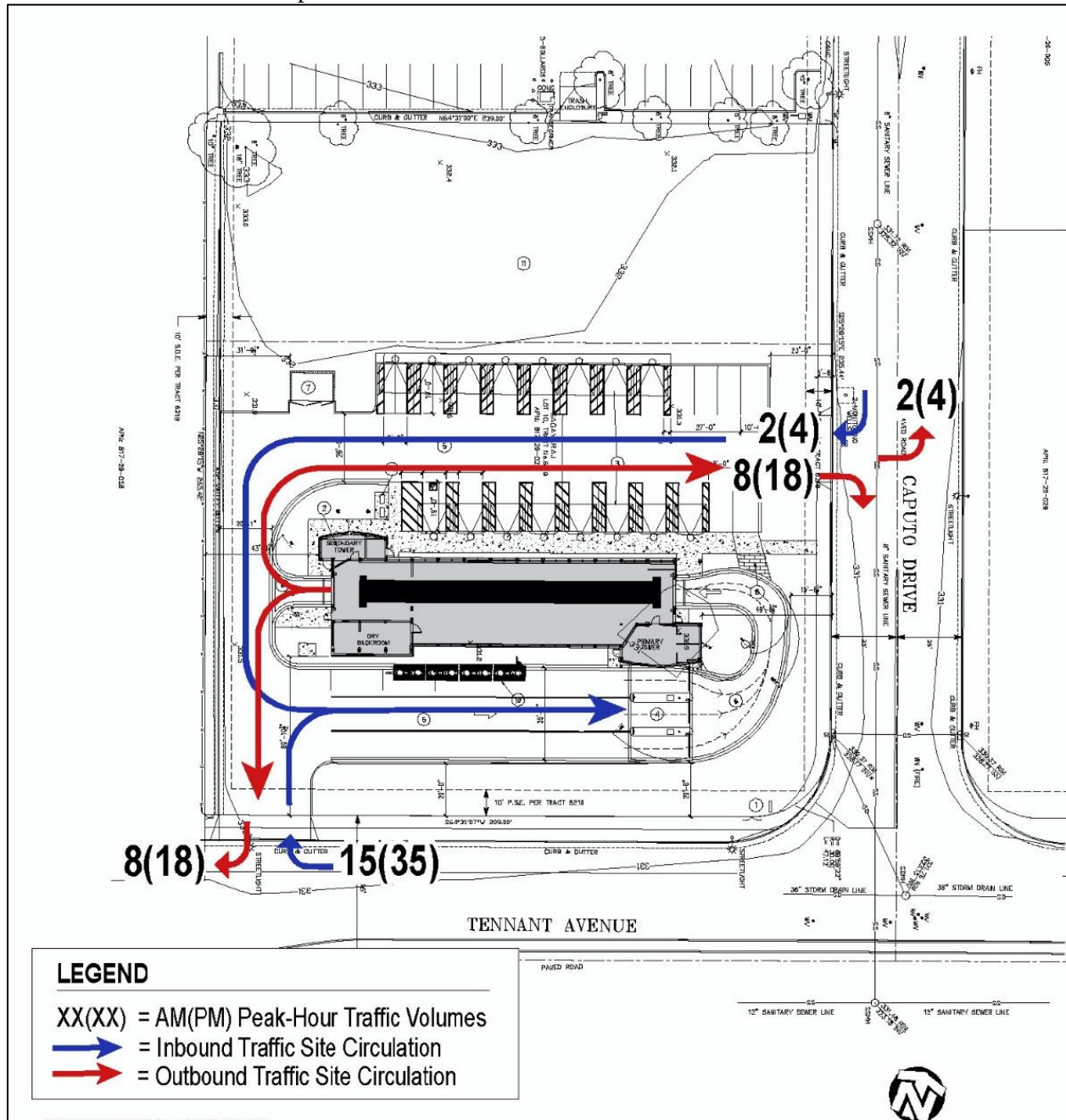
The proposed project is located at the northwest corner of the Caputo Drive and Tennant Avenue intersection. Along the project frontage, Tennant Avenue consists of two travel lanes in each direction with a raised center median. The intersection of Caputo Drive and Tennant Avenue, located approximately 250 feet west of Butterfield Boulevard, consists of a T-intersection with right-in and out access only to/from Caputo Drive.

The project site is proposed to be served by two driveways: a full-access driveway along Caputo Drive, located approximately 160 feet north of Tennant Avenue, and a right-in and right-out access only driveway located along Tennant Avenue, approximately 230 feet west of Caputo Drive (see Figure 12). The project driveways along Tennant Avenue and Caputo Drive would be approximately 36 feet and 26 feet wide, respectively. According to the City of Morgan Hill design standards, commercial driveways should be at least 16 feet wide and at most 36 feet wide. Therefore, the proposed driveway widths would satisfy the City's design standards and allow for unimpeded access to emergency vehicles.

On-Site Circulation

The proposed car wash tunnel would be centrally located within the site and oriented parallel to Tennant Avenue, with the tunnel entrance near the east project site boundary and the exit near the west project site boundary. Three automated pay stations (served by three lanes) would be located south of the car wash tunnel, located at the car wash tunnel entrance, while parking stalls equipped with vacuums would be located on the north side of the car wash tunnel. The proposed site layout would allow for continuous traffic circulation. Vehicles entering the site via the Tennant Avenue driveway would immediately turn right into the pay station lanes, while vehicles entering the site via the Caputo Drive driveway would circulate around the car wash tunnel to enter the pay station lanes. Upon exiting the tunnel, users may exit the site via Tennant Avenue or park to access the vacuums and exit via Caputo Drive.

Figure 12
Proposed Site Access and Internal Site Circulation



Source: Hexagon Transportation Consultants, Inc., 2018.

Per the Trip Generation and Operations Analysis, the proposed site plan would provide adequate site access and on-site circulation for vehicles.

Queuing Analysis

A queuing analysis was conducted to estimate the expected queue length at the car wash pay stations. The proposed project consists of a single-tunnel car wash; therefore, Hexagon conducted queuing observations in February 2018 for a similar single-tunnel drive-through car wash located at First Street in Gilroy, California. Observations were conducted during the peak evening period from 4:00 PM to 5:00 PM on a typical weekday and from 11:30 AM to 12:30 PM on a typical Saturday. The queues at the driveway were recorded every minute and measured from the car wash tunnel pay station. The results of the survey were as follows:

- Thursday, February 1, 2018: Maximum observed queue length = five vehicles.
- Saturday, February 3, 2018: Maximum observed queue length = 10 vehicles.

The maximum vehicle queue length of 10 vehicles occurred at 11:49 PM on Saturday. Based on the observed queue lengths and assuming a length of 20 feet per vehicle, the queuing storage space required to accommodate the maximum projected queue length for the proposed car wash would be 200 feet.

The proposed project would include one drive-through car wash tunnel with three pay station lanes located at the car wash entrance. Each pay station lane would be approximately 140 feet long, for a total of 420 feet of on-site queue storage space. Given the results of the queuing survey, the proposed on-site queue storage at the pay station lanes would be sufficient to meet the queuing demand for the proposed car wash.

The projected maximum queue for the proposed project was also estimated by using the estimated trip generation and assumed car wash service rates. The service rate is the average time required for each vehicle to provide payment and pass through the car wash tunnel. Field observations at the Gilroy car wash indicate a service rate of approximately three minutes. Unlike the proposed project, however, the observed car wash does not utilize automated payment through pay stations and had only one pay station. Therefore, the service rate for the proposed car wash can be expected to be less than three minutes. Based on service rates of 1.5, two, and three minutes per vehicle, the maximum total queue length at the proposed pay stations is estimated to be approximately 380 feet long (see Table 9). Therefore, the 420 feet of proposed queue storage capacity would be sufficient to meet the queuing demand during the car wash's peak demand and would not result in vehicles extending out to Tennant Avenue.

It should be noted that the Trip Generation and Operations Analysis states that reversing the site layout would ensure that vehicles would not spill out and disrupt traffic flow on Tennant Avenue. The reverse layout would consist of relocating the pay stations to the north side of the tunnel, near the western site boundary, and the vacuum parking stalls on the south side of the tunnel along Tennant Avenue. While such information will be

considered by the City, the site layout currently proposed would function adequately from an access and circulation perspective and would not generate substantial adverse traffic impacts.

Table 9 PM Peak Hour Queue Analysis			
Service Rate (min/veh)	Estimated Maximum Queue (veh)¹	Required Storage (ft)²	Adequate Storage Provided?
1.5	0	0	Yes
2	9	180	Yes
3	19	380	Yes
¹ Based on project trip generation of 39 inbound trips during the PM peak hour. ² Average storage length is 20 feet per vehicle.			
<i>Source: Hexagon Transportation Consultants, Inc., 2018.</i>			

Conclusion

Based on the above, the proposed on-site circulation system would be designed consistent with all applicable City roadway requirements and would provide adequate emergency access to the site. In addition, the proposed project would provide adequate queuing storage capacity to accommodate maximum projected queue lengths for the proposed car wash tunnel. Thus, the proposed project would not increase hazards due to a design feature, such as a sharp curve or dangerous intersection, or incompatible uses and would have a **less-than-significant** impact related to emergency access and hazardous design features.

- f. Currently, the nearest transit stop to the proposed project site is located at Monterey and Tennant Avenue, approximately 0.43-mile west of the site. A dedicated bike lane is provided along the north side of Tennant Avenue at the project frontage. Sidewalks are provided along both sides of Caputo Drive, with the exception of the project frontage.

The proposed project would consist of an automated commercial car wash facility with limited employees and, thus, would not substantially increase demand on the City's existing transit facilities and services. The proposed site improvements would include the construction of sidewalks along the project frontages at Caputo Drive and Tennant Avenue, connecting to the existing sidewalk along Caputo Drive to the north of the site. Thus, the project would increase pedestrian connectivity in the project area. The existing bike lane along Tennant Avenue would be retained.

Given that the proposed project would not disrupt existing transit, pedestrian, and bicycle facilities, increase conflicts between drivers, pedestrians, and/or bicyclists, or create inconsistencies or conflicts with policies in the City's Bikeways, Trails, Parks, and Recreation Master Plan, the project would not have a substantial adverse effect on transit, bicycle, or pedestrian facilities in the project area. Therefore, the proposed project would not conflict with adopted policies supporting alternative transportation, and a **less-than-significant** impact would occur.

XVII. TRIBAL CULTURAL RESOURCES.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	✗	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	✗	☐

Discussion

- a,b. As discussed in Section V, Cultural Resources, of this IS/MND, the proposed project site does not contain any existing permanent structures or any other known resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), and does not contain known resources that could be considered historic pursuant to the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. The records search of the CHRIS database for cultural resource site records and survey reports within the proposed project area indicated a relatively low potential for unrecorded tribal cultural resources within the project site.²⁹ In addition, a record search of the NAHC Sacred Lands File for the APE yielded negative results.³⁰

Based on the above, the proposed project is not expected to adversely impact tribal cultural resources. In addition, the project applicant would be required to comply with the City's standard conditions of approval related to cultural resource discovery. Therefore, a **less-than-significant** impact to tribal cultural resources would occur.

²⁹ Northwest Information Center. *Record search results for the proposed Zip Thru Express Car Wash Project located at 16015 Caputo Drive, Morgan Hill, Santa Clara County, APN 817-29-027.* February 12, 2018.

³⁰ Native American Heritage Commission. *Zip Thru Express Car Wash Project, Santa Clara County.* January 26, 2018.

XVIII. UTILITIES AND SERVICE SYSTEMS.*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	✗	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	✗	☐
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	✗	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	✗	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	✗	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	✗	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	✗	☐
a,b,d. Brief discussions of the wastewater and water systems that would serve the proposed project are included below.				

Wastewater

The City of Morgan Hill sewer collection system consists of approximately 135 miles of 6-inch through 30-inch diameter sewers, and includes 15 sewage lift stations and associated force mains. The “backbone” of the system consists of the trunk sewers, generally 12-inches in diameter and larger, that convey the collected wastewater flows through an outfall that continues south to the Wastewater Treatment Facility (WWTF) in Gilroy. The WWTF is owned and operated by the South County Regional Wastewater Authority (SCRWA), under a Joint Powers Agreement with the cities of Morgan Hill and Gilroy. The City of Morgan Hill has an allocation of 3.56 million gallons per day (MGD) from the WWTF. The average dry weather flow from the City of Morgan Hill was approximately 2.7 MGD in 2015.³¹

³¹ City of Morgan Hill. 2035 General Plan Draft EIR. January, 2016.

The primary source of wastewater associated with the proposed project would be wash water from the proposed car wash building. During typical operations, approximately 60 percent of such wash water would be recycled through a series of on-site clarifying tanks located to the south of the car wash building before ultimately discharging to the City's existing eight-inch sewer line located in Caputo Drive to the east of the project site.

Based on population and water conservation projections for the City of Morgan Hill, the WWTP's current allocated capacity of 3.56 MGD is anticipated to be reached in approximately 2023, with expansion planned for 2022.³² Based on the current and projected sewage flows associated with the WWTF, the incremental increase in wastewater generation associated with the development of the proposed car wash facility would not require the construction of new or expansion of existing wastewater treatment facilities, as adequate capacity is already sufficient to serve the proposed project. It should be noted that the General Plan EIR concluded that buildout of the General Plan area, including the project site, would result in a less-than-significant impact with respect to wastewater treatment.

Water

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's water system facilities include 14 groundwater wells, 10 potable water storage tanks, 10 booster stations, and over 160 miles of pressured pipes ranging from two to 14 inches in diameter. The City's water distribution system meets the needs of existing customers. The City has planned and constructed water projects in conjunction with new street construction in anticipation of future growth and associated water needs. The project applicant would be required to pay the City's development impact fees, including a water impact fee, to help fund such projects.

While development of the proposed car wash facility would increase water demand associated with the project site, the proposed project would be consistent with the site's existing General Plan land use and zoning designations. Therefore, the proposed project's water demand is within the capacities anticipated within the City's 2015 Urban Water Management Plan and analyzed in the General Plan EIR. Per the General Plan EIR, with implementation of all applicable regulations and the water conservation policies and actions included in the General Plan, buildout of the City's planning area would result in a less-than-significant impact related to water supplies. Furthermore, as noted above, the proposed project would recycle approximately 60 percent of all wash water on-site, thereby reducing overall water demand.

Conclusion

As discussed above, the increase in wastewater generation and water usage anticipated for the proposed car wash facilities would not be considered substantial. Furthermore, given that the proposed project would be consistent with the site's existing land use and zoning

³² South County Regional Wastewater Authority. *Biennial Budget Transmittal – FY 14 & FY 15*. April 3, 2013.

designations, wastewater generation and increases in water demand associated with development of the site as proposed has been previously anticipated in the City's General Plan and analyzed in the General Plan EIR. As a result, the project would have a ***less-than-significant*** impact with regard to exceeding wastewater treatment requirements of the applicable RWQCB, requiring or resulting in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or having sufficient water supplies available to serve the project from existing entitlements and resources.

- c.e. As discussed in Section IX, Hydrology and Water Quality, of this IS/MND, the proposed project would include a series of IMPs to treat and detain runoff from impervious surfaces created by the proposed project (see Figure 10). The design, construction, operation, and maintenance of the proposed stormwater system would be addressed in a final SWCP to be submitted to the City of Morgan Hill in accordance with the stormwater management requirements adopted by Resolution R3-2013-0032. The SWCP would demonstrate how the proposed IMPs would meet the specified water quality, runoff retention, and peak flow management requirements.

As such, the project would not significantly increase stormwater flows into the existing system. The final drainage system design for the project will be subject to review and approval by the City of Morgan Hill Public Works Department to confirm that the proposed drainage system for the project is consistent with the City's Storm Drainage Master Plan and standard stormwater-related conditions of approval. Therefore, the proposed project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities such that significant environmental effects would occur, and the City would have adequate stormwater infrastructure capacity to serve the project's estimated demand in addition to the City's existing commitments. Thus, a ***less-than-significant*** impact would occur.

- f,g. Recology South Valley provides solid waste and recycling services to the businesses and residents of the cities of Morgan Hill and Gilroy. Recology South Valley has contracted through 2017 with the Salinas Valley Solid Waste Authority to dispose of municipal solid waste at Johnson Canyon Sanitary Landfill. The average annual solid waste disposed at the Johnson Canyon Sanitary Landfill is between 100,000 and 250,000 tons per year (approximately 173,971 tons in 2014),³³ and the average annual capacity for the landfill is between 500,000 and 750,000 tons per year.³⁴ The proposed project would not produce enough solid waste for the landfill to exceed capacity. Therefore, sufficient permitted capacity exists at the Johnson Canyon Sanitary Landfill to accommodate the proposed project's incremental increase in solid waste disposal needs.

³³ Salinas Valley Solid Waste Authority. *Annual Report 2014-15*. 2015. Available at: <http://svswa.org/wp-content/uploads/2014-2015-Annual-Report-Final4.pdf>. Accessed November 2017.

³⁴ California Department of Resources Recycling and Recovery (CalRecycle). *Facility Information Toolbox (FacIT), Facility Operations: Johnson Canyon Sanitary Landfill*. Available at: <http://www.calrecycle.ca.gov/FacIT/Facility/Operations.aspx?FacilityID=18565>. Accessed June 2016.

Solid waste generation associated with operation of the proposed car wash facilities would be relatively modest, and would be typical of similar commercial facilities. Furthermore, per CBC Section 4.408, the proposed project would be required to submit a Waste Management Plan to the City detailing on-site sorting of construction debris. Implementation of the Waste Management Plan would ensure that the proposed project meets established diversion requirements for reused or recycled construction waste. As such, the proposed project would comply with applicable federal, State, and local statutes and regulations related to solid waste, and a ***less-than-significant*** impact would occur.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	✗	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	✗	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	✗	☐
a. As discussed in Section IV, Biological Resources, of this IS/MND, the proposed project would be required to implement mitigation measures to minimize impacts to burrowing owls. In addition, the site does not contain known historical or cultural resources. Although unlikely, the possibility exists that subsurface excavation of the site during grading and other construction activities could unearth deposits of cultural significance. However, this IS/MND explains how the City's Municipal Code requires standard measures for development projects that would ensure any impacts to archaeological resources would be less than significant. Therefore, the proposed project would have a less-than-significant impact related to degradation of the quality of the environment, reduction of habitat or plant and wildlife species, and elimination of important examples of California history or prehistory.				
b. As discussed in Section X, Land Use and Planning, of this IS/MND, the proposed project does not include residential development and, thus, would not induce substantial population growth within the project area. With approval of a Conditional Use Permit, the project would be consistent with the project site's current General Plan land use and zoning designations. Therefore, cumulative growth impacts associated with development of the project site have been previously anticipated by the City and analyzed in the General Plan EIR. Furthermore, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level with implementation of project-specific mitigation measures and compliance with applicable General Plan policies. When viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the				

proposed project would not contribute to cumulative impacts in the City of Morgan Hill, and the project's cumulative impact would be ***less than significant***.

- c. The proposed project site would be developed in a generally urbanized and built-up area of the City of Morgan Hill. Development of the proposed project would not be expected to result in adverse impacts to human beings, either directly or indirectly. The potential for environmental effects on human beings, including effects associated with groundwater contamination, is addressed within this IS/MND and all impacts have been identified as less-than-significant or less than significant with the incorporation of mitigation measures. As such, a ***less-than-significant*** impact would result.

Appendix A

CalEEMod Modeling Results

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

Zip Thru Express Car Wash Project

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	5.37	1000sqft	0.38	16,471.60	0
Parking Lot	26.60	1000sqft	0.61	26,598.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	384.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Applicant provided

Construction Phase - Applicant provided

Grading - Applicant provided

Vehicle Trips - Per traffic consultant AM/PM peak hour trip generation estimates

Water And Wastewater - Applicant provided

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	110.00
tblConstructionPhase	NumDays	100.00	110.00
tblConstructionPhase	NumDays	2.00	25.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	PhaseEndDate	3/20/2019	5/17/2019
tblConstructionPhase	PhaseEndDate	3/6/2019	5/3/2019
tblConstructionPhase	PhaseEndDate	10/17/2018	11/16/2018
tblConstructionPhase	PhaseEndDate	3/13/2019	11/30/2018
tblConstructionPhase	PhaseEndDate	10/15/2018	10/12/2018
tblConstructionPhase	PhaseStartDate	3/14/2019	12/17/2018
tblConstructionPhase	PhaseStartDate	10/18/2018	12/3/2018
tblConstructionPhase	PhaseStartDate	10/16/2018	10/15/2018
tblConstructionPhase	PhaseStartDate	3/7/2019	11/19/2018
tblConstructionPhase	PhaseStartDate	10/13/2018	10/1/2018
tblGrading	AcresOfGrading	0.00	0.99
tblGrading	AcresOfGrading	5.00	0.99
tblGrading	MaterialExported	0.00	13.78
tblLandUse	LandUseSquareFeet	5,370.00	16,471.60
tblLandUse	LotAcreage	0.12	0.38
tblProjectCharacteristics	CO2IntensityFactor	641.35	384.89
tblVehicleTrips	ST_TR	23.72	85.66
tblVehicleTrips	SU_TR	11.88	85.66
tblVehicleTrips	WD_TR	23.72	85.66
tblWater	IndoorWaterUseRate	505,215.55	1,680,000.00

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

2.0 Emissions Summary**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0469	0.3487	0.2620	4.5000e-004	0.0143	0.0208	0.0351	6.3200e-003	0.0195	0.0258	0.0000	40.0536	40.0536	9.0500e-003	0.0000	40.2799
2019	0.1427	0.5696	0.4605	8.1000e-004	8.8400e-003	0.0336	0.0425	2.4000e-003	0.0315	0.0339	0.0000	72.5217	72.5217	0.0161	0.0000	72.9240
Maximum	0.1427	0.5696	0.4605	8.1000e-004	0.0143	0.0336	0.0425	6.3200e-003	0.0315	0.0339	0.0000	72.5217	72.5217	0.0161	0.0000	72.9240

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0469	0.3487	0.2620	4.5000e-004	0.0143	0.0208	0.0351	6.3200e-003	0.0195	0.0258	0.0000	40.0535	40.0535	9.0500e-003	0.0000	40.2799
2019	0.1427	0.5696	0.4605	8.1000e-004	8.8400e-003	0.0336	0.0425	2.4000e-003	0.0315	0.0339	0.0000	72.5216	72.5216	0.0161	0.0000	72.9239
Maximum	0.1427	0.5696	0.4605	8.1000e-004	0.0143	0.0336	0.0425	6.3200e-003	0.0315	0.0339	0.0000	72.5216	72.5216	0.0161	0.0000	72.9239

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2018	12-31-2018	0.3713	0.3713
2	1-1-2019	3-31-2019	0.5013	0.5013
3	4-1-2019	6-30-2019	0.2024	0.2024
		Highest	0.5013	0.5013

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0752	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004
Energy	2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	48.5659	48.5659	2.3600e-003	8.2000e-004	48.8694
Mobile	0.1067	0.4326	0.8920	2.2800e-003	0.1706	2.6400e-003	0.1732	0.0458	2.4800e-003	0.0483	0.0000	209.1091	209.1091	0.0106	0.0000	209.3733
Waste						0.0000	0.0000		0.0000	0.0000	4.1633	0.0000	4.1633	0.2461	0.0000	10.3145
Water						0.0000	0.0000		0.0000	0.0000	0.5330	1.7763	2.3092	0.0549	1.3200e-003	4.0746
Total	0.1842	0.4539	0.9102	2.4100e-003	0.1706	4.2600e-003	0.1748	0.0458	4.1000e-003	0.0499	4.6963	259.4519	264.1482	0.3139	2.1400e-003	272.6324

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0752	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004
Energy	2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	48.5659	48.5659	2.3600e-003	8.2000e-004	48.8694
Mobile	0.1067	0.4326	0.8920	2.2800e-003	0.1706	2.6400e-003	0.1732	0.0458	2.4800e-003	0.0483	0.0000	209.1091	209.1091	0.0106	0.0000	209.3733
Waste						0.0000	0.0000		0.0000	0.0000	4.1633	0.0000	4.1633	0.2461	0.0000	10.3145
Water						0.0000	0.0000		0.0000	0.0000	0.5330	1.7763	2.3092	0.0549	1.3200e-003	4.0746
Total	0.1842	0.4539	0.9102	2.4100e-003	0.1706	4.2600e-003	0.1748	0.0458	4.1000e-003	0.0499	4.6963	259.4519	264.1482	0.3139	2.1400e-003	272.6324

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2018	10/12/2018	5	10	
2	Grading	Grading	10/15/2018	11/16/2018	5	25	
3	Building Construction	Building Construction	12/3/2018	5/3/2019	5	110	
4	Paving	Paving	11/19/2018	11/30/2018	5	10	
5	Architectural Coating	Architectural Coating	12/17/2018	5/17/2019	5	110	

Acres of Grading (Site Preparation Phase): 0.99

Acres of Grading (Grading Phase): 0.99

Acres of Paving: 0.61

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,707; Non-Residential Outdoor: 8,236; Striped Parking Area: 1,596
(Architectural Coating – sqft)

OffRoad Equipment

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.2 Site Preparation - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.2000e-004	0.0000	5.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9300e-003	0.0488	0.0213	5.0000e-005		2.0900e-003	2.0900e-003		1.9200e-003	1.9200e-003	0.0000	4.4575	4.4575	1.3900e-003	0.0000	4.4922
Total	3.9300e-003	0.0488	0.0213	5.0000e-005	5.2000e-004	2.0900e-003	2.6100e-003	6.0000e-005	1.9200e-003	1.9800e-003	0.0000	4.4575	4.4575	1.3900e-003	0.0000	4.4922

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	7.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1842	0.1842	1.0000e-005	0.0000	0.1844
Total	1.0000e-004	8.0000e-005	7.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1842	0.1842	1.0000e-005	0.0000	0.1844

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.2 Site Preparation - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.2000e-004	0.0000	5.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9300e-003	0.0488	0.0213	5.0000e-005		2.0900e-003	2.0900e-003		1.9200e-003	1.9200e-003	0.0000	4.4575	4.4575	1.3900e-003	0.0000	4.4922
Total	3.9300e-003	0.0488	0.0213	5.0000e-005	5.2000e-004	2.0900e-003	2.6100e-003	6.0000e-005	1.9200e-003	1.9800e-003	0.0000	4.4575	4.4575	1.3900e-003	0.0000	4.4922

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	7.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1842	0.1842	1.0000e-005	0.0000	0.1844
Total	1.0000e-004	8.0000e-005	7.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1842	0.1842	1.0000e-005	0.0000	0.1844

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.3 Grading - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.9400e-003	0.0000	9.9400e-003	5.2300e-003	0.0000	5.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1179	0.0972	1.5000e-004		7.7800e-003	7.7800e-003		7.4300e-003	7.4300e-003	0.0000	13.2602	13.2602	2.5600e-003	0.0000	13.3241
Total	0.0133	0.1179	0.0972	1.5000e-004	9.9400e-003	7.7800e-003	0.0177	5.2300e-003	7.4300e-003	0.0127	0.0000	13.2602	13.2602	2.5600e-003	0.0000	13.3241

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.3000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0783	0.0783	0.0000	0.0000	0.0784
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.8000e-004	3.8600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9211	0.9211	3.0000e-005	0.0000	0.9218
Total	5.1000e-004	7.1000e-004	3.9200e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0100e-003	2.6000e-004	1.0000e-005	2.8000e-004	0.0000	0.9994	0.9994	3.0000e-005	0.0000	1.0001

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.3 Grading - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.9400e-003	0.0000	9.9400e-003	5.2300e-003	0.0000	5.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1179	0.0972	1.5000e-004		7.7800e-003	7.7800e-003		7.4300e-003	7.4300e-003	0.0000	13.2602	13.2602	2.5600e-003	0.0000	13.3241
Total	0.0133	0.1179	0.0972	1.5000e-004	9.9400e-003	7.7800e-003	0.0177	5.2300e-003	7.4300e-003	0.0127	0.0000	13.2602	13.2602	2.5600e-003	0.0000	13.3241

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.3000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0783	0.0783	0.0000	0.0000	0.0784
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.8000e-004	3.8600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9211	0.9211	3.0000e-005	0.0000	0.9218
Total	5.1000e-004	7.1000e-004	3.9200e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0100e-003	2.6000e-004	1.0000e-005	2.8000e-004	0.0000	0.9994	0.9994	3.0000e-005	0.0000	1.0001

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.1158	0.0814	1.2000e-004		7.4400e-003	7.4400e-003		6.8500e-003	6.8500e-003	0.0000	10.9212	10.9212	3.4000e-003	0.0000	11.0062
Total	0.0114	0.1158	0.0814	1.2000e-004		7.4400e-003	7.4400e-003		6.8500e-003	6.8500e-003	0.0000	10.9212	10.9212	3.4000e-003	0.0000	11.0062

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	9.8500e-003	2.6100e-003	2.0000e-005	4.8000e-004	8.0000e-005	5.6000e-004	1.4000e-004	7.0000e-005	2.1000e-004	0.0000	1.9500	1.9500	1.1000e-004	0.0000	1.9528
Worker	6.8000e-004	5.2000e-004	5.1900e-003	1.0000e-005	1.3300e-003	1.0000e-005	1.3400e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2380	1.2380	4.0000e-005	0.0000	1.2389
Total	1.0700e-003	0.0104	7.8000e-003	3.0000e-005	1.8100e-003	9.0000e-005	1.9000e-003	4.9000e-004	8.0000e-005	5.7000e-004	0.0000	3.1880	3.1880	1.5000e-004	0.0000	3.1917

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.4 Building Construction - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.1158	0.0814	1.2000e-004		7.4400e-003	7.4400e-003		6.8500e-003	6.8500e-003	0.0000	10.9212	10.9212	3.4000e-003	0.0000	11.0062
Total	0.0114	0.1158	0.0814	1.2000e-004		7.4400e-003	7.4400e-003		6.8500e-003	6.8500e-003	0.0000	10.9212	10.9212	3.4000e-003	0.0000	11.0062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	9.8500e-003	2.6100e-003	2.0000e-005	4.8000e-004	8.0000e-005	5.6000e-004	1.4000e-004	7.0000e-005	2.1000e-004	0.0000	1.9500	1.9500	1.1000e-004	0.0000	1.9528
Worker	6.8000e-004	5.2000e-004	5.1900e-003	1.0000e-005	1.3300e-003	1.0000e-005	1.3400e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2380	1.2380	4.0000e-005	0.0000	1.2389
Total	1.0700e-003	0.0104	7.8000e-003	3.0000e-005	1.8100e-003	9.0000e-005	1.9000e-003	4.9000e-004	8.0000e-005	5.7000e-004	0.0000	3.1880	3.1880	1.5000e-004	0.0000	3.1917

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.4 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.4370	0.3357	5.1000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	45.5237	45.5237	0.0144	0.0000	45.8838
Total	0.0426	0.4370	0.3357	5.1000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	45.5237	45.5237	0.0144	0.0000	45.8838

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0395	0.0101	9.0000e-005	2.0400e-003	2.7000e-004	2.3100e-003	5.9000e-004	2.6000e-004	8.5000e-004	0.0000	8.2088	8.2088	4.5000e-004	0.0000	8.2202
Worker	2.5800e-003	1.9100e-003	0.0195	6.0000e-005	5.6300e-003	4.0000e-005	5.6600e-003	1.5000e-003	4.0000e-005	1.5300e-003	0.0000	5.0892	5.0892	1.4000e-004	0.0000	5.0926
Total	4.0500e-003	0.0414	0.0296	1.5000e-004	7.6700e-003	3.1000e-004	7.9700e-003	2.0900e-003	3.0000e-004	2.3800e-003	0.0000	13.2980	13.2980	5.9000e-004	0.0000	13.3127

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.4 Building Construction - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.4370	0.3357	5.1000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	45.5237	45.5237	0.0144	0.0000	45.8837
Total	0.0426	0.4370	0.3357	5.1000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	45.5237	45.5237	0.0144	0.0000	45.8837

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0395	0.0101	9.0000e-005	2.0400e-003	2.7000e-004	2.3100e-003	5.9000e-004	2.6000e-004	8.5000e-004	0.0000	8.2088	8.2088	4.5000e-004	0.0000	8.2202
Worker	2.5800e-003	1.9100e-003	0.0195	6.0000e-005	5.6300e-003	4.0000e-005	5.6600e-003	1.5000e-003	4.0000e-005	1.5300e-003	0.0000	5.0892	5.0892	1.4000e-004	0.0000	5.0926
Total	4.0500e-003	0.0414	0.0296	1.5000e-004	7.6700e-003	3.1000e-004	7.9700e-003	2.0900e-003	3.0000e-004	2.3800e-003	0.0000	13.2980	13.2980	5.9000e-004	0.0000	13.3127

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.5 Paving - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-003	0.0437	0.0361	6.0000e-005		2.5500e-003	2.5500e-003		2.3700e-003	2.3700e-003	0.0000	4.8541	4.8541	1.3700e-003	0.0000	4.8883
Paving	8.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4000e-003	0.0437	0.0361	6.0000e-005		2.5500e-003	2.5500e-003		2.3700e-003	2.3700e-003	0.0000	4.8541	4.8541	1.3700e-003	0.0000	4.8883

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.8000e-004	2.7800e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6632	0.6632	2.0000e-005	0.0000	0.6637
Total	3.6000e-004	2.8000e-004	2.7800e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6632	0.6632	2.0000e-005	0.0000	0.6637

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.5 Paving - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-003	0.0437	0.0361	6.0000e-005		2.5500e-003	2.5500e-003		2.3700e-003	2.3700e-003	0.0000	4.8541	4.8541	1.3700e-003	0.0000	4.8883
Paving	8.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4000e-003	0.0437	0.0361	6.0000e-005		2.5500e-003	2.5500e-003		2.3700e-003	2.3700e-003	0.0000	4.8541	4.8541	1.3700e-003	0.0000	4.8883

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.8000e-004	2.7800e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6632	0.6632	2.0000e-005	0.0000	0.6637
Total	3.6000e-004	2.8000e-004	2.7800e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6632	0.6632	2.0000e-005	0.0000	0.6637

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6400e-003	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4076
Total	0.0108	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4076

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1216	0.1216	0.0000	0.0000	0.1217
Total	7.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1216	0.1216	0.0000	0.0000	0.1217

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.6 Architectural Coating - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6400e-003	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4076
Total	0.0108	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4076

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1216	0.1216	0.0000	0.0000	0.1217
Total	7.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1216	0.1216	0.0000	0.0000	0.1217

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0823					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.0909	0.0912	1.5000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	12.6386	12.6386	1.0700e-003	0.0000	12.6653
Total	0.0955	0.0909	0.0912	1.5000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	12.6386	12.6386	1.0700e-003	0.0000	12.6653

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.0000e-004	4.0700e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0614	1.0614	3.0000e-005	0.0000	1.0622
Total	5.4000e-004	4.0000e-004	4.0700e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0614	1.0614	3.0000e-005	0.0000	1.0622

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

3.6 Architectural Coating - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0823					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.0909	0.0912	1.5000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	12.6386	12.6386	1.0700e-003	0.0000	12.6653
Total	0.0955	0.0909	0.0912	1.5000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	12.6386	12.6386	1.0700e-003	0.0000	12.6653

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.0000e-004	4.0700e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0614	1.0614	3.0000e-005	0.0000	1.0622
Total	5.4000e-004	4.0000e-004	4.0700e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0614	1.0614	3.0000e-005	0.0000	1.0622

4.0 Operational Detail - Mobile

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1067	0.4326	0.8920	2.2800e-003	0.1706	2.6400e-003	0.1732	0.0458	2.4800e-003	0.0483	0.0000	209.1091	209.1091	0.0106	0.0000	209.3733
Unmitigated	0.1067	0.4326	0.8920	2.2800e-003	0.1706	2.6400e-003	0.1732	0.0458	2.4800e-003	0.0483	0.0000	209.1091	209.1091	0.0106	0.0000	209.3733

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	459.99	459.99	459.99	458,240	458,240
Parking Lot	0.00	0.00	0.00		
Total	459.99	459.99	459.99	458,240	458,240

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.3783	25.3783	1.9100e-003	4.0000e-004	25.5440
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.3783	25.3783	1.9100e-003	4.0000e-004	25.5440
NaturalGas Mitigated	2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1877	23.1877	4.4000e-004	4.3000e-004	23.3255
NaturalGas Unmitigated	2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1877	23.1877	4.4000e-004	4.3000e-004	23.3255

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	434521	2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1877	23.1877	4.4000e-004	4.3000e-004	23.3255
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1877	23.1877	4.4000e-004	4.3000e-004	23.3255

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	434521	2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1877	23.1877	4.4000e-004	4.3000e-004	23.3255
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.3400e-003	0.0213	0.0179	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1877	23.1877	4.4000e-004	4.3000e-004	23.3255

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	136055	23.7530	1.7900e-003	3.7000e-004	23.9081
Parking Lot	9309.44	1.6253	1.2000e-004	3.0000e-005	1.6359
Total		25.3783	1.9100e-003	4.0000e-004	25.5440

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	136055	23.7530	1.7900e-003	3.7000e-004	23.9081
Parking Lot	9309.44	1.6253	1.2000e-004	3.0000e-005	1.6359
Total		25.3783	1.9100e-003	4.0000e-004	25.5440

6.0 Area Detail**6.1 Mitigation Measures Area**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0752	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004
Unmitigated	0.0752	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0661					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004
Total	0.0752	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0661					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004
Total	0.0752	0.0000	3.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.7000e-004	5.7000e-004	0.0000	0.0000	6.1000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.3092	0.0549	1.3200e-003	4.0746
Unmitigated	2.3092	0.0549	1.3200e-003	4.0746

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	1.68 / 0.309648	2.3092	0.0549	1.3200e-003	4.0746
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.3092	0.0549	1.3200e-003	4.0746

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Automobile Care Center	1.68 / 0.309648	2.3092	0.0549	1.3200e-003	4.0746
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.3092	0.0549	1.3200e-003	4.0746

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
	MT/yr			
Mitigated	4.1633	0.2461	0.0000	10.3145
Unmitigated	4.1633	0.2461	0.0000	10.3145

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	20.51	4.1633	0.2461	0.0000	10.3145
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.1633	0.2461	0.0000	10.3145

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	20.51	4.1633	0.2461	0.0000	10.3145
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.1633	0.2461	0.0000	10.3145

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

Zip Thru Express Car Wash Project

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	5.37	1000sqft	0.38	16,471.60	0
Parking Lot	26.60	1000sqft	0.61	26,598.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	384.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Applicant provided

Construction Phase - Applicant provided

Grading - Applicant provided

Vehicle Trips - Per traffic consultant AM/PM peak hour trip generation estimates

Water And Wastewater - Applicant provided

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	110.00
tblConstructionPhase	NumDays	100.00	110.00
tblConstructionPhase	NumDays	2.00	25.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	PhaseEndDate	3/20/2019	5/17/2019
tblConstructionPhase	PhaseEndDate	3/6/2019	5/3/2019
tblConstructionPhase	PhaseEndDate	10/17/2018	11/16/2018
tblConstructionPhase	PhaseEndDate	3/13/2019	11/30/2018
tblConstructionPhase	PhaseEndDate	10/15/2018	10/12/2018
tblConstructionPhase	PhaseStartDate	3/14/2019	12/17/2018
tblConstructionPhase	PhaseStartDate	10/18/2018	12/3/2018
tblConstructionPhase	PhaseStartDate	10/16/2018	10/15/2018
tblConstructionPhase	PhaseStartDate	3/7/2019	11/19/2018
tblConstructionPhase	PhaseStartDate	10/13/2018	10/1/2018
tblGrading	AcresOfGrading	0.00	0.99
tblGrading	AcresOfGrading	5.00	0.99
tblGrading	MaterialExported	0.00	13.78
tblLandUse	LandUseSquareFeet	5,370.00	16,471.60
tblLandUse	LotAcreage	0.12	0.38
tblProjectCharacteristics	CO2IntensityFactor	641.35	384.89
tblVehicleTrips	ST_TR	23.72	85.66
tblVehicleTrips	SU_TR	11.88	85.66
tblVehicleTrips	WD_TR	23.72	85.66
tblWater	IndoorWaterUseRate	505,215.55	1,680,000.00

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.1621	14.0133	10.4761	0.0180	0.8784	0.8675	1.5018	0.4405	0.8104	1.0354	0.0000	1,800.806 3	1,800.806 3	0.3999	0.0000	1,810.803 5
2019	2.9912	12.5756	10.1645	0.0179	0.2035	0.7412	0.9447	0.0550	0.6924	0.7475	0.0000	1,775.615 6	1,775.615 6	0.3957	0.0000	1,785.508 1
Maximum	3.1621	14.0133	10.4761	0.0180	0.8784	0.8675	1.5018	0.4405	0.8104	1.0354	0.0000	1,800.806 3	1,800.806 3	0.3999	0.0000	1,810.803 5

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.1621	14.0133	10.4761	0.0180	0.8784	0.8675	1.5018	0.4405	0.8104	1.0354	0.0000	1,800.806 3	1,800.806 3	0.3999	0.0000	1,810.803 5
2019	2.9912	12.5756	10.1645	0.0179	0.2035	0.7412	0.9447	0.0550	0.6924	0.7475	0.0000	1,775.615 6	1,775.615 6	0.3957	0.0000	1,785.508 1
Maximum	3.1621	14.0133	10.4761	0.0180	0.8784	0.8675	1.5018	0.4405	0.8104	1.0354	0.0000	1,800.806 3	1,800.806 3	0.3999	0.0000	1,810.803 5

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Energy	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Mobile	0.6861	2.3266	4.7622	0.0132	0.9737	0.0144	0.9881	0.2606	0.0136	0.2741		1,339.0629	1,339.0629	0.0625		1,340.6263
Total	1.1112	2.4434	4.8635	0.0139	0.9737	0.0233	0.9970	0.2606	0.0224	0.2830		1,479.1250	1,479.1250	0.0652	2.5700e-003	1,481.5211

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Energy	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Mobile	0.6861	2.3266	4.7622	0.0132	0.9737	0.0144	0.9881	0.2606	0.0136	0.2741		1,339.0629	1,339.0629	0.0625		1,340.6263
Total	1.1112	2.4434	4.8635	0.0139	0.9737	0.0233	0.9970	0.2606	0.0224	0.2830		1,479.1250	1,479.1250	0.0652	2.5700e-003	1,481.5211

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2018	10/12/2018	5	10	
2	Grading	Grading	10/15/2018	11/16/2018	5	25	
3	Building Construction	Building Construction	12/3/2018	5/3/2019	5	110	
4	Paving	Paving	11/19/2018	11/30/2018	5	10	
5	Architectural Coating	Architectural Coating	12/17/2018	5/17/2019	5	110	

Acres of Grading (Site Preparation Phase): 0.99

Acres of Grading (Grading Phase): 0.99

Acres of Paving: 0.61

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,707; Non-Residential Outdoor: 8,236; Striped Parking Area: 1,596 (Architectural Coating – sqft)

OffRoad Equipment

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.2 Site Preparation - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.1050	0.4180	0.5230	0.0113	0.3846	0.3959		982.7113	982.7113	0.3059		990.3596

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0136	0.1675	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		43.6782	43.6782	1.2800e-003		43.7101
Total	0.0211	0.0136	0.1675	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		43.6782	43.6782	1.2800e-003		43.7101

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.2 Site Preparation - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.1050	0.4180	0.5230	0.0113	0.3846	0.3959	0.0000	982.7113	982.7113	0.3059		990.3596

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0136	0.1675	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		43.6782	43.6782	1.2800e-003		43.7101
Total	0.0211	0.0136	0.1675	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		43.6782	43.6782	1.2800e-003		43.7101

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.3 Grading - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7948	0.0000	0.7948	0.4183	0.0000	0.4183			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.350 2	1,169.350 2	0.2254		1,174.985 7
Total	1.0643	9.4295	7.7762	0.0120	0.7948	0.6228	1.4176	0.4183	0.5943	1.0126		1,169.350 2	1,169.350 2	0.2254		1,174.985 7

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.6000e-004	0.0258	4.8500e-003	7.0000e-005	1.4000e-003	1.0000e-004	1.5000e-003	3.8000e-004	1.0000e-004	4.8000e-004		6.9480	6.9480	3.6000e-004		6.9569
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	0.0429	0.0530	0.3399	9.5000e-004	0.0836	6.5000e-004	0.0842	0.0222	6.1000e-004	0.0228		94.3044	94.3044	2.9100e-003		94.3771

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.3 Grading - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7948	0.0000	0.7948	0.4183	0.0000	0.4183			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.350 2	1,169.350 2	0.2254		1,174.985 7
Total	1.0643	9.4295	7.7762	0.0120	0.7948	0.6228	1.4176	0.4183	0.5943	1.0126	0.0000	1,169.350 2	1,169.350 2	0.2254		1,174.985 7

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.6000e-004	0.0258	4.8500e-003	7.0000e-005	1.4000e-003	1.0000e-004	1.5000e-003	3.8000e-004	1.0000e-004	4.8000e-004		6.9480	6.9480	3.6000e-004		6.9569
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	0.0429	0.0530	0.3399	9.5000e-004	0.0836	6.5000e-004	0.0842	0.0222	6.1000e-004	0.0228		94.3044	94.3044	2.9100e-003		94.3771

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0361	0.9243	0.2341	1.9600e-003	0.0474	7.1500e-003	0.0545	0.0136	6.8400e-003	0.0205		206.8484	206.8484	0.0114		207.1325
Worker	0.0674	0.0435	0.5360	1.4000e-003	0.1314	8.9000e-004	0.1323	0.0349	8.2000e-004	0.0357		139.7702	139.7702	4.0800e-003		139.8723
Total	0.1035	0.9678	0.7702	3.3600e-003	0.1788	8.0400e-003	0.1869	0.0485	7.6600e-003	0.0562		346.6186	346.6186	0.0154		347.0048

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.4 Building Construction - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0361	0.9243	0.2341	1.9600e-003	0.0474	7.1500e-003	0.0545	0.0136	6.8400e-003	0.0205		206.8484	206.8484	0.0114		207.1325
Worker	0.0674	0.0435	0.5360	1.4000e-003	0.1314	8.9000e-004	0.1323	0.0349	8.2000e-004	0.0357		139.7702	139.7702	4.0800e-003		139.8723
Total	0.1035	0.9678	0.7702	3.3600e-003	0.1788	8.0400e-003	0.1869	0.0485	7.6600e-003	0.0562		346.6186	346.6186	0.0154		347.0048

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.4 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.669 6	1,127.669 6	0.3568		1,136.589 2
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.669 6	1,127.669 6	0.3568		1,136.589 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0325	0.8743	0.2135	1.9400e-003	0.0474	6.0500e-003	0.0534	0.0136	5.7900e-003	0.0194		205.4886	205.4886	0.0109		205.7602
Worker	0.0609	0.0381	0.4771	1.3600e-003	0.1314	8.7000e-004	0.1323	0.0349	8.0000e-004	0.0357		135.5869	135.5869	3.6000e-003		135.6770
Total	0.0933	0.9124	0.6906	3.3000e-003	0.1788	6.9200e-003	0.1857	0.0485	6.5900e-003	0.0551		341.0754	341.0754	0.0145		341.4372

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.4 Building Construction - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.669 6	1,127.669 6	0.3568		1,136.589 2
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.669 6	1,127.669 6	0.3568		1,136.589 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0325	0.8743	0.2135	1.9400e-003	0.0474	6.0500e-003	0.0534	0.0136	5.7900e-003	0.0194		205.4886	205.4886	0.0109		205.7602
Worker	0.0609	0.0381	0.4771	1.3600e-003	0.1314	8.7000e-004	0.1323	0.0349	8.0000e-004	0.0357		135.5869	135.5869	3.6000e-003		135.6770
Total	0.0933	0.9124	0.6906	3.3000e-003	0.1788	6.9200e-003	0.1857	0.0485	6.5900e-003	0.0551		341.0754	341.0754	0.0145		341.4372

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.5 Paving - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.137 2	1,070.137 2	0.3017		1,077.679 8
Paving	0.1598					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0800	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.137 2	1,070.137 2	0.3017		1,077.679 8

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0758	0.0490	0.6030	1.5800e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		157.2415	157.2415	4.5900e-003		157.3563
Total	0.0758	0.0490	0.6030	1.5800e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		157.2415	157.2415	4.5900e-003		157.3563

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.5 Paving - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.137 2	1,070.137 2	0.3017		1,077.679 8
Paving	0.1598					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0800	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.137 2	1,070.137 2	0.3017		1,077.679 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0758	0.0490	0.6030	1.5800e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		157.2415	157.2415	4.5900e-003		157.3563
Total	0.0758	0.0490	0.6030	1.5800e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		157.2415	157.2415	4.5900e-003		157.3563

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	1.9611	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0126	8.1600e-003	0.1005	2.6000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		26.2069	26.2069	7.7000e-004		26.2261
Total	0.0126	8.1600e-003	0.1005	2.6000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		26.2069	26.2069	7.7000e-004		26.2261

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.6 Architectural Coating - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	1.9611	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0126	8.1600e-003	0.1005	2.6000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		26.2069	26.2069	7.7000e-004		26.2261
Total	0.0126	8.1600e-003	0.1005	2.6000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		26.2069	26.2069	7.7000e-004		26.2261

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	1.9289	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0114	7.1500e-003	0.0895	2.6000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		25.4225	25.4225	6.8000e-004		25.4394
Total	0.0114	7.1500e-003	0.0895	2.6000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		25.4225	25.4225	6.8000e-004		25.4394

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

3.6 Architectural Coating - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	1.9289	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0114	7.1500e-003	0.0895	2.6000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		25.4225	25.4225	6.8000e-004		25.4394
Total	0.0114	7.1500e-003	0.0895	2.6000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		25.4225	25.4225	6.8000e-004		25.4394

4.0 Operational Detail - Mobile

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6861	2.3266	4.7622	0.0132	0.9737	0.0144	0.9881	0.2606	0.0136	0.2741		1,339.0629	1,339.0629	0.0625		1,340.6263
Unmitigated	0.6861	2.3266	4.7622	0.0132	0.9737	0.0144	0.9881	0.2606	0.0136	0.2741		1,339.0629	1,339.0629	0.0625		1,340.6263

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	459.99	459.99	459.99	458,240	458,240
Parking Lot	0.00	0.00	0.00		
Total	459.99	459.99	459.99	458,240	458,240

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
NaturalGas Unmitigated	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1190.47	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1.19047	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873

6.0 Area Detail**6.1 Mitigation Measures Area**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Unmitigated	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0501					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-004	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Total	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0501					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-004	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Total	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

Zip Thru Express Car Wash Project

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	5.37	1000sqft	0.38	16,471.60	0
Parking Lot	26.60	1000sqft	0.61	26,598.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	384.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Applicant provided

Construction Phase - Applicant provided

Grading - Applicant provided

Vehicle Trips - Per traffic consultant AM/PM peak hour trip generation estimates

Water And Wastewater - Applicant provided

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	110.00
tblConstructionPhase	NumDays	100.00	110.00
tblConstructionPhase	NumDays	2.00	25.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	PhaseEndDate	3/20/2019	5/17/2019
tblConstructionPhase	PhaseEndDate	3/6/2019	5/3/2019
tblConstructionPhase	PhaseEndDate	10/17/2018	11/16/2018
tblConstructionPhase	PhaseEndDate	3/13/2019	11/30/2018
tblConstructionPhase	PhaseEndDate	10/15/2018	10/12/2018
tblConstructionPhase	PhaseStartDate	3/14/2019	12/17/2018
tblConstructionPhase	PhaseStartDate	10/18/2018	12/3/2018
tblConstructionPhase	PhaseStartDate	10/16/2018	10/15/2018
tblConstructionPhase	PhaseStartDate	3/7/2019	11/19/2018
tblConstructionPhase	PhaseStartDate	10/13/2018	10/1/2018
tblGrading	AcresOfGrading	0.00	0.99
tblGrading	AcresOfGrading	5.00	0.99
tblGrading	MaterialExported	0.00	13.78
tblLandUse	LandUseSquareFeet	5,370.00	16,471.60
tblLandUse	LotAcreage	0.12	0.38
tblProjectCharacteristics	CO2IntensityFactor	641.35	384.89
tblVehicleTrips	ST_TR	23.72	85.66
tblVehicleTrips	SU_TR	11.88	85.66
tblVehicleTrips	WD_TR	23.72	85.66
tblWater	IndoorWaterUseRate	505,215.55	1,680,000.00

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.1685	14.0392	10.4771	0.0178	0.8784	0.8676	1.5018	0.4405	0.8105	1.0354	0.0000	1,782.659 5	1,782.659 5	0.4006	0.0000	1,792.674 0
2019	2.9969	12.5981	10.1631	0.0177	0.2035	0.7413	0.9448	0.0550	0.6925	0.7476	0.0000	1,757.814 2	1,757.814 2	0.3964	0.0000	1,767.722 9
Maximum	3.1685	14.0392	10.4771	0.0178	0.8784	0.8676	1.5018	0.4405	0.8105	1.0354	0.0000	1,782.659 5	1,782.659 5	0.4006	0.0000	1,792.674 0

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.1685	14.0392	10.4771	0.0178	0.8784	0.8676	1.5018	0.4405	0.8105	1.0354	0.0000	1,782.659 5	1,782.659 5	0.4006	0.0000	1,792.674 0
2019	2.9969	12.5981	10.1631	0.0177	0.2035	0.7413	0.9448	0.0550	0.6925	0.7476	0.0000	1,757.814 2	1,757.814 2	0.3964	0.0000	1,767.722 9
Maximum	3.1685	14.0392	10.4771	0.0178	0.8784	0.8676	1.5018	0.4405	0.8105	1.0354	0.0000	1,782.659 5	1,782.659 5	0.4006	0.0000	1,792.674 0

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Energy	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Mobile	0.5816	2.4022	5.3019	0.0124	0.9737	0.0146	0.9883	0.2606	0.0138	0.2743		1,250.4660	1,250.4660	0.0670		1,252.1398
Total	1.0067	2.5189	5.4033	0.0131	0.9737	0.0235	0.9972	0.2606	0.0226	0.2832		1,390.5281	1,390.5281	0.0697	2.5700e-003	1,393.0346

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Energy	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Mobile	0.5816	2.4022	5.3019	0.0124	0.9737	0.0146	0.9883	0.2606	0.0138	0.2743		1,250.4660	1,250.4660	0.0670		1,252.1398
Total	1.0067	2.5189	5.4033	0.0131	0.9737	0.0235	0.9972	0.2606	0.0226	0.2832		1,390.5281	1,390.5281	0.0697	2.5700e-003	1,393.0346

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2018	10/12/2018	5	10	
2	Grading	Grading	10/15/2018	11/16/2018	5	25	
3	Building Construction	Building Construction	12/3/2018	5/3/2019	5	110	
4	Paving	Paving	11/19/2018	11/30/2018	5	10	
5	Architectural Coating	Architectural Coating	12/17/2018	5/17/2019	5	110	

Acres of Grading (Site Preparation Phase): 0.99**Acres of Grading (Grading Phase): 0.99****Acres of Paving: 0.61****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,707; Non-Residential Outdoor: 8,236; Striped Parking Area: 1,596 (Architectural Coating – sqft)****OffRoad Equipment**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.2 Site Preparation - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.1050	0.4180	0.5230	0.0113	0.3846	0.3959		982.7113	982.7113	0.3059		990.3596

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0168	0.1592	4.0000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		40.2393	40.2393	1.2100e-003		40.2695
Total	0.0223	0.0168	0.1592	4.0000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		40.2393	40.2393	1.2100e-003		40.2695

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.2 Site Preparation - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	0.7858	9.7572	4.2514	9.7600e-003	0.1050	0.4180	0.5230	0.0113	0.3846	0.3959	0.0000	982.7113	982.7113	0.3059		990.3596

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0168	0.1592	4.0000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		40.2393	40.2393	1.2100e-003		40.2695
Total	0.0223	0.0168	0.1592	4.0000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		40.2393	40.2393	1.2100e-003		40.2695

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.3 Grading - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7948	0.0000	0.7948	0.4183	0.0000	0.4183			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.350 2	1,169.350 2	0.2254		1,174.985 7
Total	1.0643	9.4295	7.7762	0.0120	0.7948	0.6228	1.4176	0.4183	0.5943	1.0126		1,169.350 2	1,169.350 2	0.2254		1,174.985 7

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.8000e-004	0.0265	5.2800e-003	6.0000e-005	1.4000e-003	1.1000e-004	1.5000e-003	3.8000e-004	1.0000e-004	4.8000e-004		6.8357	6.8357	3.8000e-004		6.8451
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	0.0454	0.0601	0.3237	8.7000e-004	0.0836	6.6000e-004	0.0842	0.0222	6.1000e-004	0.0228		87.3143	87.3143	2.7900e-003		87.3841

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.3 Grading - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7948	0.0000	0.7948	0.4183	0.0000	0.4183			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.350 2	1,169.350 2	0.2254		1,174.985 7
Total	1.0643	9.4295	7.7762	0.0120	0.7948	0.6228	1.4176	0.4183	0.5943	1.0126	0.0000	1,169.350 2	1,169.350 2	0.2254		1,174.985 7

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.8000e-004	0.0265	5.2800e-003	6.0000e-005	1.4000e-003	1.1000e-004	1.5000e-003	3.8000e-004	1.0000e-004	4.8000e-004		6.8357	6.8357	3.8000e-004		6.8451
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	0.0454	0.0601	0.3237	8.7000e-004	0.0836	6.6000e-004	0.0842	0.0222	6.1000e-004	0.0228		87.3143	87.3143	2.7900e-003		87.3841

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.4 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0379	0.9380	0.2668	1.9100e-003	0.0474	7.2600e-003	0.0546	0.0136	6.9500e-003	0.0206		201.7693	201.7693	0.0123		202.0773
Worker	0.0713	0.0538	0.5095	1.2900e-003	0.1314	8.9000e-004	0.1323	0.0349	8.2000e-004	0.0357		128.7659	128.7659	3.8600e-003		128.8624
Total	0.1092	0.9918	0.7762	3.2000e-003	0.1788	8.1500e-003	0.1870	0.0485	7.7700e-003	0.0563		330.5351	330.5351	0.0162		330.9397

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.4 Building Construction - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0379	0.9380	0.2668	1.9100e-003	0.0474	7.2600e-003	0.0546	0.0136	6.9500e-003	0.0206		201.7693	201.7693	0.0123		202.0773
Worker	0.0713	0.0538	0.5095	1.2900e-003	0.1314	8.9000e-004	0.1323	0.0349	8.2000e-004	0.0357		128.7659	128.7659	3.8600e-003		128.8624
Total	0.1092	0.9918	0.7762	3.2000e-003	0.1788	8.1500e-003	0.1870	0.0485	7.7700e-003	0.0563		330.5351	330.5351	0.0162		330.9397

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.4 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.669 6	1,127.669 6	0.3568		1,136.589 2
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.669 6	1,127.669 6	0.3568		1,136.589 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0340	0.8861	0.2437	1.8900e-003	0.0474	6.1500e-003	0.0535	0.0136	5.8800e-003	0.0195		200.3764	200.3764	0.0118		200.6706
Worker	0.0643	0.0471	0.4505	1.2500e-003	0.1314	8.7000e-004	0.1323	0.0349	8.0000e-004	0.0357		124.9011	124.9011	3.3900e-003		124.9859
Total	0.0983	0.9332	0.6942	3.1400e-003	0.1788	7.0200e-003	0.1858	0.0485	6.6800e-003	0.0552		325.2775	325.2775	0.0152		325.6565

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.4 Building Construction - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.669 6	1,127.669 6	0.3568		1,136.589 2
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.669 6	1,127.669 6	0.3568		1,136.589 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0340	0.8861	0.2437	1.8900e-003	0.0474	6.1500e-003	0.0535	0.0136	5.8800e-003	0.0195		200.3764	200.3764	0.0118		200.6706
Worker	0.0643	0.0471	0.4505	1.2500e-003	0.1314	8.7000e-004	0.1323	0.0349	8.0000e-004	0.0357		124.9011	124.9011	3.3900e-003		124.9859
Total	0.0983	0.9332	0.6942	3.1400e-003	0.1788	7.0200e-003	0.1858	0.0485	6.6800e-003	0.0552		325.2775	325.2775	0.0152		325.6565

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.5 Paving - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.137 2	1,070.137 2	0.3017		1,077.679 8
Paving	0.1598					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0800	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.137 2	1,070.137 2	0.3017		1,077.679 8

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0605	0.5731	1.4600e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		144.8616	144.8616	4.3400e-003		144.9702
Total	0.0802	0.0605	0.5731	1.4600e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		144.8616	144.8616	4.3400e-003		144.9702

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.5 Paving - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.137 2	1,070.137 2	0.3017		1,077.679 8
Paving	0.1598					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0800	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.137 2	1,070.137 2	0.3017		1,077.679 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0605	0.5731	1.4600e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		144.8616	144.8616	4.3400e-003		144.9702
Total	0.0802	0.0605	0.5731	1.4600e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		144.8616	144.8616	4.3400e-003		144.9702

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	1.9611	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	0.0101	0.0955	2.4000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		24.1436	24.1436	7.2000e-004		24.1617
Total	0.0134	0.0101	0.0955	2.4000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		24.1436	24.1436	7.2000e-004		24.1617

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.6 Architectural Coating - 2018**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	1.9611	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	0.0101	0.0955	2.4000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		24.1436	24.1436	7.2000e-004		24.1617
Total	0.0134	0.0101	0.0955	2.4000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		24.1436	24.1436	7.2000e-004		24.1617

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	1.9289	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	8.8300e-003	0.0845	2.4000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		23.4190	23.4190	6.4000e-004		23.4349
Total	0.0121	8.8300e-003	0.0845	2.4000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		23.4190	23.4190	6.4000e-004		23.4349

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

3.6 Architectural Coating - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	1.9289	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	8.8300e-003	0.0845	2.4000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		23.4190	23.4190	6.4000e-004		23.4349
Total	0.0121	8.8300e-003	0.0845	2.4000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		23.4190	23.4190	6.4000e-004		23.4349

4.0 Operational Detail - Mobile

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5816	2.4022	5.3019	0.0124	0.9737	0.0146	0.9883	0.2606	0.0138	0.2743		1,250.4660	1,250.4660	0.0670		1,252.1398
Unmitigated	0.5816	2.4022	5.3019	0.0124	0.9737	0.0146	0.9883	0.2606	0.0138	0.2743		1,250.4660	1,250.4660	0.0670		1,252.1398

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	459.99	459.99	459.99	458,240	458,240
Parking Lot	0.00	0.00	0.00		
Total	459.99	459.99	459.99	458,240	458,240

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
NaturalGas Unmitigated	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1190.47	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1.19047	0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0128	0.1167	0.0980	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.0551	140.0551	2.6800e-003	2.5700e-003	140.8873

6.0 Area Detail**6.1 Mitigation Measures Area**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Unmitigated	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0501					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-004	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Total	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0501					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-004	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003
Total	0.4123	3.0000e-005	3.2800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.0000e-003	7.0000e-003	2.0000e-005		7.4700e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Zip Thru Express Car Wash Project - Bay Area AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Zip Thru Express Car Wash Project
Bay Area AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 11

Date: 1/31/2018 10:08 AM

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	6	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	1.48300E-002	1.01880E-001	1.01340E-001	1.60000E-004	7.20000E-003	7.20000E-003	0.00000E+000	1.40429E+001	1.40429E+001	1.20000E-003	0.00000E+000	1.40729E+001
Cement and Mortar Mixers	8.80000E-004	5.52000E-003	4.63000E-003	1.00000E-005	2.20000E-004	2.20000E-004	0.00000E+000	6.87410E-001	6.87410E-001	7.00000E-005	0.00000E+000	6.89200E-001
Concrete/Industrial Saws	6.49000E-003	4.89400E-002	4.65500E-002	8.00000E-005	3.34000E-003	3.34000E-003	0.00000E+000	6.72070E+000	6.72070E+000	5.20000E-004	0.00000E+000	6.73371E+000
Cranes	1.42100E-002	1.69460E-001	6.42600E-002	1.60000E-004	7.22000E-003	6.64000E-003	0.00000E+000	1.42950E+001	1.42950E+001	4.51000E-003	0.00000E+000	1.44078E+001
Forklifts	1.34800E-002	1.20140E-001	9.87900E-002	1.30000E-004	9.36000E-003	8.62000E-003	0.00000E+000	1.13605E+001	1.13605E+001	3.58000E-003	0.00000E+000	1.14501E+001
Graders	2.60000E-003	3.56400E-002	9.57000E-003	3.00000E-005	1.16000E-003	1.07000E-003	0.00000E+000	3.03878E+000	3.03878E+000	9.50000E-004	0.00000E+000	3.06243E+000
Pavers	1.43000E-003	1.57900E-002	1.28000E-002	2.00000E-005	7.70000E-004	7.10000E-004	0.00000E+000	1.87783E+000	1.87783E+000	5.80000E-004	0.00000E+000	1.89245E+000
Rollers	1.13000E-003	1.09100E-002	8.47000E-003	1.00000E-005	7.50000E-004	6.90000E-004	0.00000E+000	1.04743E+000	1.04743E+000	3.30000E-004	0.00000E+000	1.05558E+000
Rubber Tired Dozers	1.82000E-003	1.96200E-002	6.84000E-003	1.00000E-005	9.50000E-004	8.80000E-004	0.00000E+000	1.21928E+000	1.21928E+000	3.80000E-004	0.00000E+000	1.22876E+000
Tractors/Loaders/Backhoes	3.37900E-002	3.37210E-001	3.19730E-001	4.30000E-004	2.30400E-002	2.12000E-002	0.00000E+000	3.87698E+001	3.87698E+001	1.22000E-002	0.00000E+000	3.90747E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.48300E-002	1.01880E-001	1.01340E-001	1.60000E-004	7.20000E-003	7.20000E-003	0.00000E+000	1.40429E+001	1.40429E+001	1.20000E-003	0.00000E+000	1.40729E+001
Cement and Mortar Mixers	8.80000E-004	5.52000E-003	4.63000E-003	1.00000E-005	2.20000E-004	2.20000E-004	0.00000E+000	6.87410E-001	6.87410E-001	7.00000E-005	0.00000E+000	6.89200E-001
Concrete/Industrial Saws	6.49000E-003	4.89400E-002	4.65500E-002	8.00000E-005	3.34000E-003	3.34000E-003	0.00000E+000	6.72070E+000	6.72070E+000	5.20000E-004	0.00000E+000	6.73370E+000
Cranes	1.42100E-002	1.69460E-001	6.42600E-002	1.60000E-004	7.22000E-003	6.64000E-003	0.00000E+000	1.42950E+001	1.42950E+001	4.51000E-003	0.00000E+000	1.44077E+001
Forklifts	1.34800E-002	1.20140E-001	9.87900E-002	1.30000E-004	9.36000E-003	8.62000E-003	0.00000E+000	1.13605E+001	1.13605E+001	3.58000E-003	0.00000E+000	1.14501E+001
Graders	2.60000E-003	3.56400E-002	9.57000E-003	3.00000E-005	1.16000E-003	1.07000E-003	0.00000E+000	3.03877E+000	3.03877E+000	9.50000E-004	0.00000E+000	3.06242E+000
Pavers	1.43000E-003	1.57900E-002	1.28000E-002	2.00000E-005	7.70000E-004	7.10000E-004	0.00000E+000	1.87783E+000	1.87783E+000	5.80000E-004	0.00000E+000	1.89245E+000
Rollers	1.13000E-003	1.09100E-002	8.47000E-003	1.00000E-005	7.50000E-004	6.90000E-004	0.00000E+000	1.04743E+000	1.04743E+000	3.30000E-004	0.00000E+000	1.05558E+000
Rubber Tired Dozers	1.82000E-003	1.96200E-002	6.84000E-003	1.00000E-005	9.50000E-004	8.80000E-004	0.00000E+000	1.21927E+000	1.21927E+000	3.80000E-004	0.00000E+000	1.22876E+000
Tractors/Loaders/Balckhoes	3.37900E-002	3.37210E-001	3.19730E-001	4.30000E-004	2.30400E-002	2.12000E-002	0.00000E+000	3.87697E+001	3.87697E+001	1.22000E-002	0.00000E+000	3.90746E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.42421E-006	1.42421E-006	0.00000E+000	0.00000E+000	1.42117E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48507E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.39909E-006	1.39909E-006	0.00000E+000	0.00000E+000	1.38814E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.76049E-006	1.76049E-006	0.00000E+000	0.00000E+000	8.73358E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.29079E-006	3.29079E-006	0.00000E+000	0.00000E+000	3.26538E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.20156E-006	8.20156E-006	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.28966E-006	1.28966E-006	0.00000E+000	0.00000E+000	1.27960E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	0.00
No	Clean Paved Road	% PM Reduction	0.00	

CalEEMod Version: CalEEMod.2016.3.2

Page 6 of 11

Date: 1/31/2018 10:08 AM

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Grading	Fugitive Dust	0.01	0.01	0.01	0.01	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

CalEEMod Version: CalEEMod.2016.3.2

Page 7 of 11

Date: 1/31/2018 10:08 AM

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

CalEEMod Version: CalEEMod.2016.3.2

Page 8 of 11

Date: 1/31/2018 10:08 AM

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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Appendix B

Phase 1 Environmental Site Assessment



Harris and Lee Environmental Sciences, LLC

All Appropriate Inquiry- Phase 1 Environmental Site Assessment

16015 Caputo Drive, Morgan Hill, CA 95037

APN 817-29-027

Prepared for:

Paul Sagayaraj Amaldoss Henry
1022 Banyan Court
San Jose, CA 95131

Prepared by:

Harris and Lee Environmental Sciences, LLC

Walter Beach, REPA 705676

Robert S. Harris, REPA 976999

October 2, 2017

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION	5
2.1	Purpose	5
2.2	Definition of Terms	5
2.3	Scope of Services	6
2.4	Significant Assumptions	8
2.5	Limitations and Exceptions	8
2.6	User Reliance	9
2.7	Involved Parties	9
3.0	SITE DESCRIPTION	9
3.1	Site Locations and Description	9
3.2	Site and Vicinity General Characteristics	10
3.3	Current Use of the Property	10
3.4	Descriptions of Current Improvements	10
3.4.1	Structures	10
3.4.2	Roads	10
3.4.3	Sewage Disposal	10
3.4.4	Water Supply	10
3.4.5	Heating and cooling systems	10
3.4.6	Utilities	10
3.5	Current Uses of the Adjoining Properties	10
4.0	USER PROVIDED INFORMATION	11
4.1	Searches for Environmental Liens	11
4.2	Valuation Reduction for Environmental Issues	12
4.3	Assessments of Specialized Knowledge	13
5.0	RECORDS REVIEW	13
5.1	Standard and Additional Environmental Record Sources	14
5.2	Physical Setting	16
5.2.1	Topography	16
5.2.2	Flood Insurance Rate Map	16
5.2.3	Geologic and Hydrogeologic Setting	16
5.3	Results of Site History and Land Use Review	17
5.3.1	Sanborn Fire Insurance Maps	18
5.3.2	Historical Topographic Maps	18
5.3.3	Aerial Photographs	18
5.3.4	City Directory	19
5.3.5	Local Records Review	20
5.3.6	Synopsis of Previous and Current Environmental Investigations	20
5.4	Discussion of Records Review	20
6.0	SITE RECONNAISSANCE	21
6.1	Methodology and Limiting Conditions	21
6.2	General Site Setting	21
6.3	Subject Property	22
6.4	Adjacent Properties	22
7.0	INTERVIEWS	22
7.1	Interviews with Past and Present Owners, Operators, and Occupants	22
7.2	Interviews with Local Government Officials	23
7.3	Interviews with Others	23
8.0	VAPOR ENCROACHMENT SCREENING	23
9.0	FINDINGS	24
10.0	CONCLUSIONS	25

11.0	OPINION	26
12.0	ENVIRONMENTAL PROFESSIONAL STATEMENT	26
13.0	DEVIATIONS	27
14.0	ADDITIONAL SERVICES	27
15.0	REFERENCES	27
	15.1 Published References	27
	15.2 Unpublished References	27
16.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	29

List of Exhibits

Exhibit A – Vicinity Map
 Exhibit B – Assessor's Parcel Map
 Exhibit C – U.S.G.S 7.5-Minute Topographic Map
 Exhibit D – Site Photographs
 Exhibit E – Historic Topographic and Aerial Photographs
 Exhibit F – Environmental Data Resources Reports
 Exhibit G – Regulatory Records Documentation

1.0 EXECUTIVE SUMMARY

Pursuant to the request and assignment of Paul Sagayaraj Amaldoss Henry, Harris and Lee Environmental Sciences, LLC (HLENV) has performed a Phase 1 Environmental Site Assessment on the property identified as 16015 Caputo Drive, Morgan Hill, CA 95037, Santa Clara County Assessor's Parcel Number 817-29-027 ("Subject Property"), which is located in the City Limits of Morgan Hill in Santa Clara County, CA.

The purpose of this All Appropriate Inquiry, Environmental Site Assessment Phase 1 Investigation is to provide information as to the Recognized Environmental Conditions on or near the Subject Property noted above. Recognized Environmental Conditions are defined with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. This Environmental Site Assessment follows the guidelines established by the American Society for Testing and Materials (ASTM) in the document entitled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and designated E1527-13. As such, this assessment is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser protection as noted in CERCLA and the California Health and Safety Code; that is the "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice as defined at 42 U.S.C. 9601(35)(B).

The Scope of Service for this Phase I Environmental Site Assessment consists of four overall tasks:

- Task I:** Research and review of regulatory information
- Task II:** A site reconnaissance of subject and nearby property
- Task III:** Interviews of persons with knowledge of subject and surrounding property
- Task IV:** Preparation of the final Environmental Site Assessment report

Site Description and Current Use

The Subject Property is located in the City Limits of Morgan Hill in Santa Clara County. It is approximately 0.43 miles west of U. S. Highway 101 and 1.39 miles south-east of the City Center of Morgan Hill. The general characteristic of the property's vicinity is a mix of offices and commercial buildings.

The Subject Property is a rectangular parcel of real estate that is approximately 1.45 acres in area. The Subject Property is a vacant lot with no structures. The ground is covered with dirt, weeds and native vegetation.

Adjoining Properties Use

- **North:** Vacant offices
- **East:** Caputo Drive; Morgan Hill Physical Therapy
- **South:** Tennant Avenue; Farmers Market Produce

➤ **West:** Vacant lot

Standard and Additional Environmental Records Search

The Standard and Additional Environmental Records Search disclosed issues on the Subject Property or any of the properties within the standard ASTM search radius of 1-mile that appeared to pose a Recognized Environmental Condition for the Subject Property.

- Groundwater contaminated with perchlorate in excess of the California maximum contaminant level has migrated from the adjacent property to the west under the Subject Property. This constitutes a Recognized Environmental Condition for the Subject Property.

Detailed discussions of specific listings are included in Section 5.1.

Physical Setting

The elevation of the Subject Property is at 331 feet above sea level with the general topographic gradient towards the south. Soils consist of well drained soils with moderate infiltration rates. The property is inside the 500-year and outside the 100-year flood zones.

Historical and Present Use of Subject Property

The Subject Property appears to have been agricultural farmland from as far back as at least 1939 until the mid 1970's. From the mid 1970's until present the Subject Property has been an undeveloped lot with no structures.

Recognized Environmental Conditions

In the course of performing this All Appropriate Inquiry-Environmental Site Assessment, Phase 1 Investigation evidence of one Recognized Environmental Condition was identified on the Subject Property.

- Groundwater contaminated with perchlorate in excess of the California maximum contaminant level has migrated from the adjacent property to the west under the Subject Property. This constitutes a Recognized Environmental Condition for the Subject Property.
- **Controlled Recognized Environmental Conditions**
No Controlled Recognized Environmental Conditions were identified in connection with the Subject Property.
- **Vapor Encroachment Conditions**
No evidence was found for a likely Vapor Encroachment Condition on the Subject Property.

Historical Recognized Environmental Conditions

No Historic Recognized Environmental Conditions were identified in connection with the Subject Property.

Activity and Use Limitations

One Activity and Use Limitation was identified in connection with the Subject Property:

- The only use restriction is that groundwater would not be able to be used, untreated, as a potable water source due to contamination from perchlorate.

De Minimis Conditions

No de minimis conditions were found for the Subject Property.

Data Gaps

No data gaps were encountered during the performance of this investigation.

Conclusions

Harris and Lee Environmental Sciences, LLC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527 of the Subject Property designated as Santa Clara County Assessor's Parcel Number 817-29-027 with the physical address of 16015 Caputo Drive, Morgan Hill, CA. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- Groundwater contaminated with perchlorate in excess of the California maximum contaminant level has migrated from the adjacent property to the west under the Subject Property. This constitutes a Recognized Environmental Condition for the Subject Property.

Opinion

Harris and Lee Environmental Sciences, LLC reminds the client that it is always prudent to maintain care in handling chemicals and any hazardous materials in any building or any property. It is pertinent to be reminded that the building / property owner is ultimately responsible for the environmental compliance that occurs in any building or on any property. Thus, if a tenant is not in compliance, the owner, who has nothing to do with the tenant's operations, can be held responsible.

It is the opinion of Harris and Lee Environmental Sciences, LLC that the Recognized Environmental Condition associated with contaminated groundwater from an adjacent site that has migrated under the Subject Property is unlikely to pose a financial liability or human health risk for the Subject Property. The only use restriction is that groundwater would not be able to be used as a potable water source due to the contamination.

- Financial Liability
 - o A known Responsible Party is actively addressing the contamination source.
 - o The Subject Property does not appear to have current or prior uses that may have contributed to the contamination plume.
- Human Health Risk
 - o The Subject Property does not utilize groundwater as a potable water source.
 - o The chemical of concern – perchlorate – does not readily volatilize and as such is unlikely to pose a vapor intrusion risk for the Subject Property.
- Usage Restrictions
 - o The only use restriction is that groundwater would not be able to be used, untreated, as a potable water source.

Recommendations

Harris and Lee Environmental Sciences, LLC recommends that no further environmental investigation is warranted on the Subject Property given the findings of this Phase I Environmental Site Assessment.

This report is governed by the Limitations set forth in Sections 2.4 and 2.5 of this report. This Executive Summary is not to be used without the accompaniment of the entire report.

2.0 INTRODUCTION

2.1 Purpose

Pursuant to the request and assignment of Paul Sagayaraj Amaldoss Henry, Harris and Lee Environmental Sciences, LLC (HLENV) has performed a Phase 1 Environmental Site Assessment on the property identified as 16015 Caputo Drive, Morgan Hill, CA 95037, Santa Clara County Assessor's Parcel Number 817-29-027 ("Subject Property"), which is located in the City Limits of Morgan Hill in Santa Clara County, CA.

The purpose of this All Appropriate Inquiry, Environmental Site Assessment Phase 1 Investigation is to provide information as to the Recognized Environmental Conditions on or near the Subject Property noted above. Recognized Environmental Conditions are defined with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. This Environmental Site Assessment follows the guidelines established by the American Society for Testing and Materials (ASTM) in the document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" and designated E-1527-13. As such, this assessment is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser protection as noted in CERCLA and the California Health and Safety Code; that is the "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice as defined at 42 U.S. C. 9601(35)(B).

2.2 Definition of Terms

This section provides definitions and descriptions of terms used in this report.

Activity and Use Limitations - legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment.

Controlled Recognized Environmental Condition - a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

De Minimis Condition - a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

Data Gap - a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

Historical Recognized Environmental Condition - a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Recognized Environmental Condition – “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.” (ASTM E1527-13)

Pursuant to the ASTM E-1527-13 Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, Recognized Environmental Conditions do not include Controlled Substances, Asbestos Containing Materials, Lead-base paint, Mold, Radon or other non-CERCLA related conditions.

Vapor Encroachment Condition - the presence or likely presence of chemical vapors in the sub-surface of the Subject Property caused by the release of vapors from contaminated soil or groundwater either on or near the Subject Property. A vapor encroachment condition may be considered a recognized environmental condition or a de minimus condition.

2.3 Scope of Services

The Scope of Services for this All Appropriate Inquiry, Environmental Site Assessment Phase 1 Investigation consists of four overall tasks:

Task I: Research and review of regulatory information

-
- Task II:** A site reconnaissance of subject and nearby properties
Task III: Interviews of persons with knowledge of subject and surrounding property
Task IV: Preparation of the final Environmental Site Assessment report

The Scope of Services for this All Appropriate Inquiry, Environmental Site Assessment, Phase 1 Investigation follows the Standard Practice for Environmental Site Assessments designated as E-1527-13 of the ASTM. Accordingly, the All Appropriate Inquiry, Environmental Site Assessment, Phase 1 Investigation is targeted towards the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. As such, "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC 9601(35)(B) is applied. However, an evaluation of business environmental risk associated with a parcel of commercial real estate may necessitate investigation beyond that identified in this assessment.

The Scope of Services includes observations for Recognized Environmental Conditions, as well as review of information that can be obtained from regulatory files that is reasonably ascertainable within reasonable time and cost constraints. Accordingly, it cannot be guaranteed that all files are examined or that every contingency is investigated. These limitations are in conformance with the stated guidelines of ASTM E1527-13.

The Records Review includes review of files for the Subject Property available at state, county and local offices or websites, as listed in Section 5.1 of this report. Records were reviewed for adjacent properties, as appropriate, as required by ASTM E1527-13. In some cases the status of a site is determined from telephone interviews of staff persons of these offices.

The potential for contaminated vapor migration, as well as soil and groundwater contamination, on the Subject Property is considered during evaluation of potentially relevant releases, as required by ASTM 1527-13. Releases reported with a contaminated groundwater plume within a critical distance from the Subject site were reviewed to evaluate if the reported release could constitute a potential vapor encroachment condition to the Subject Property. The critical distance between the Subject Property and a contaminated plume is defined by ASTM E2600-10 as 30 feet for dissolved petroleum hydrocarbons, and 100 feet for free-product petroleum hydrocarbons and non-petroleum chemicals of concern.

The site reconnaissance consists of the Subject Property and the identification of nearby properties. Interviews are conducted of persons associated with the Subject Property and reasonably available at the time of the site reconnaissance, and on occasion, by telephone when such interviews are possible. The report follows the Standard Practice of ASTM E-1527-13.

The Scope of Services for this All Appropriate Inquiry, Environmental Site Assessment, Phase 1 Investigation does not include analysis of Controlled Substances (CS) or Asbestos Containing Materials (ACM). Neither does the Scope of Services include analysis of the building constituents for Lead based paint or other non-CERCLA related conditions. If there is suspicion that these substances or conditions may be present, professionals licensed to assess their presence should be contacted. Harris and Lee Environmental Sciences, LLC can assist, if requested.

2.4 Significant Assumptions

The All Appropriate Inquiry, Environmental Site Assessment, Phase 1 Investigation is intended to assess the environmental conditions of a specific parcel of commercial real estate. It is intended to constitute all appropriate inquiry for purposes of the CERCLA liability, i.e., innocent landowner, contiguous property owner or bona fide prospective purchaser limitations on CERCLA liability. This Phase 1 is intended to reflect a commercially prudent and reasonable inquiry designed to identify recognized environmental conditions in connection with a property.

2.5 Limitations and Exceptions

The Scope of Services performed to complete this All Appropriate Inquiry, Environmental Site Assessment, Phase 1 Investigation was limited in nature. While we consider work of this type to be valuable in the preliminary evaluation of potential hazardous materials or waste at the site, we also must alert the Client that this study may not reveal hazardous materials releases that have occurred. Also, the site conditions can change with time, and our assessment was not intended to predict future site conditions. Because of the limited nature of this assessment, this report is not a risk assessment and the Scope of Services does not include a determination of the extent of business environmental risk nor the public health impact of, known or suspected hazardous materials or wastes. This assessment does not address whether requirements in addition to all appropriate inquiry have been met in order to qualify for the innocent landowner, contiguous property owner or bona fide prospective purchaser limitations on liability protections under CERCLA. Furthermore, this assessment does not address requirements of state or local laws or federal laws other than the all appropriate inquiry provisions of the landowner liability protections. Client(s) are cautioned that federal, state and local laws may impose environmental assessment obligations that are beyond the scope of the all appropriate inquiry provisions of this assessment.

This service has been performed in accordance with generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No other guarantees or warranties, expressed or implied are provided.

It is understood by the parties hereto that the Client who has requested this assessment will use the assessment (in addition to other information) to provide information to a

lender, investors in the property, for the purposes of refinancing or purchasing said property or to satisfy regulatory agency requirements. Consultant intends no other use or disclosure. Client agrees to hold Consultant harmless for any inverse condemnation or devaluation of said property that may result if the Consultant's report or information generated is used for other purposes. Also, this report is issued with the understanding that it is to be used only in its entirety.

2.6 User Reliance

Only Mr. Paul Sagayaraj Amaldoss Henry, the financing institution(s) providing financing for the purchase and/or redevelopment of the property and any pertinent regulatory agencies may rely upon this report. No other person or entity may rely upon the report without written consent of Harris and Lee Environmental Sciences, LLC.

2.7 Involved Parties

The following are the parties involved in this proposed transaction on the property identified as Santa Clara County Assessor's Parcel Number 817-29-027:

- Frank Huang & Ching Su - listed current owner
- Paul Sagayaraj Amaldoss Henry - prospective buyer

3.0 SITE DESCRIPTION

3.1 Site Locations and Description

Exhibit A is a vicinity map of the general area of the Subject Property. Exhibit B presents an Assessor's Parcel Map for the Subject Property having Santa Clara County Assessor's Parcel Number 817-29-027. The legal description of the Subject Property may be found in the title report, which is not included in this report.

Using the Earth's Grid System, the coordinates of the Subject Property location are:

Latitude (North):	N 37.1168740° - 37° 7' 0.74"
Longitude (West):	W 121.6341830° - 121° 38' 3.05"
Elevation:	331 feet above sea level

Table: Subject Property Information

Street Address	APN	Recorded Owner	Size (Acres)	Structure-Year built/ Square. ft./ # of floors	Use	Zone
16015 Caputo Drive, Morgan Hill, CA	817-29-027	Frank Huang & Ching Su	1.45	-- --- ---	Vacant land	CO

3.2 Site and Vicinity General Characteristics

The Subject Property is located in the City Limits of Morgan Hill in Santa Clara County. It is approximately 0.43 miles west of U. S. Highway 101 and 1.39 miles south-east of the City Center of Morgan Hill. The general characteristic of the property's vicinity is a mix of offices and commercial buildings.

The Subject Property's zoning designation is CO. CO stands for Administrative Office District.

3.3 Current Use of the Property

Current use of the Subject Property is vacant land.

3.4 Descriptions of Current Improvements

3.4.1 Structures

No structures are located on the Subject Property.

3.4.2 Roads

The Subject Property is bounded Caputo Drive to the east and Tennant Avenue to the south. Access to the property is via Caputo Drive and Tennant Avenue.

3.4.3 Sewage Disposal

Municipal sewage services are available for the Subject Property.

3.4.4 Water Supply

Municipal water services are available for the Subject Property.

3.4.5 Heating and cooling systems

These systems were not inspected in the course of this assessment.

3.4.6 Utilities

Pacific Gas and Electric Company electricity and gas service is available for the Subject Property.

3.5 Current Uses of the Adjoining Properties

According to the 40 CFR 312.10, "adjoining properties are defined as any real property or properties the border of which is (are) shared in part or in whole with that of the

Subject Property, or that would be shared in part or in whole with that of the Subject Property but for a street, road, or other public thoroughfare separating the properties.”

- **North:** Vacant offices
- **East:** Caputo Drive; Morgan Hill Physical Therapy
- **South:** Tennant Avenue; Farmers Market Produce
- **West:** Vacant lot

4.0 USER PROVIDED INFORMATION

The purpose of this section is to identify general tasks that will help identify the possibility of recognized environmental conditions in connection with the Subject Property. The general tasks are 1) Searches for Environmental Liens; 2) Valuation Reduction for Environmental Issues; and 3) Assessments of Specialized Knowledge. These tasks do not require technical expertise and Environmental Professionals do not normally perform these tasks. These tasks are the responsibility of the client. However, the results of these tasks must be made available for the Environmental Professionals to review; if none are provided they will be identified as “data gaps”. The Environmental Professional(s) are required to review these items in order to formulate an opinion regarding the obviousness of the presence or likely presence of contamination at the property or identify them as missing “data gaps.”

4.1 Searches for Environmental Liens

Searches for environmental cleanup liens against the Subject Property that are filed or recorded under federal, tribal, state or local law as required under 40 CFR Part 312 Section 312.25.

40 CFR Part 312 Section 312.25(b) states: “All information collected regarding the existence of such environmental cleanup liens associated with the property must be provided to the environmental professional.”

Preliminary Title Report

Chicago Title Company, 675 North First Street, Suite 400, San Jose, California, provided a contemporary preliminary title report. The report Order Number is FWPS-3022170955-SD and is dated September 7, 2017.

The preliminary title report included the following provisions in connection with the Subject Property:

The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

*Redevelopment Agency: Ojo De Agua Project Area
 Recording Date: June 23, 1981
 Recording No.: 7092982, Book G169, Page 270, of Official Records*

The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

*Redevelopment Agency: Amendment to the Ojo De Agua Community Development Plan
 Recording Date: January 9, 1995
 Recording No.: 12769934, Book N724, Page 1384, of Official Records*

Matters contained in that certain document

*Entitled: Ordinance No. 552, New Series
 Dated: June 9, 1981
 Executed by: City of Morgan Hill
 Recording Date: July 23, 1981
 Recording No.: 7092983, of Official Records*

Reference is hereby made to said document for full particulars.

The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document.

*Redevelopment Agency: City of Morgan Hill
 Recording Date: January 9, 1995
 Recording No.: 12769934, of Official Records*

In order to complete this report the Company requires the following:

*Information requested: Grant Deed to include the names of Trustees
 Party(ies): Frank F.C. Huang and Su-Ching Huang*

The Company reserves the right to make additional requirements or add additional items or exceptions after review of the requested documentation.

4.2 Valuation Reduction for Environmental Issues

An assessment of the relationship of the purchase price to the fair market value of the Subject Property, assuming there is no contamination of the property, is required under

40 CFR Part 312 Section 312.29 to maintain the innocent landowner defense. The sections from the federal document are reproduced (with edits for clarity) following:

- (a) Persons to whom this part is applicable must consider whether the purchase price of the Subject Property reasonably reflects the fair market value of the property, assuming there is no contamination of the property;
- (b) Persons who conclude that the purchase price of the Subject Property does not reasonably reflect the fair market value of that property, if the property were not contaminated, should consider whether or not the differential in purchase price and fair market value is due to the presence of releases or threatened releases of hazardous substances.

An appraisal of the Subject Property was not available for review.

4.3 Assessments of Specialized Knowledge

Assessments of any specialized knowledge or experience on the part of the purchaser or landowner is required by 40 CFR Part 312 Section 312.28 to maintain the innocent landowner defense. The sections from the federal document are reproduced (with edits for clarity) following:

- (a) Persons to whom this part is applicable must take into account, their specialized knowledge of the Subject Property, the area surrounding the Subject Property, the conditions of adjoining properties, and any other experience relevant to the inquiry, for the purpose of identifying conditions indicative of releases or threatened releases at the Subject Property.
- (b) All appropriate inquiries are not complete unless the results of the inquiries take into account the relevant and applicable specialized knowledge and experience of the persons responsible for undertaking the inquiry.

No specialized knowledge relating to the Subject Property was obtained via interviews of persons with knowledge of the status and history of the property.

5.0 RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the Subject Property. This is one of the Criteria required under the All Appropriate Inquiry, Environmental Site Assessment Phase 1 Investigation.

5.1 Standard and Additional Environmental Record Sources

The *Standard Environmental Record Sources* and the *Additional Environmental Record Sources* were obtained through a computer data bank search company, Environmental Data Resources of Milford, Connecticut. Computer data bank searches for active sites can be useful in locating sites that may have the potential to adversely impact the subject site. It is important to keep in mind that computer database searches provide general overview data and may not be precise in the data that is presented. Consequently, an investigator needs additional familiarity with active sites to properly interpret the data that is provided.

The Environmental Radius Report is included in Exhibit F. This report accessed a large number of active federal, state and local databases—some are Standard Environmental Record Sources (Section 8.2.1 ASTM E-1527-13) and others are Additional Environmental Record Sources that provide additional data and supplement the Standard Environmental Record Sources. A comprehensive listing of government records searched is listed in the Radius Report and is not repeated in the text.

EDR Database Search

Subject Property: The Subject Property does not appear on any standard record sources or any additional environmental record sources searched and reported upon in the Radius Report.

Neighboring Properties: Summary of relevant findings of the database search within the minimum radius search distance of the property as specified by ASTM E-1527-13, Section 8.2.1 are summarized in the Table below.

U.S. Federal Databases		
Database	ASTM Criteria Search Distance (miles)	Number of Properties within the Search Distance
NPL	1.0	0
Delisted NPL	0.5	0
CERCLIS	0.5	0
CERCLIS NFRAP	0.5	0
RCRA CORRACTS facilities	1.0	0
RCRA non-CORRACTS TSD facilities	0.5	0
Generators list: RCRA_LQG	Property; adjoining property	0
Generators list: RCRA_SQG	Property; adjoining property	0
Federal Institutional / Engineering Control	Property	0
Federal ERNS List	Property	0

State, Tribal and Local Databases			
Database	ASTM Search Distance (miles)	Properties within the Search Distance	
ENVIROSTOR ¹	1.0	7	
SLIC	0.5	4	
LUST	0.5	3	
SWF/LS	0.5	0	
AST ²	Property; adjoining property	0	
UST ²	Property; adjoining property	0	
Notify 65 ²	Property; adjoining property	0	
Old Databases ³	Property; adjoining property	0	

Note 1: The following databases are part of Envirostor under DTSC; they are not listed individually: Cal-Sites (State equivalent to NPL is AWP, BE), Hist. Cal-Sites, Response, Institutional & Engineering Controls, VCP and Brownfield sites.

Note 2: The following databases are discussed only if the listed sites are on the property or on adjoining properties: UST, AST, and Notify 65.

Note 3: The following databases are old and are not updated; unless the sites listed are on the Subject Property or adjoining properties, they are not discussed; the databases include: CA FID; HIST UST; & SWEEPS.

There are several sites listed within the standard ASTM search distance of 1-mile of the Subject Property. A brief review of the listed sites reveals that most are not likely threats for the Subject Property due to one or more of the following reasons: listing database not relevant, sufficient distance from Subject Property, location relative to site topography and ground water flow direction, and the status of the listed site (e.g., closed, contamination characterized, contamination under remediation, etc.)

The Environmental Radius Report is attached to this report. A summary of those sites in the report considered pertinent for the Subject Property is presented below in Section 5.4.

Other Environmental Record Sources

To enhance and supplement the Environmental Radius Report data bank searches for active sites, local records and / or additional state or tribal records were independently searched through their various websites. These records are reasonably ascertainable, and are sufficiently useful, accurate and complete in light of the objective of the records review. Other Environmental Record Sources contacted for information pertaining to the subject and nearby properties were as follows:

- U.S. EPA (<http://www.epa.gov/region09/>)
- California Environmental Protection Agency, Department of Toxic Substances Control (<http://www.calepa.ca.gov/> and <http://www.envirostor.dtsc.ca.gov/public/>)
- County of Santa Clara — all departments (<http://www.co.Santa.Clara.ca.us/>)
- California State Water Resources Control Board (<http://geotracker.swrcb.ca.gov/>)

Any information obtained from these sources is documented in appropriate sections of this report.

Environmental File Review - Unified Program

The Unified Program is the consolidation of six state environmental programs into one program under the authority of a Certified Unified Program Agency. These can be a county, city or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. The six programs are the Hazardous Materials Business Plan/Emergency Response Plan, Hazardous Waste, Tiered Permitting, Underground Storage Tanks, Aboveground Storage Tanks (SPCC only) and the Uniform Fire Code Hazardous Materials Management Plan.

A CUPA or Certified Unified Program Agency is a local agency that has been certified by Cal EPA to implement the six state environmental programs within the local agency's jurisdiction.

The Santa Clara County Environmental Health Department is the designated local agency for the Subject Property.

No additional records of environmental significance were found for the Subject Property.

5.2 Physical Setting

5.2.1 Topography

Exhibit C is the U. S. Department of Interior, Geological Survey Quadrangle 7.5-Minute Series topographic map. The Subject Property lies at an elevation of approximately 331 feet above mean sea level. The general topographic gradient at the Subject Property is generally south. Surface topography may be indicative of the direction of surficial groundwater flow.

5.2.2 Flood Insurance Rate Map

According to FEMA Flood Panel Maps, the Subject Property is within the 500-year flood zone and outside the 100-year flood zone.

5.2.3 Geologic and Hydrogeologic Setting

Soil Conditions

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Table: Soil types found near Subject Property				
Soil series		Texture	Hydrologic Group	Drainage Class
1	Arbuckle series	Gravelly loam	Class B – Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.	Well drained

Note: The definition of a hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part. The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation.

Groundwater Flow Direction

EDR GeoCheck-Physical Setting Source Summary provides the following site-specific hydrogeologic data.

Search Radius:	1.25 miles
Location Relative to TP:	1/8 - 1/4 Mile SW
Site Name:	OLIN CORP MORGAN HILL PLT
Site EPA ID Number:	CAD009183831
Groundwater Flow Direction:	Southeast
Measured Depth to Water:	80 feet
Hydraulic Connection:	The aquifer underlying the site is unconfined.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

Two sites with groundwater flow directions were identified within a radius of one mile of the Subject Property. The groundwater flow directions are reported to be east and west.

5.3 Results of Site History and Land Use Review

The objective of consulting historical sources is to develop a history of the previous uses of the Subject Property and surrounding area in order to identify the likelihood of past uses having led to recognized environmental conditions. All obvious uses of the property must be identified from the present back to the property's first developed use or back to 1940, whichever is earlier (§ 8.3.2 ASTM 1527-13). The Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13) requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable is defined by ASTM as information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable. The following standard historical sources for the Subject Property

were reviewed: Sanborn Fire Insurance Maps, City Directories, County Records Review, personal interviews, historical aerial photographs and previous environmental investigations.

5.3.1 Sanborn Fire Insurance Maps

Environmental Data Resources of Milford, Connecticut investigated the historic Sanborn Fire Insurance Maps. The inquiry Number is 5052107.3.

No coverage was reported:

The report is attached to this Environmental Site Assessment as a component of Exhibit F.

5.3.2 Historical Topographic Maps

Environmental Data Resources of Milford, Connecticut performed a search for historical topographic maps. The topographic maps are presented in the EDR report number 5052107. The report is reproduced in Exhibit E of this report.

The historical topographic maps report did not reveal any significant potential liability resulting from past activities.

5.3.3 Aerial Photographs

Environmental Data Resources of Milford, Connecticut performed a search for historic aerial photographs. The photographs are presented in the EDR report number 5052107. The report is reproduced in Exhibit E of this report. A synopsis of the aerial photography is presented in the Table below.

Table: Description of the Subject Property from aerial photographs		
DATE	ON SITE DESCRIPTION	OFFSITE DESCRIPTION
1939-1940	The site is agricultural farmland.	North: Agricultural farmland. East: Agricultural farmland. South: Agricultural farmland. West: Undeveloped land. There is a road that runs from north-west and south-east.
1950	The site is agricultural farmland.	North: Agricultural farmland with a few residences East: Agricultural farmland with a few residences. South: Agricultural farmland with a few residences. West: Undeveloped land. There is a road that runs from north-west and south-east.

Table: Description of the Subject Property from aerial photographs		
DATE	ON SITE DESCRIPTION	OFFSITE DESCRIPTION
1956-1968	The site is agricultural farmland.	North: Agricultural farmland with a few residences East: Agricultural farmland with a few residences. South: Agricultural farmland with a few residences. West: Immediately west is undeveloped land. Further west is a commercial structure. West of the commercial structure is a road that runs from north-west and south-east. West of the road is undeveloped land.
1974	The site is undeveloped and covered in trees.	North: A mix of undeveloped land, residences and a few commercial structures. East: Immediately east is undeveloped land. Further east is Highway 101 that runs from north to south. South: A mix of undeveloped land, residences and commercial structures. West: A mix of commercial structures and undeveloped land.
1982	The site is undeveloped land. There are no trees or structures located on the site.	North: A mix of undeveloped land, residences and a few commercial structures. East: Immediately east is undeveloped land. Further east is Highway 101 that runs from north to south. South: A mix of undeveloped land, residences and commercial structures. West: A mix of commercial structures and undeveloped land.
1998	The site is undeveloped land. There are no trees or structures located on the site.	North: Immediately north are commercial structures. North of the structures is a mix of undeveloped land and residences. East: Immediately east is undeveloped land with a few commercial structures. Further east is Highway 101 that runs from north to south. South: A mix of undeveloped land and commercial structures. West: A mix of commercial structures and undeveloped land.
2005-2012	The site is undeveloped land. There are no trees or structures located on the site.	North: Immediately north are commercial structures. North of the structures is a mix of undeveloped land and residential developments. East: Immediately east are commercial structures. Further east is Highway 101 that runs from north to south. South: Commercial structures. West: Immediately west is undeveloped land. Further west are commercial structures.

5.3.4 City Directory

Environmental Data Resources of Milford, Connecticut investigated historic City Directory; this report is documented in the City Directory Abstract Report with Inquiry Number 5052107. It is included in this report as a component of Exhibit F.

Business directories including city, cross-reference and telephone directories were reviewed, if available, at approximately five-year intervals for the years spanning 1970 through 2011. (These years are not necessarily inclusive.)

The Subject Property was not listed.

These listings are consistent with usage as vacant land. The listings do not indicate an issue of environmental concern.

Adjacent Property listings were predominantly commercial listings. Some of these listings may be for businesses that regularly generate and/or handle hazardous wastes. These sites do not indicate issues of environmental concern unless a record of contamination (such as listings in regulatory records) is found. Any such sites are discussed in Section 5.1.

5.3.5 Local Records Review

Historical Permit records for the Subject Property were researched at the City of Morgan Hill Building Department. This review included the Building and Zoning Records.

No Permit history of environmental impact related to the Subject Property at Santa Clara County Assessor's Parcel Number 817-29-027 was found.

5.3.6 Synopsis of Previous and Current Environmental Investigations

No previous or current environmental investigations prior to this report were identified.

5.4 Discussion of Records Review

Subject Property

Based on the review of the database report and other records review, there are no records for the Subject Property that constitute a recognized environmental condition. This opinion is based on current and available information.

Surrounding Properties

Sites considered potentially relevant to environmental conditions on the Subject Property based on the records review are discussed below. Sites not mentioned are judged insignificant for the Subject Property. In some cases, rather than engage in an exhaustive discussion of the various sites, these are grouped together in a summary discussion.

Sites warranting further discussion are as follows:

Olin Corporation is listed on the **CHMIRS, SWEEPS UST, HIST UST, CA FID UST, Cortese, ENF, SEMS ARCHIVE, EMI, NPDES** and **SLIC** databases (Global ID

SL0608756247). This site is located at 425 Tennant Avenue adjacent to the Subject Property on the west side. Regulatory records indicate Olin and Standard Fusee manufactured signal flares at the site from 1956 to 1995 which resulted in discharge of perchlorate to soil and groundwater. A case was opened for the contamination on March 21, 2001. The site is currently status Open – Remediation as of April 8, 2004. Groundwater contaminated with perchlorate has migrated under the Subject Property at contamination levels that range from 11.1 to 24.5 ug/l. California's maximum contaminant level for perchlorate in groundwater is 6 ug/l. Olin Corporation is the Responsible Party for the remediation of the contamination.

Based on the review of the open and active surrounding properties listed on the database report and other records review, there is one that constitutes a recognized environmental condition for the Subject Property. This opinion is based on current and available information.

- Groundwater contaminated with perchlorate in excess of the California maximum contaminant level has migrated from the adjacent property to the west under the Subject Property. This constitutes a Recognized Environmental Condition for the Subject Property.

6.0 SITE RECONNAISSANCE

On September 28, 2017, an environmental professional performed a site reconnaissance of the Subject Property and nearby properties. The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property. It is not an environmental compliance audit; this process does not determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations.

Photo-documentation of the property is presented in Exhibit D of this report.

6.1 Methodology and Limiting Conditions

The method used in conducting the site reconnaissance consisted of walking the perimeter of the Subject Property and inspecting as closely as possible the features of the property. Visual observations of nearby properties were performed in an effort to identify conditions that potentially could negatively impact the subject site.

6.2 General Site Setting

The general site setting is an undeveloped field with no structures. The property is located in the southern section of the City of Morgan Hill. Nearby properties are a mix of offices, stores and commercial buildings.

6.3 Subject Property

The Subject Property is a rectangular parcel of about 1.45 acres in area. The Subject Property is a vacant lot with no structures. The ground is covered in dirt, weeds and native vegetation. There was minimal trash on the site.

There were two (2) monitoring wells located on Caputo Drive east of the Subject Property. The monitoring wells are associated with the Olin Corporation site that is adjacent to the Subject Property to the west.

Access to the property is via from Caputo Drive to the east and Tennant Avenue to the south.

No water wells are located on the Subject Property.

No underground storage tanks were evident on the Subject Property.

No excessive staining or distressed vegetation was evident on the Subject Property.

No hazardous materials are located on the Subject Property.

In the course of the inspection indications of recognized environmental conditions were observed.

- Contamination from perchlorate from the adjacent site to the west has migrated in the groundwater underneath the Subject Property at levels above the California Maximum Screening Levels.

6.4 Adjacent Properties

- **North:** Vacant offices
- **East:** Caputo Drive; Morgan Hill Physical Therapy
- **South:** Tennant Avenue; Farmers Market Produce
- **West:** Vacant lot

7.0 INTERVIEWS

7.1 Interviews with Past and Present Owners, Operators, and Occupants

The representative for the Subject Property was interviewed in the course of this assessment.

- The Subject Property is vacant land with no structures.
- The Subject Property has never been developed with a structure.

7.2 Interviews with Local Government Officials

No local government officials were interviewed for this report.

7.3 Interviews with Others

Various individuals encountered while conducting the site reconnaissance of the site were interviewed. These brief interviews were conducted in a casual conversational manner in an attempt to determine if there are any historic factors that would indicate an impact on the property.

8.0 VAPOR ENCROACHMENT SCREENING

This section presents a Vapor Encroachment Screening (VES) of the Subject Property to determine whether a Vapor Encroachment Condition (VEC) is present or likely to be present on the Subject Property. The VES was performed in conjunction with this Phase I ESA for the Subject Property in general accordance with Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions adopted by ASTM International in Method E2600-15.

The VES process as described in ASTM Standard E2600-15 is a two-tiered screening process. Tier 1 VES focuses on known or suspected contaminated properties located within the area of concern (AOC). The ASTM Standard E2600-15 defines the AOC for petroleum release sites as the area within one-tenth mile (528 feet) around the Subject Property. For non-petroleum release sites (for example, solvent release sites), the AOC is defined as the area within one-third mile (1,760 feet) around the Subject Property. In accordance with the Tier 1 VES process, a search distance test was performed to determine whether known or suspected contaminated properties are located within the AOC.

Tier 2 VES uses a plume test and critical distance determination to evaluate whether vapors from the contaminated property might migrate and encroach on the Subject Property. The critical distance between the Subject Property and a contaminated plume is defined by E2600-15 as 30 feet for dissolved petroleum hydrocarbons, and 100 feet for free-product petroleum hydrocarbons and non-petroleum chemicals of concern ("COC"). Contaminated groundwater plumes within these distances may constitute a VEC to the Subject Property.

Summary

No evidence was found for a likely Vapor Encroachment Condition on the Subject Property. The contaminant of concern (perchlorate) in the groundwater under the Subject Property does not easily volatilize. It does not pose a Vapor Encroachment Risk.

9.0 FINDINGS

Site Description and Current Use

The Subject Property is located in the City Limits of Morgan Hill in Santa Clara County. It is approximately 0.43 miles west of U. S. Highway 101 and 1.39 miles south-east of the City Center of Morgan Hill. The general characteristic of the property's vicinity is a mix of offices and commercial buildings.

The Subject Property is a rectangular parcel of real estate that is approximately 1.45 acres in area. The Subject Property is a vacant lot with no structures. The ground is covered with dirt, weeds and native vegetation.

Adjoining Properties Use

- **North:** Vacant offices
- **East:** Caputo Drive; Morgan Hill Physical Therapy
- **South:** Tennant Avenue; Farmers Market Produce
- **West:** Vacant lot

Land Use Designations

The Subject Property is zoned CO for Administrative Office District.

Standard and Additional Environmental Records Search

The Standard and Additional Environmental Records Search disclosed issues on the Subject Property or any of the properties within the standard ASTM search radius of 1-mile that appeared to pose a Recognized Environmental Condition for the Subject Property.

Detailed discussions of specific listings are included in Section 5.1.

Physical Setting

The elevation of the Subject Property is at 331 feet above sea level with the general topographic gradient towards the south. Soils consist of well drained soils with moderate infiltration rates. The property is inside the 500-year and outside the 100-year flood zones.

Historical and Present Use of Subject Property

The Subject Property appears to have been agricultural farmland from as far back as at least 1939 until the mid 1970's. From the mid 1970's until present the Subject Property has been an undeveloped lot with no structures.

Recognized Environmental Conditions

In the course of performing this All Appropriate Inquiry-Environmental Site Assessment, Phase 1 Investigation evidence of one Recognized Environmental Condition was identified on the Subject Property.

- Groundwater contaminated with perchlorate in excess of the California maximum contaminant level has migrated from the adjacent property to the west under the Subject Property. This constitutes a Recognized Environmental Condition for the Subject Property.
- **Controlled Recognized Environmental Conditions**
No Controlled Recognized Environmental Conditions were identified in connection with the Subject Property.
- **Vapor Encroachment Conditions**
No evidence was found for a likely Vapor Encroachment Condition on the Subject Property.

Historic Recognized Environmental Conditions

No Historic Recognized Environmental Conditions were identified in connection with the Subject Property.

Activity and Use Limitations

One Activity and Use Limitation was identified in connection with the Subject Property:

- The only use restriction is that groundwater would not be able to be used, untreated, as a potable water source due to contamination from perchlorate.

De Minimis Conditions

No de minimis conditions were found for the Subject Property.

Data Gaps

No data gaps were encountered during the performance of this investigation.

10.0 CONCLUSIONS

Harris and Lee Environmental Sciences, LLC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527 of the Subject Property designated as Santa Clara County Assessor's Parcel Number 817-29-027 with the physical address of 16015 Caputo Drive, Morgan Hill, CA. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- Groundwater contaminated with perchlorate in excess of the California maximum contaminant level has migrated from the adjacent property to the west under the Subject Property. This constitutes a Recognized Environmental Condition for the Subject Property.

11.0 OPINION

Harris and Lee Environmental Sciences, LLC reminds the client that it is always prudent to maintain care in handling chemicals and any hazardous materials in any building or any property. It is pertinent to be reminded that the building / property owner is ultimately responsible for the environmental compliance that occurs in any building or on any property. Thus, if a tenant is not in compliance, the owner, who has nothing to do with the tenant's operations, can be held responsible.

It is the opinion of Harris and Lee Environmental Sciences, LLC that the Recognized Environmental Condition associated with contaminated groundwater from an adjacent site that has migrated under the Subject Property is unlikely to pose a financial liability or human health risk for the Subject Property. The only use restriction is that groundwater would not be able to be used as a potable water source due to the contamination.

- Financial Liability
 - o A known Responsible Party is actively addressing the contamination source.
 - o The Subject Property does not appear to have current or prior uses that may have contributed to the contamination plume.
- Human Health Risk
 - o The Subject Property does not utilize groundwater as a potable water source.
 - o The chemical of concern – perchlorate – does not readily volatilize and as such is unlikely to pose a vapor intrusion risk for the Subject Property.
- Usage Restrictions
 - o The only use restriction is that groundwater would not be able to be used, untreated, as a potable water source.

Recommendations

Harris and Lee Environmental Sciences, LLC recommends that no further environmental investigation is warranted on the Subject Property given the findings of this Phase I Environmental Site Assessment.

12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR §312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

13.0 DEVIATIONS

There are no deviations in the preparation of this Environmental Site Assessment from the Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process (ASTM Designation: E-1527-13).

14.0 ADDITIONAL SERVICES

No additional services beyond the All Appropriate Inquiry, Environmental Site Assessment Phase 1 Investigation ASTM E-1527-13 Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process were added to this report.

15.0 REFERENCES

15.1 Published References

ASTM 2013, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, Annual Book of ASTM Standards, Standard Practice E1527-13

ASTM 2010, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, Standard Method E2600-10.

Environmental Protection Agency 2005, Standards and Practices for All Appropriate Inquiries; Final Rule, Part III Environmental Protection Agency, 40 Code of Federal Regulations Part 312, Federal Register Vol. 70, No. 210, Rules and Regulations, November 1, 2005

US Code Title 42, the Public Health and Welfare, Chapter 103--Comprehensive Environmental Response, Compensation, and Liability, Subchapter I- Hazardous Substances Releases, Liability, Compensation

15.2 Unpublished References

Environmental Data Resources, Inc., The EDR Radius Map with GeoCheck, Inquiry Number 5052107.2s for Paul Sagayaraj Amaldoss Henry, 16015 Caputo Drive, Morgan Hill, CA

Environmental Data Resources, Inc., Certified Sanborn® Map Report, Inquiry Number 5052107.3 for Paul Sagayaraj Amaldoss Henry, 16015 Caputo Drive, Morgan Hill, CA

Environmental Data Resources, Inc., EDR-Historical Topographic Map Report, Inquiry Number 5052107.4 for Paul Sagayaraj Amaldoss Henry, 16015 Caputo Drive, Morgan Hill, CA

Environmental Data Resources, Inc., The EDR Aerial Photo Decade Package, Inquiry Number 5052107.5 for Paul Sagayaraj Amaldoss Henry, 16015 Caputo Drive, Morgan Hill, CA

Environmental Data Resources, Inc., The EDR-City Directory Abstract, Inquiry Number 5052107.6 for Paul Sagayaraj Amaldoss Henry, 16015 Caputo Drive, Morgan Hill, CA

California Department of Toxic Substances, California EPA Website at www.envirostor.dtsc.ca.gov/public/

California Department of Water Resources, Division of Planning and Local Assistance Website at <http://well.water.ca.gov/>

California State Water Resources Control Board, Water Quality, Geographic Information System (GIS) at <http://www.geotacker.swrcb.ca.gov>

California Department of Conservation, Division of Mines and Geology Website at http://www.consrv.ca.gov/CGS/information/publications/cgs_notes/note_36/note_36.pdf

U. S. Environmental Protection Agency, Brownfields Cleanup and Redevelopment, [All Appropriate Inquiries](#) at <http://www.epa.gov/>

16.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and 12.13.2 We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

PROFESSIONAL PROFILE

Robert S. Harris

TITLE: Partner/Senior Scientist: Harris and Lee Environmental Sciences LLC

Partner: Lee Seeley & Harris

EXPERTISE: Thirty-six (36) years experience in Environmental Analytical Chemistry and Environmental Toxicology. Efforts involved full research laboratory supervision for the University of California as well as commercial laboratories involved in Environmental Analytical Chemistry. Developed and refined the now standard method for PCB Analysis in various matrices. Mr. Harris has supported Risk Assessments, Site Audits, Health and Safety Management programs, and Hazardous Waste Management Programs. In addition, Mr. Harris has brought electronic data management technology into major petroleum industry members including Exxon, USA, Chevron USA, Texaco, USA, Mobil Oil Corporation, Atlantic Richfield (ARCO), Amara Hess, Unocal, and Pacific Gas and Electric Company.

EXPERIENCE: Laboratory Director for the University of California for 11 years beginning in 1964; operated laboratories on the Davis Campus and the Hopland Field Station in Mendocino County, California. Published 12 research papers at the University of California

Founded Multi-Tech Laboratories in Ukiah in 1974. Established laboratories in Ukiah and Santa Rosa, CA. Multi-Tech Laboratories was one of the larger laboratories in California. During this time Mr. Harris developed several methodologies for environmental analysis, including the standard method for the analyses of Polychlorinated Biphenyls (PCB's) in water, soils and oils. When the laboratory became a part of Environmental Testing and Certification Corporation, Mr. Harris was Executive Vice President in charge of western United States operations.

Established American Technologies in 1992 and developed it in the United States and Mexico. Changed name of American Technologies to Harris and Lee Environmental Sciences in 1997. Development and refinement of the concept of environmental management where toxic risk evaluation and regulatory requirements guide the project oversight. Supervised the management and orchestration of source monitoring in Southern

California. In Northern California, developed a waste minimization program that converted waste costing \$120K per month for disposal into a usable fuel to operate high pressure steam boilers.

Has carried out property transfer assessments and aided in the control and management of environmental as well as health and safety risk. In this capacity, Mr. Harris has used his knowledge of the sciences of chemistry and toxicology to properly identify risks that are real and to separate these from situations where the risk is suspected but not real. In this capacity, Mr. Harris has assisted lending institutions, insurance companies, real estate professionals and law firms in identifying chemical profiles and characteristics in toxic situations and managing environmental risk. Mr. Harris has extensive experience in litigation support and expert testimony in areas of environmental chemistry and industrial process chemistry.

ACADEMIC

BACKGROUND: BS. Zoology, Minor, Chemistry, University of California, Davis, 1964
MS, Biology, emphasis Biochemistry, California State University, Sonoma, 1972

PUBLICATIONS: Published approximately 12 times in the fields of agricultural chemistry, neurophysiology and animal physiology.

**SPECIALIZED
TRAINING:**

Varian Gas Chromatography Course
Varian Electronic Chromatograph Data Reduction
Hewlett Packard GC/MS Course I
Hewlett Packard GC/MS Course II
Risk Assessment for Hazardous Chemicals
University of California Hazardous Materials Courses
University of California Advanced Environmental Auditing
University of California, Risk Assessment Modeling, The Cal Tox Model. Presented in association with California Dept of Toxic Substances Control.
American Society for Testing and Materials, Risk Based Corrective Action

**PROFESSIONAL
AFFILIATIONS:**

American Chemical Society
American Association for the Advancement of Science
American Water Works Association
Rotary International

CERTIFICATIONS:

California Registered Environmental Assessor - REA #4966

PROFESSIONAL PROFILE

Walter Beach

TITLE: Partner: Harris and Lee Environmental Sciences, LLC

EXPERTISE: Mr. Beach is a Registered Environmental Assessor, certified in the State of California. Mr. Beach has performed or supervised over 2,500 environmental assessments and numerous Phase II, III and IV Environmental Investigations. Mr. Beach leads the Environmental Due Diligence group within Harris and Lee Environmental Sciences, LLC.

Mr. Beach has over 25 years experience in Environmental Sciences and Management and Information Technology for Fortune 500 companies including: Charles Schwab & Co., Price Waterhouse Consulting, Novartis and Wells Fargo Bank. He specializes in Merger and Acquisition Integration, Process Improvement, Offshore Outsourcing, Project Management and Software Development and Maintenance. Mr. Beach has a unique blend of business, technical and organizational acumen to effectively communicate the issues to a range of stakeholders from individual contributors to executive leaders to solve problems always with business needs and goals in mind.

EXPERIENCE: Mr. Beach's experience includes building and managing organizations in multiple companies of all sizes. He has worked extensively in management consulting. His background is engineering and computer information technology.

Some of Mr. Beach's professional experience includes:

Performed or supervised over 2,500 environmental assessments and numerous Phase II, III and IV Environmental Investigations.

Implemented post-acquisition integration including organization restructure, technology (applications and infrastructure), brand and business processes at a Financial Organization. Included multiple geographical locations including off-shore. Successfully met aggressive budget and schedule targets.

Responsible for developing and implementing cohesive application architecture for subsidiary of Global Pharmaceutical Corporation's world-wide enterprise. Included systems and functional areas of SAP, Siebel CRM, corporate Intranet, DR/CAPA, LIMS, R&D, Finance, Human Resources, Supply Chain Management, Clinical Development, Document Management, Contingent Workforce Outsourcing and

Business Intelligence. Implemented Long Range Planning process across the Corporation. Developed comprehensive Business Intelligence strategy for all reporting and analysis needs at Chiron. Incorporated SAP BW, Cognos and Business Objects suites and numerous, international data sources. Worked on project team that implemented the first PMO for the organization. Worked closely with business and technical areas. Experienced in regulatory and CFR Part 11 requirements.

Head of Information Technology Off-shoring corporate-wide for Financial Company. Created program for utilization of offshore companies for all aspects of system life cycle work within the company. The Offshore Development Office was responsible for vendor selection, negotiating contracts, governance, infrastructure, security, and financial reporting. Demonstrated 40% project savings over traditional approaches with annual savings of \$22,000,000. Director of Technology for Capital Markets and Trading business in Brokerage. Responsible for all technology solutions and infrastructure (desktop, servers, applications, helpdesk, etc.) for business unit with over \$1B annual revenue. Multiple geographic locations supported. Partnered with business to decrease unit operating costs by 42% while revenues increased by 300%. Led application development and maintenance organization of 100+. Hired skilled staff, including successor, and developed processes and tools to promote repeatable success and drive down costs. Partnered with business clients and fostered team concept and pride in work. Group achieved the finest track record of any within the company, delivering over 300 projects with 93+% success rate and receiving 15 corporate-wide awards.

ACADEMIC**BACKGROUND:**

BS, Computer Engineering, Boston University, 1983
MS, Computer Science, University of California, Berkeley, 1986
MBA, Duke University-Fuqua School of Business, 1991

PATENTS:

Mr. Beach holds three patents in Computer Design

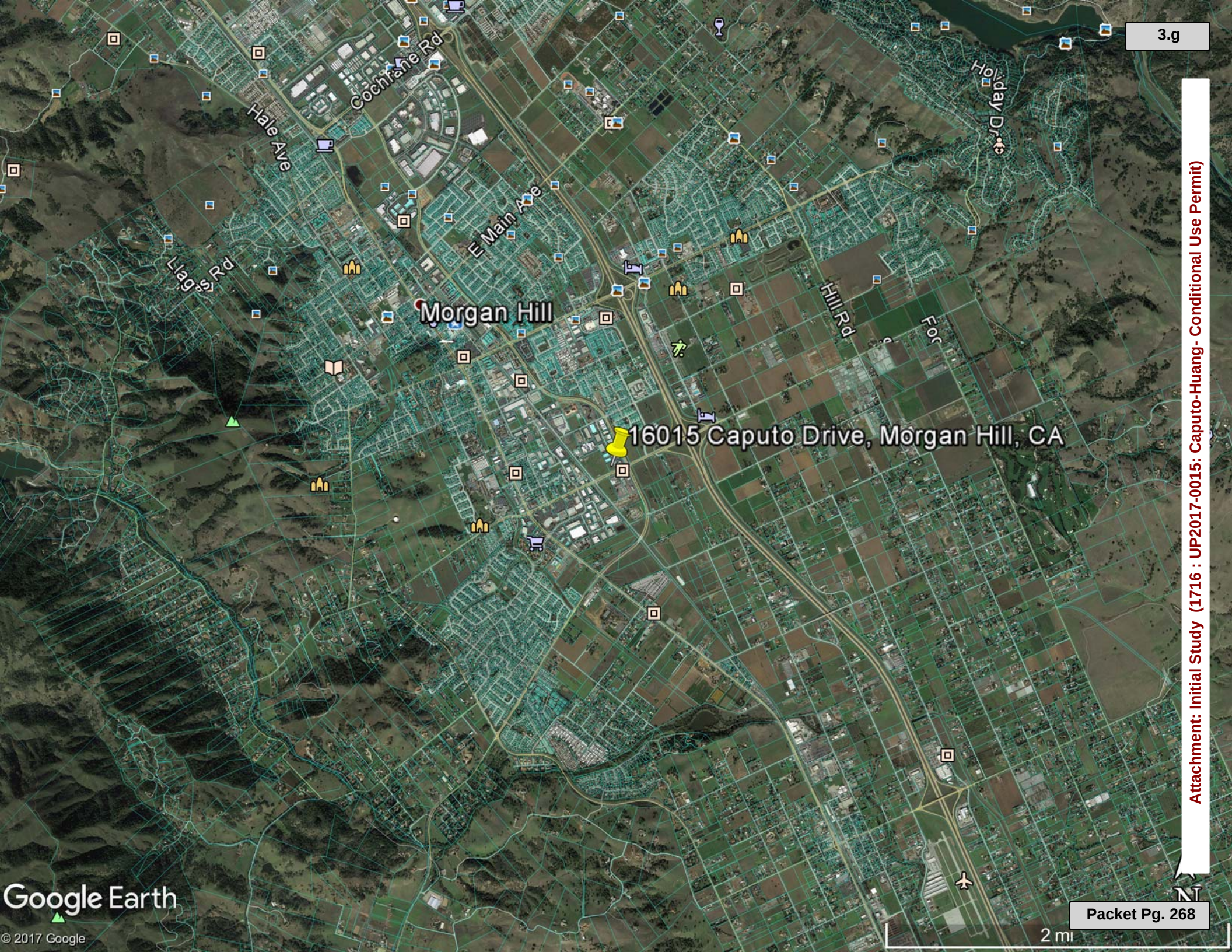
PROFESSIONAL**AFFILIATIONS:**

Rotary International; Project Management Institute; ASTM

CERTIFICATIONS:

Project Management Professional
Registered Environmental Assessor

Exhibit A – Vicinity Map



Morgan Hill

16015 Caputo Drive, Morgan Hill, CA

16015 Caputo Drive, Morgan Hill, CA

Tennant Ave

Butterfield

Exhibit B – Assessor's Parcel Map

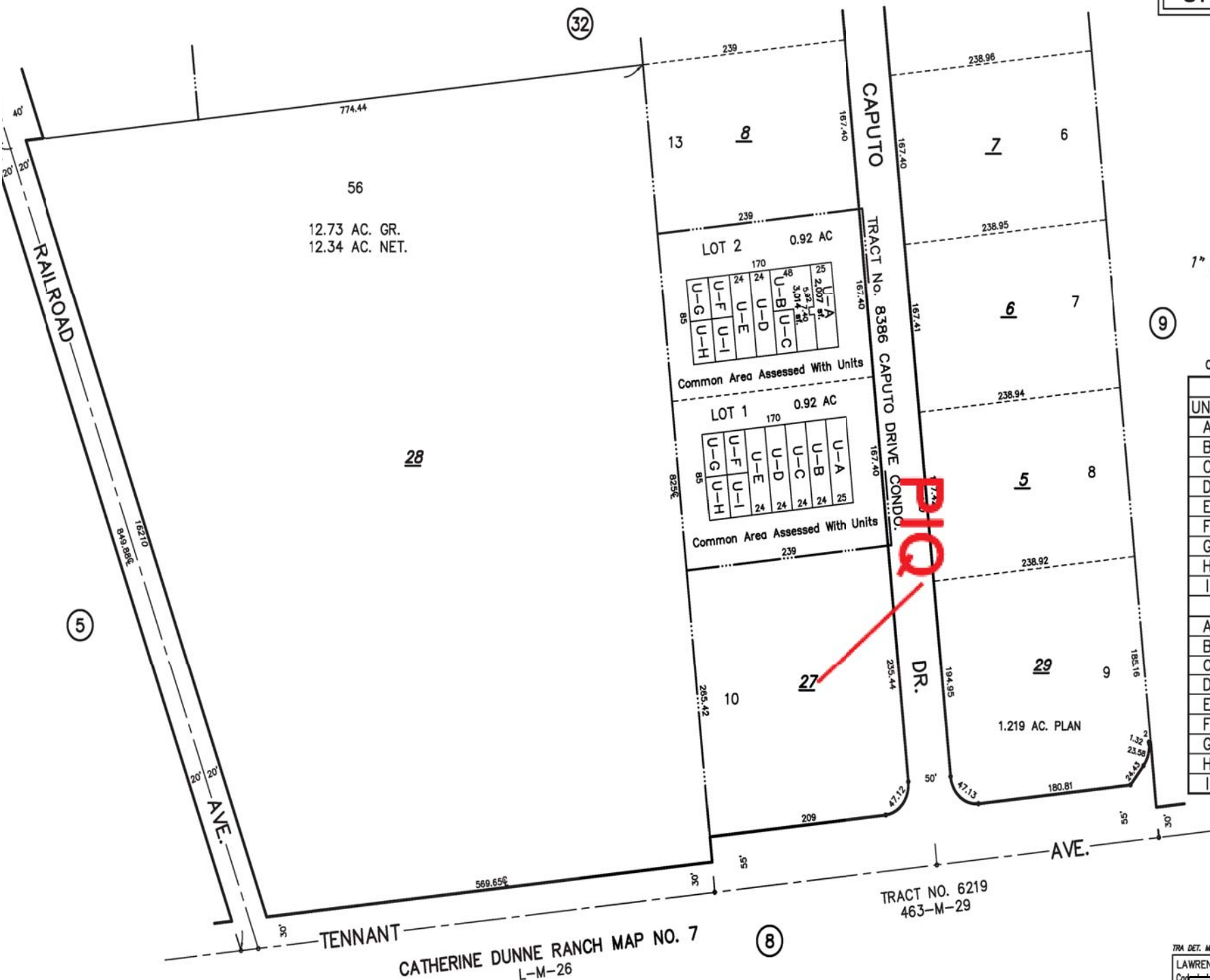


9

TRACT NO. 8386
124-M-17
CAPUTO DRIVE CONDO

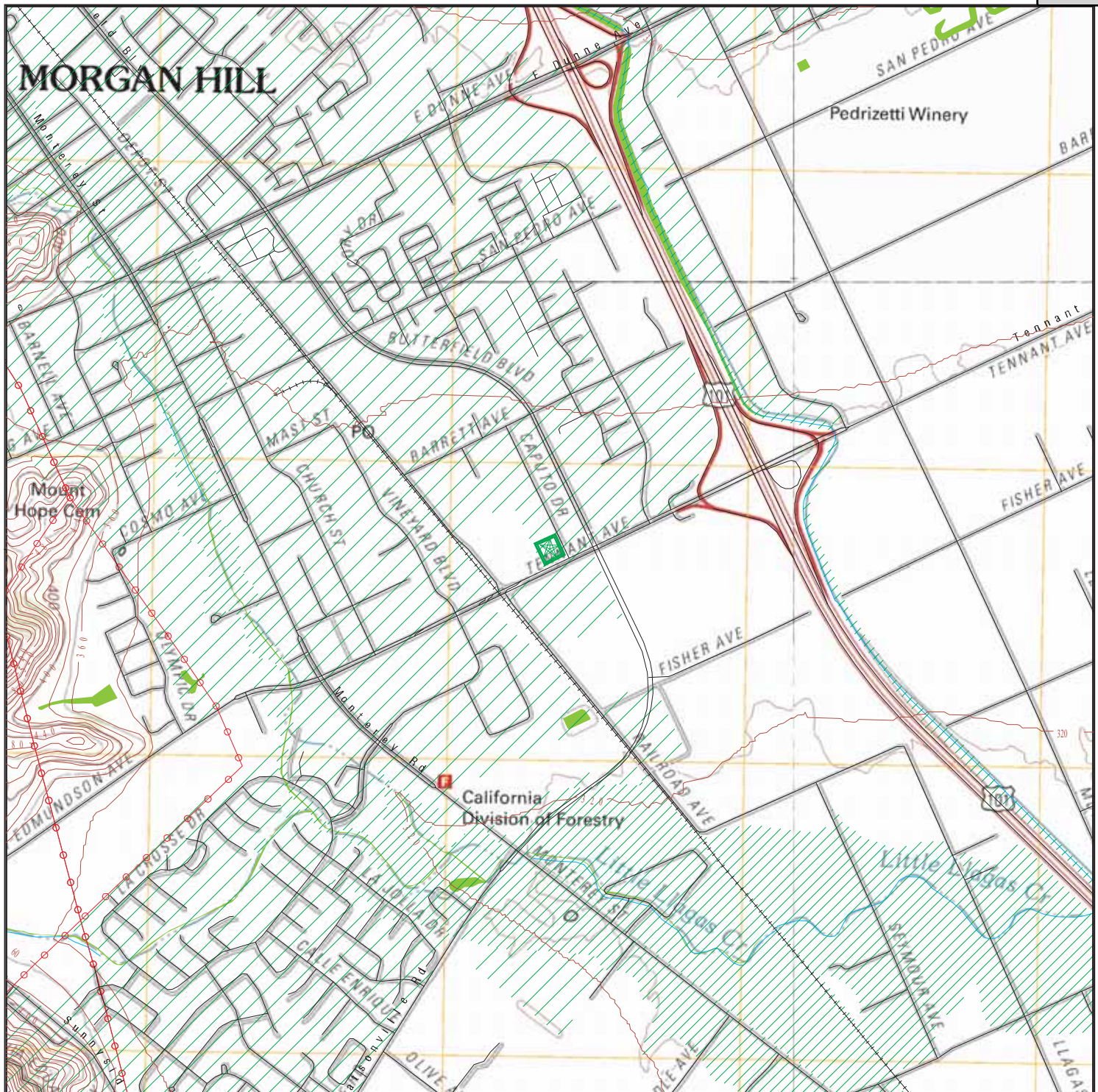
16035 Caputo Drive				
UNIT	APN	LOT	SIT	
A	26	1		
B	25	1		
C	24	1		
D	23	1		
E	22	1		
F	21	1		
G	20	1		
H	19	1		
I	18	1		
16065 Caputo Drive				
A	9	2		
B	10	2		
C	11	2		
D	12	2		
E	13	2		
F	14	2		
G	15	2		
H	16	2		
I	17	2		

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.



Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Exhibit C – U.S.G.S 7.5-Minute Topographic Map



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

Areas of Concern

This report includes Interactive Map Layers display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL CA 95037
LAT/LONG: 37.116874 / 121.634183

CLIENT: Harris & Lee Env. Sciences
CONTACT: Cathy Neumann
INQUIRY #: 5052107.2S
DATE: September 18, 2017 12:49 pm

Packet Pg. 273

Exhibit D – Site Photographs



Subject Property – 16015 Caputo Drive, Morgan Hill, CA



Subject Property- view south across property



Subject Property – view west across property



Monitoring well located east of the Subject Property



View west from Subject Property



View south from Subject Property



View east from Subject Property



View north from Subject Property

Exhibit E – Historic Topographic and Aerial Photographs

Paul Sagayaraj
16015 CAPUTO DR
MORGAN HILL, CA 95037

Inquiry Number: 5052107.4

September 18, 2017

EDR Historical Topo Map Report with QuadMatch

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



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EDR Historical Topo Map Report

09/10/17

3.g

Site Name:

Paul Sagayaraj
16015 CAPUTO DR
MORGAN HILL, CA 95037
EDR Inquiry # 5052107.4

Client Name:

Harris & Lee Env. Sciences
120 Ross Valley Drive
San Rafael, CA 94901-0000
Contact: Cathy Neumann



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Harris & Lee Env. Sciences were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	16015 Caputo Drive	Latitude:	37.116874 37° 7' 1" North
Project:	Paul Sagayaraj	Longitude:	-121.634183 -121° 38' 3" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	621341.92
		UTM Y Meters:	4108710.55
		Elevation:	331.00' above sea level

Maps Provided:

2012
1996
1980, 1981
1973
1968, 1971
1955
1939
1917

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Morgan Hill

7.5-minute, 24000



Mount Sizer

7.5-minute, 24000



Gilroy

7.5-minute, 24000



Mount Madonna

7.5-minute, 24000

1996 Source Sheets



Mount Madonna

7.5-minute, 24000

Aerial Photo Revised 1987

1980, 1981 Source Sheets



Morgan Hill

7.5-minute, 24000

Aerial Photo Revised 1978



Mt. Madonna

7.5-minute, 24000

Aerial Photo Revised 1978



Gilroy

7.5-minute, 24000

Aerial Photo Revised 1978

1973 Source Sheets



Morgan Hill

7.5-minute, 24000

Aerial Photo Revised 1973



Gilroy

7.5-minute, 24000

Aerial Photo Revised 1973

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968, 1971 Source Sheets



Mt. Madonna

7.5-minute, 24000
Aerial Photo Revised 1968



Morgan Hill

7.5-minute, 24000
Aerial Photo Revised 1968



Gilroy

7.5-minute, 24000
Aerial Photo Revised 1968



Mt. Sizer

7.5-minute, 24000
Aerial Photo Revised 1971

1955 Source Sheets



Morgan Hill

7.5-minute, 24000
Aerial Photo Revised 1953



Gilroy

7.5-minute, 24000
Aerial Photo Revised 1953



Mt. Sizer

7.5-minute, 24000
Aerial Photo Revised 1953



Mt. Madonna

7.5-minute, 24000
Aerial Photo Revised 1953

1939 Source Sheets



Morgan Hill

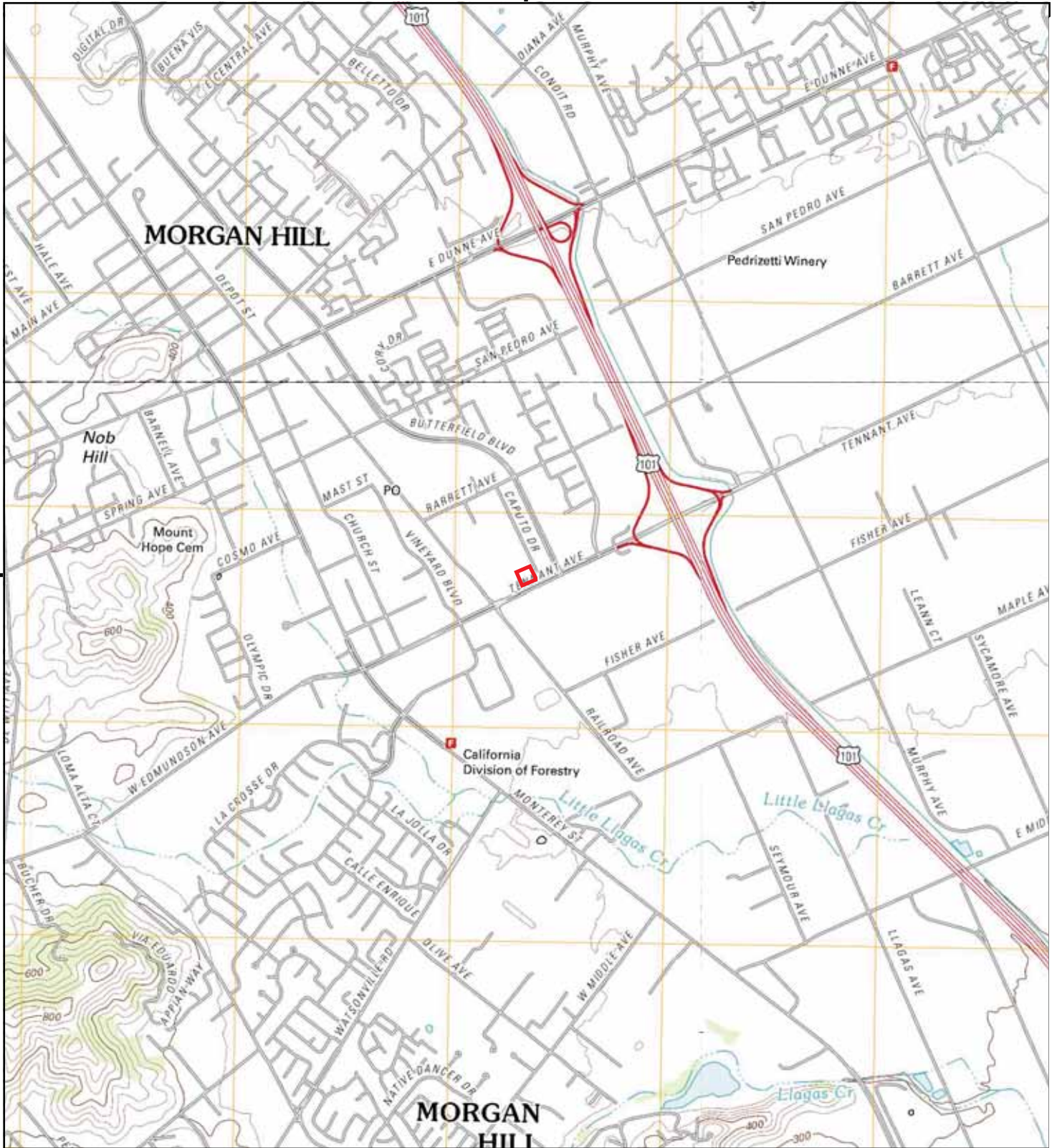
15-minute, 62500
Aerial Photo Revised 1939

1917 Source Sheets

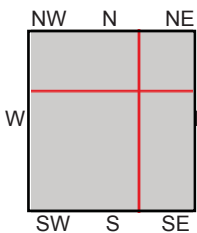
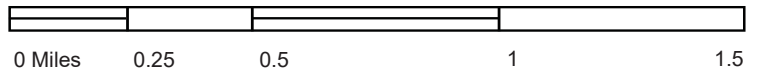


Morgan Hill

15-minute, 62500



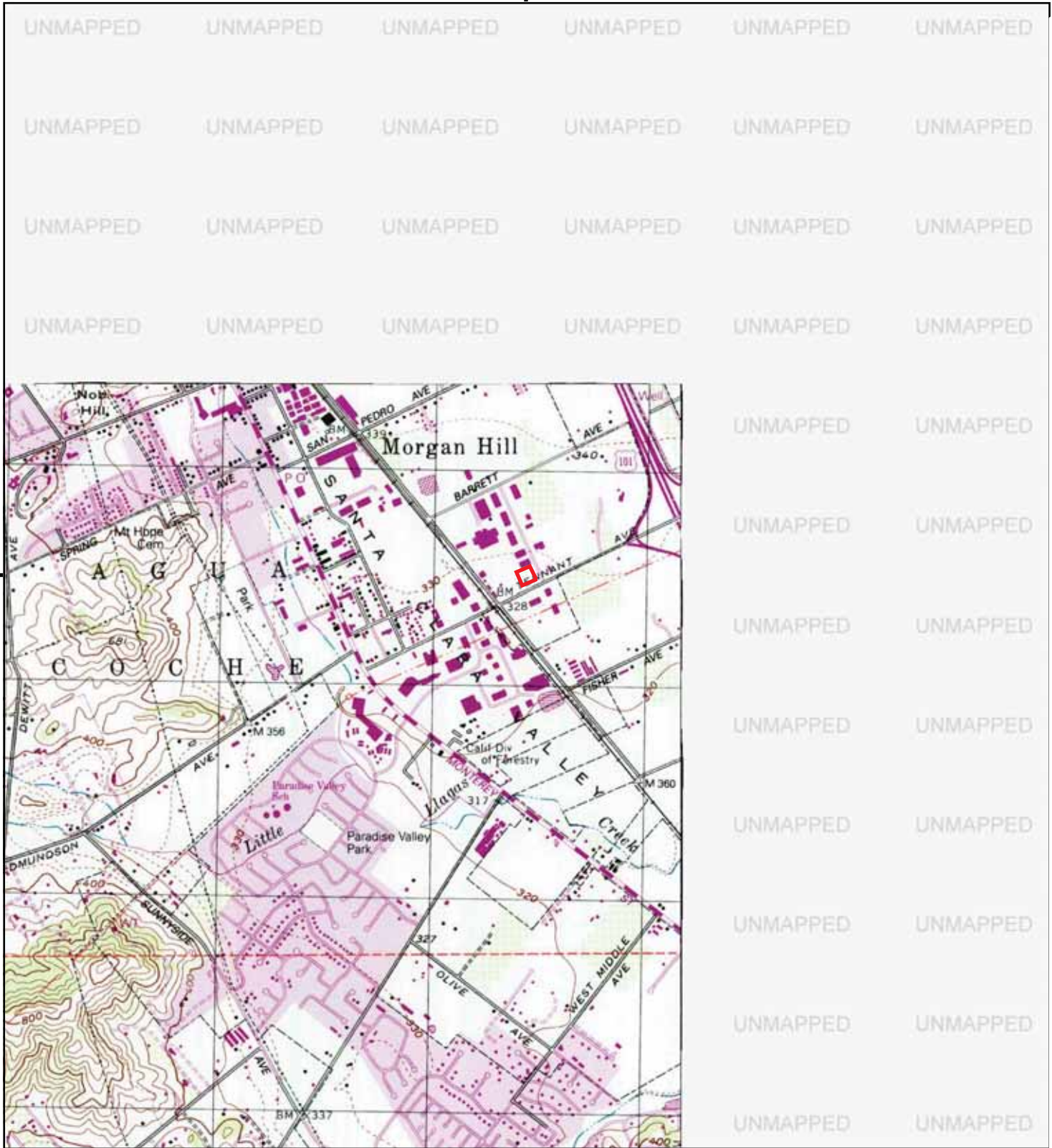
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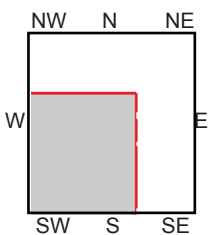
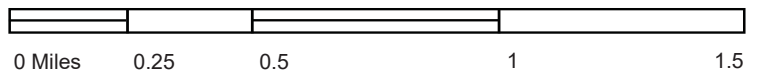
TP, Mount Madonna, 2012, 7.5-minute
 NE, Mount Sizer, 2012, 7.5-minute
 SE, Gilroy, 2012, 7.5-minute
 NW, Morgan Hill, 2012, 7.5-minute

SITE NAME: Paul Sagayaraj
 ADDRESS: 16015 CAPUTO DR
 MORGAN HILL, CA 95037
 CLIENT: Harris & Lee Env. Sciences

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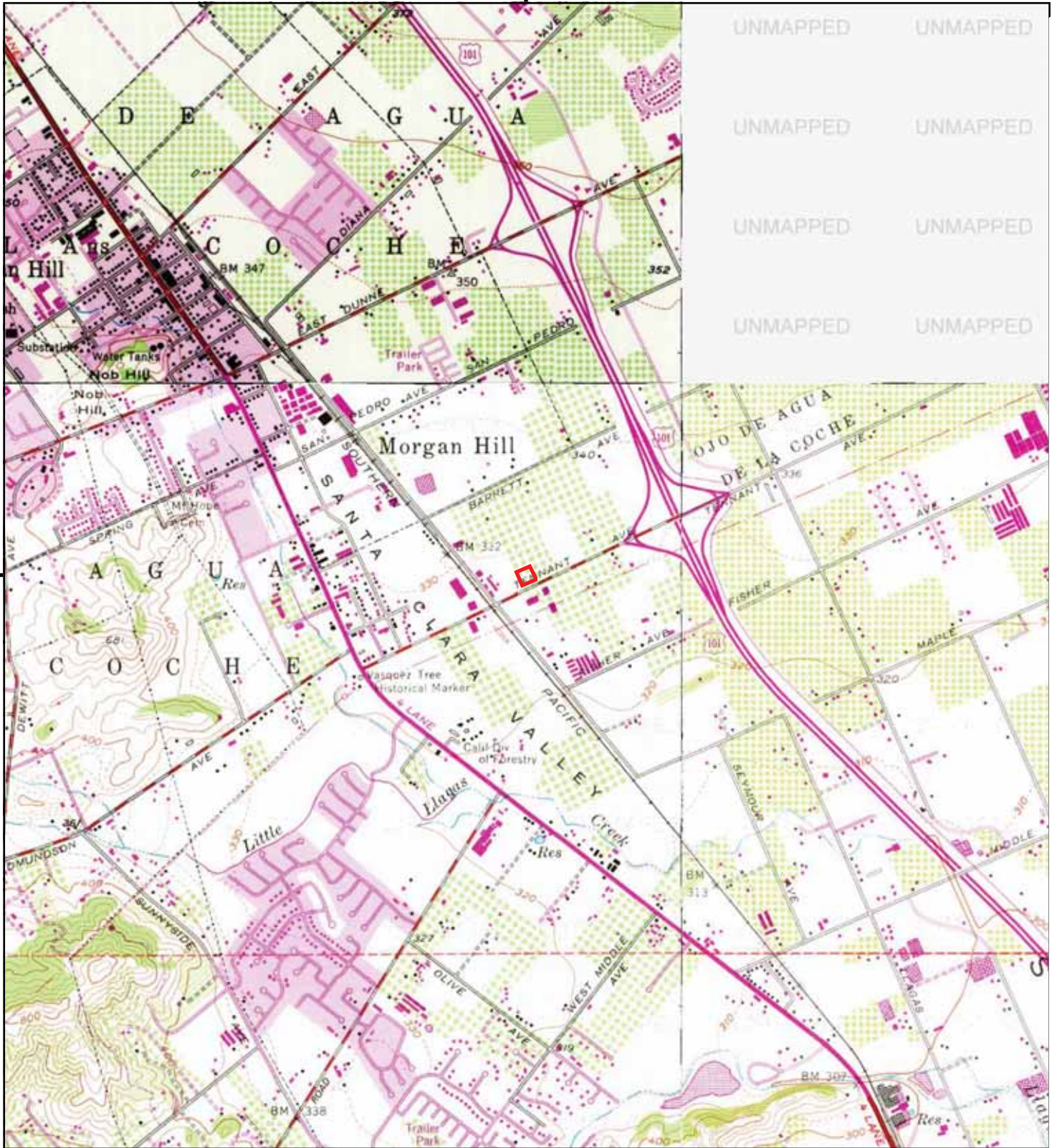
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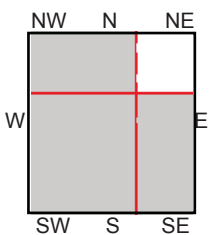
TP, Mount Madonna, 1996, 7.5-minute

SITE NAME: Paul Sagayaraj
 ADDRESS: 16015 CAPUTO DR
 MORGAN HILL, CA 95037
 CLIENT: Harris & Lee Env. Sciences

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



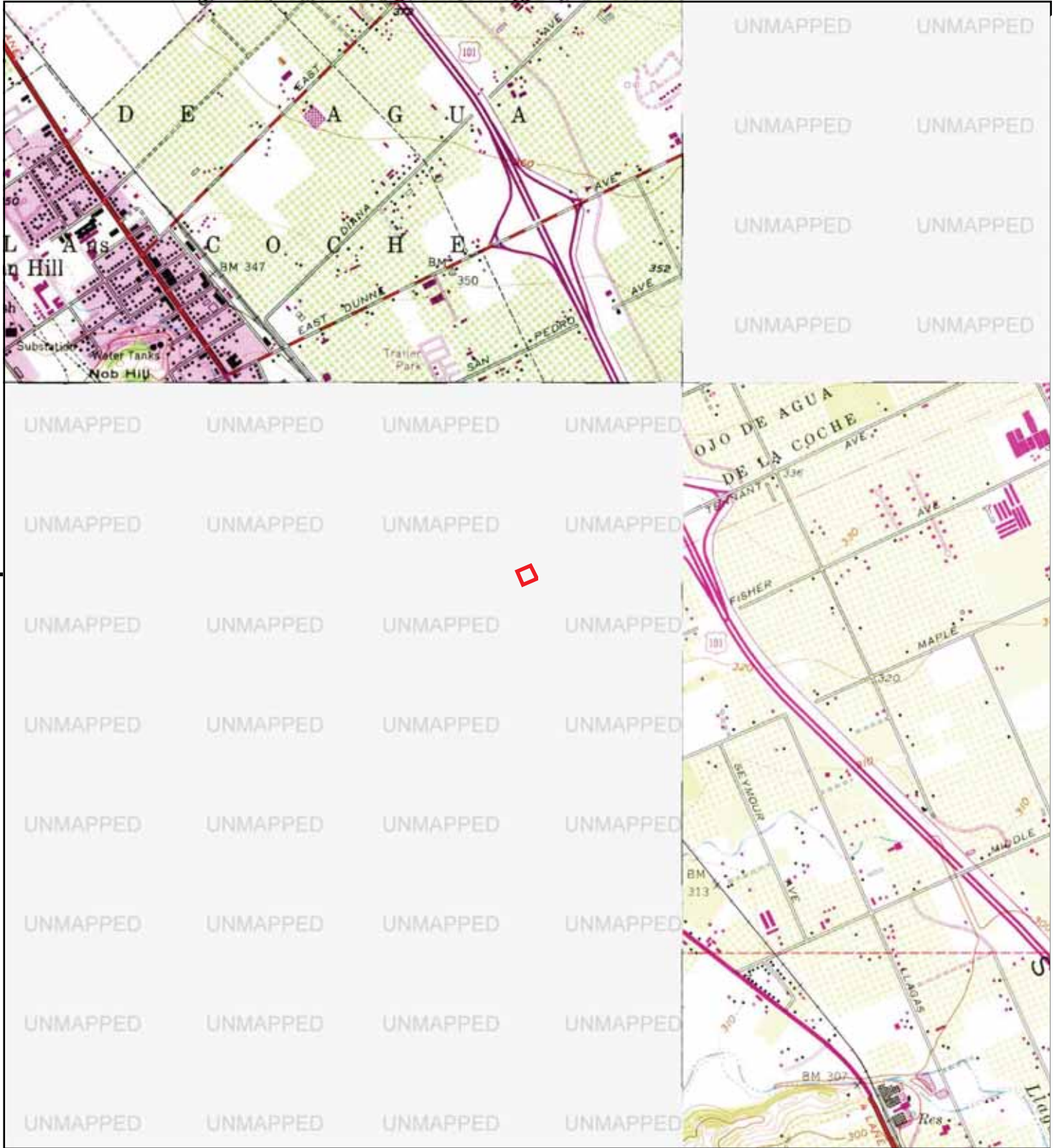
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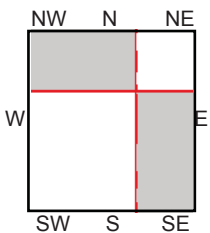
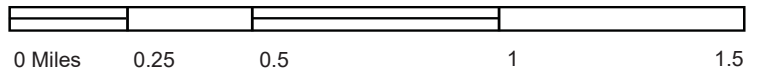
TP, Mt. Madonna, 1980, 7.5-minute
SE, Gilroy, 1981, 7.5-minute
NW, Morgan Hill, 1980, 7.5-minute

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL, CA 95037
CLIENT: Harris & Lee Env. Sciences

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



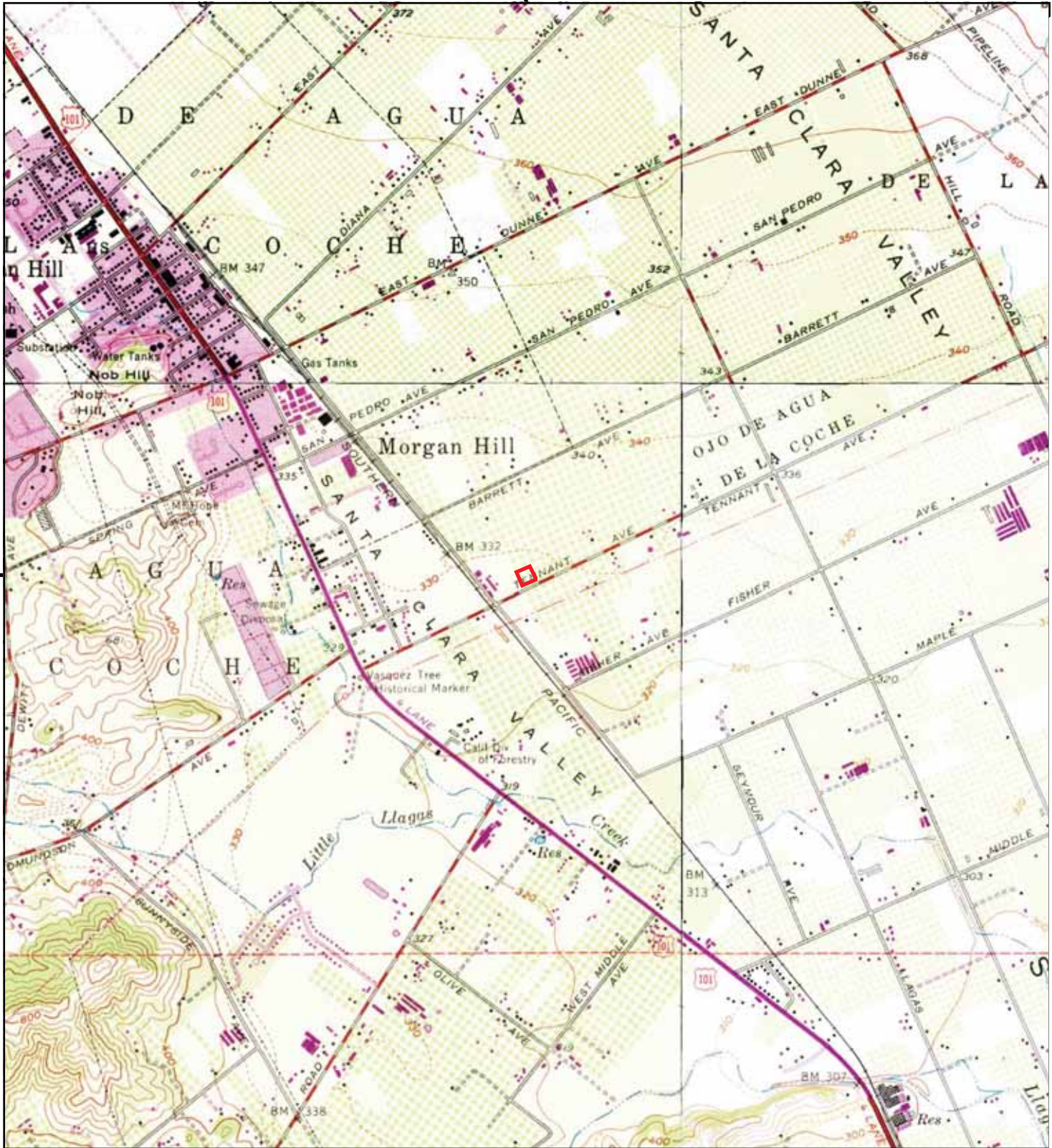
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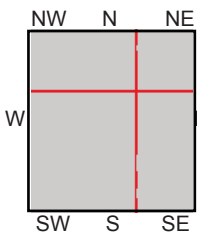
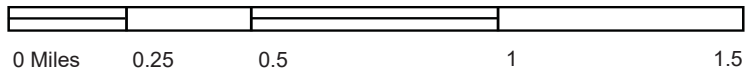
SE, Gilroy, 1973, 7.5-minute
NW, Morgan Hill, 1973, 7.5-minute

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL, CA 95037
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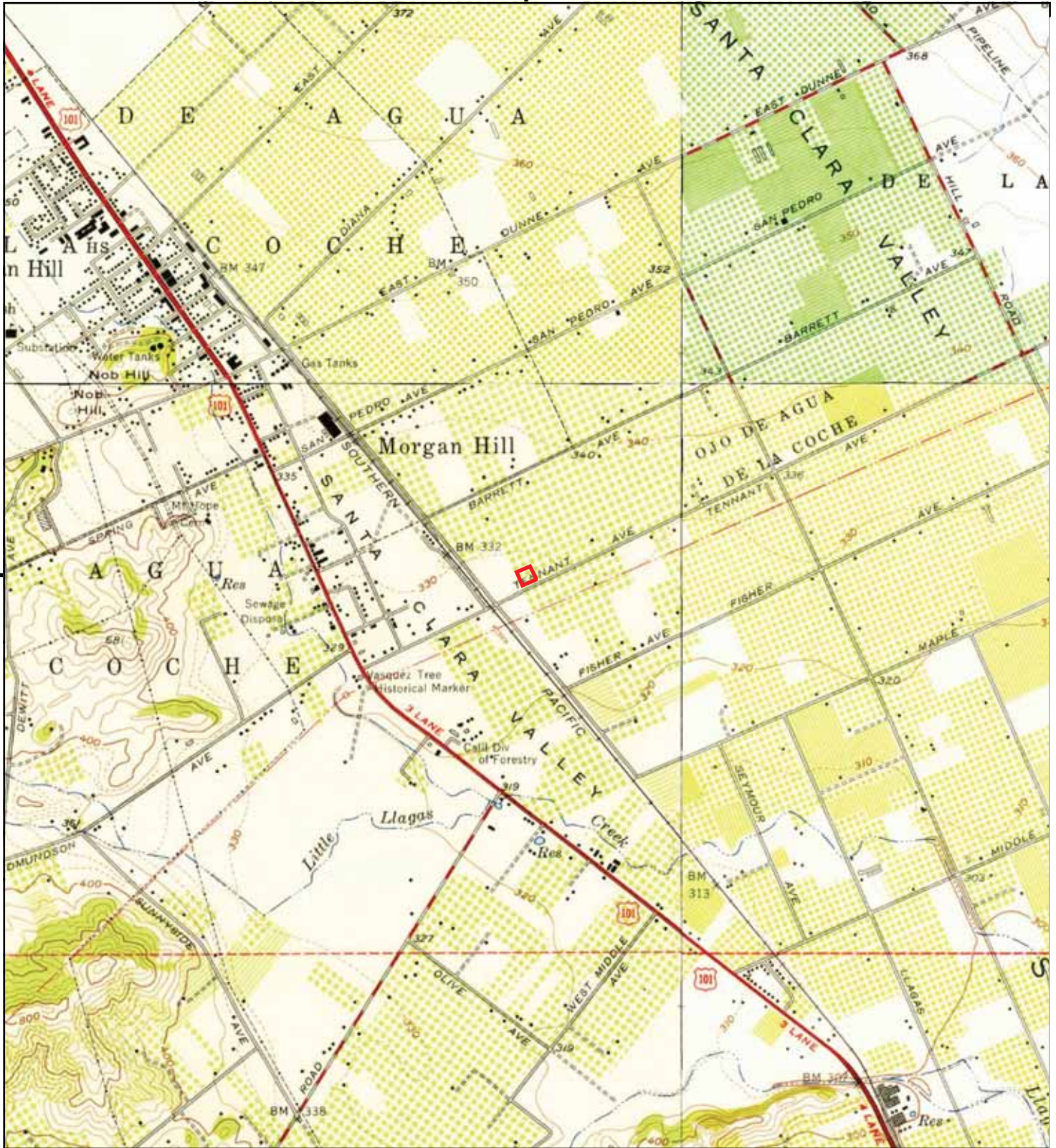
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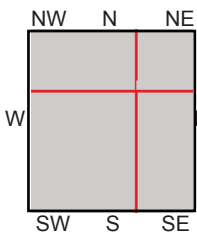
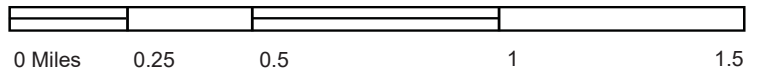
TP, Mt. Madonna, 1968, 7.5-minute
NE, Mt. Sizer, 1971, 7.5-minute
SE, Gilroy, 1968, 7.5-minute
NW, Morgan Hill, 1968, 7.5-minute

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL, CA 95037
CLIENT: Harris & Lee Env. Sciences

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



This report includes information from the following map sheet(s).

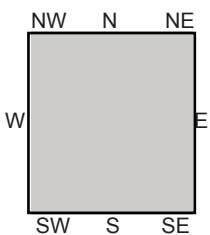
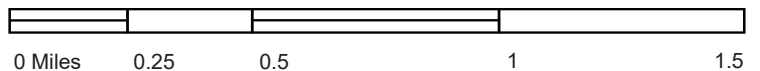


TP, Mt. Madonna, 1955, 7.5-minute
NE, Mt. Sizer, 1955, 7.5-minute
SE, Gilroy, 1955, 7.5-minute
NW, Morgan Hill, 1955, 7.5-minute

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL, CA 95037
CLIENT: Harris & Lee Env. Sciences



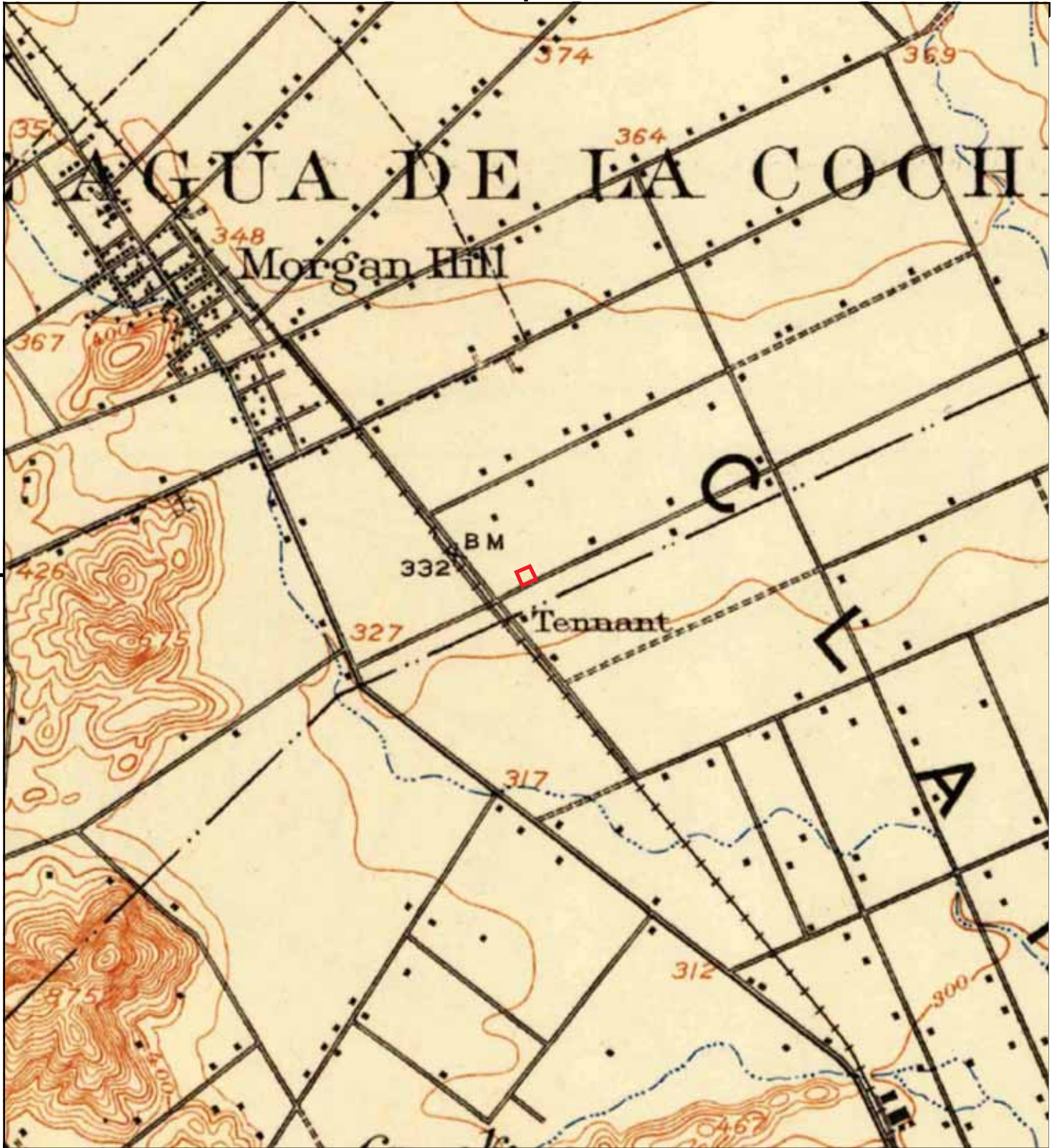
This report includes information from the following map sheet(s).



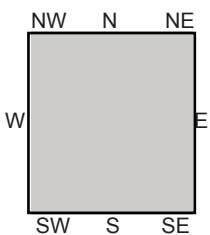
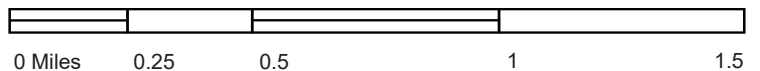
TP, Morgan Hill, 1939, 15-minute

SITE NAME: Paul Sagayaraj
 ADDRESS: 16015 CAPUTO DR
 MORGAN HILL, CA 95037
 CLIENT: Harris & Lee Env. Sciences

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This report includes information from the following map sheet(s).



TP, Morgan Hill, 1917, 15-minute

SITE NAME: Paul Sagayaraj
 ADDRESS: 16015 CAPUTO DR
 MORGAN HILL, CA 95037
 CLIENT: Harris & Lee Env. Sciences

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Paul Sagayaraj
16015 CAPUTO DR
MORGAN HILL, CA 95037

Inquiry Number: 5052107.9

September 20, 2017

The EDR Aerial Photo Decade Package

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



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EDR Aerial Photo Decade Package

09/20/17

3.g

Site Name:

Paul Sagayaraj
16015 CAPUTO DR
MORGAN HILL, CA 95037
EDR Inquiry # 5052107.9

Client Name:

Harris & Lee Env. Sciences
120 Ross Valley Drive
San Rafael, CA 94901-0000
Contact: Cathy Neumann



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=500'	Acquisition Date: August 21, 1998	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: January 01, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1963	1"=500'	Flight Date: June 24, 1963	USGS
1956	1"=500'	Flight Date: June 12, 1956	USDA
1950	1"=500'	Flight Date: March 06, 1950	USDA
1940	1"=500'	Flight Date: June 09, 1940	USDA
1939	1"=500'	Flight Date: October 20, 1939	USDA

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INQUIRY #: 5052107.9

YEAR: 2012



= 500'



INQUIRY #: 5052107.9

YEAR: 2010



— = 500'



INQUIRY #: 5052107.9

YEAR: 2009



— = 500'



INQUIRY #: 5052107.9

YEAR: 2006



— = 500'



INQUIRY #: 5052107.9

YEAR: 2005



= 500'



INQUIRY #: 5052107.9

YEAR: 1998



— = 500'





INQUIRY #: 5052107.9

YEAR: 1974



= 500'

Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 5052107.9

YEAR: 1968



= 500'



INQUIRY #: 5052107.9

YEAR: 1963



— = 500'



INQUIRY #: 5052107.9

YEAR: 1956

= 500'





INQUIRY #: 5052107.9

YEAR: 1950

— = 500'





INQUIRY #: 5052107.9

YEAR: 1940



= 500'



INQUIRY #: 5052107.9

YEAR: 1939



= 500'

Exhibit F – Environmental Data Resources Reports

Paul Sagayaraj

16015 CAPUTO DR
MORGAN HILL, CA 95037

Inquiry Number: 5052107.2s
September 18, 2017

The EDR Radius Map™ Report with GeoCheck®

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



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Shelton, CT 06484
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TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	98
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-6
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

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with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

16015 CAPUTO DR
MORGAN HILL, CA 95037

COORDINATES

Latitude (North):	37.1168740 - 37° 7' 0.74"
Longitude (West):	121.6341830 - 121° 38' 3.05"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	621344.9
UTM Y (Meters):	4108507.0
Elevation:	331 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640078 MOUNT MADONNA, CA
Version Date:	2012
Northeast Map:	5640104 MOUNT SIZER, CA
Version Date:	2012
Southeast Map:	5640386 GILROY, CA
Version Date:	2012
Northwest Map:	5640402 MORGAN HILL, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140609
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
16015 CAPUTO DR
MORGAN HILL, CA 95037

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & DIRECTIO	)
A1	MICMAR INC	16035 CAPUTO DR UNIT	CUPA Listings	Higher	95, 0.018, I	
B2	A FRENCH CLEANER	602 TENNANT STATION	ENVIROSTOR, VCP, DRYCLEANERS, EMI	Higher	136, 0.026,	
B3	SADONNA'S HOLIDAY CL	602 TENNANT STATION	RCRA-SQG, FINDS, ECHO	Higher	136, 0.026,	
B4	SADONNAS HOLIDAY CLE	602 TENNANT STA	EDR Hist Cleaner	Higher	136, 0.026,	
A5	STRICTLY WICKED CYCL	16055 CAPUTO DR STE	CUPA Listings	Higher	155, 0.029,	h
A6	PACIFIC GEOTECHNICAL	16055 CAPUTO DR D	CUPA Listings	Higher	260, 0.049,	V
C7	SATELLITE DIALYSIS	16060 CAPUTO DR 140	CUPA Listings	Higher	393, 0.074,	h
C8	LEPRECHAUN ELECTRONIC	16075 CAPUTO DR	RCRA NonGen / NLR, FINDS, ECHO	Higher	418, 0.079,	V
C9	ART'S SHEET METAL	16075 CAPUTO DR	CUPA Listings	Higher	418, 0.079,	V
10	24 HOUR TOWING	761 TENNANT AVE	EDR Hist Auto	Higher	434, 0.082,	:
D11	OLIN CORPORATION	425 TENNANT AVE.	SLIC, CHMIRS	Higher	454, 0.086,	
D12	OLIN/STD FUSEE SITE	425 TENNANT	SLIC, SWEEPS UST, HIST UST, CA FID UST, Cortese,...	Higher	454, 0.086,	
D13	OLIN CORP MORGAN HIL	425 TENNANT AVE	SEMS-ARCHIVE, EMI	Higher	454, 0.086,	
D14	MORGAN HILL PLANT	425 TENNANT AVE	HIST UST	Higher	454, 0.086,	
15	JOHNSON LUMBER	600 TENNANT AV	CUPA Listings	Lower	544, 0.103,	
C16	SHAW PIPELINE SERVIC	16080 CAPUTO DR	RCRA-SQG	Higher	556, 0.105,	h
C17	NELSON BIOTECHNOLOGI	16080 CAPUTO DR UNIT	CUPA Listings	Higher	556, 0.105,	h
E18	CUSTOM CHROME	16100 JACQUELINE COU	SEMS-ARCHIVE	Higher	744, 0.141,	
E19	MISSION BELL MANUFAC	16100 JACQUELINE CT	CUPA Listings	Higher	744, 0.141,	
20	NOVA MICROWAVE INC	380 TENNANT AV STE 5	CUPA Listings	Lower	838, 0.159,	
F21	LEPRECHAUN ELECTRONIC	16120 CAPUTO DR	RCRA-SQG, FINDS, ECHO	Higher	911, 0.173,	V
G22	ASCO AIR CONDITIONIN	16250 RAILROAD AVE.	ENVIROSTOR, CUPA Listings	Higher	918, 0.174,	N
G23	ASCO AIR CONDITIONIN	16250 RAILROAD AVENU	SEMS-ARCHIVE	Higher	918, 0.174,	N
H24	OAKLEY PLYWOOD	375 TENNANT AVE	LUST, SWEEPS UST, CA FID UST	Higher	925, 0.175,	t
H25	OAKLEY PLYWOOD	375 TENNANT AVE	HIST UST	Higher	925, 0.175,	t
H26	TM COBB COMPANY	375 TENNANT AVE	LUST, HIST LUST, HIST UST	Higher	925, 0.175,	t
I27	ANAEROBE SYSTEMS	15906 CONCORD CL	CUPA Listings	Lower	1032, 0.199,	W
F28	B A S PRECISION SHEE	16155 CAPUTO DRIVE	CUPA Listings, EMI	Higher	1055, 0.200,	W
F29	BAS PRECISION SHEETM	16155 CAPUTO DR	RCRA NonGen / NLR, FINDS, ECHO	Higher	1055, 0.200,	W
J30	U-SAVE ROCKERY	15760 RAILROAD	LUST, HIST CORTESE	Lower	1093, 0.207,	uth
J31	FORMER JOHNSON LUMBE	15770 RAILROAD AVE	SWEEPS UST	Lower	1093, 0.207,	uth
J32	U-SAVE ROCKERY OF MO	15760 RAILROAD AVE	HIST UST, CHMIRS	Lower	1093, 0.207,	uth
K33	B A S PRECISION SHEE	16170 JACQUELINE COU	CUPA Listings, EMI	Higher	1095, 0.207,	/
K34	BAS PRECISION SHEET	16170 JACQUELINE CT.	RCRA-SQG	Higher	1095, 0.207,	/
K35	BAS PRECISION SHEET	16170 JAQUELINE CT	ENVIROSTOR	Higher	1095, 0.207,	/
I36	MELVIN C DILL CO, IN	15940 CONCORD CIRCLE	RCRA NonGen / NLR, FINDS, ECHO	Lower	1163, 0.220,	W
F37	PACIFIC GAS & ELECTR	16160 CAPUTO DR	CUPA Listings, HAZNET	Higher	1164, 0.220,	rth
L38	AMERICAN SCISSOR LIF	16120 VINEYARD BL	CUPA Listings	Higher	1209, 0.229,	st
39	ALTANOVA MANUFACTURI	16170 VINEYARD BL 16	CUPA Listings, HAZNET, PEST LIC	Higher	1251, 0.237,	st

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

MAPPED SITES SUMMARY

Target Property Address:
16015 CAPUTO DR
MORGAN HILL, CA 95037

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & DIRECTIO	)
40	C & M AUTO SERVICE I	16169 CAPUTO DR	CUPA Listings	Higher	1269, 0.240	W
L41	AT&T MOBILITY - MONT	16170 VINEYARD BL	CUPA Listings	Higher	1314, 0.249	st
L42	UNAXIS MATERIALS, IN	16035 VINEYARD BOULE	ENVIROSTOR, CUPA Listings	Higher	1355, 0.251	W
M43	DEMETRON INC	235 TENNANT AVE	SEMS-ARCHIVE, RCRA NonGen / NLR, FINDS, ECHO	Lower	1479, 0.280	W
M44	JACKSON FAMILY TRUST	235 TENNANT AVENUE	ENVIROSTOR	Lower	1479, 0.280	W
45	GREEN SOUTH BAY CORP	16290 RAILROAD AVE	SWRCY, CUPA Listings	Higher	1482, 0.281	W
N46	FORMER CASTLE VEGTEC	16470 VINEYARD BOULE	SLIC, ENF	Higher	2067, 0.391	W
N47	CASTLE VEGTECH	16470 VINEYARD BLVD.	SLIC	Higher	2067, 0.391	W
48	BARRETT AVENUE ELEME	895 BARRETT AVENUE	ENVIROSTOR, SCH	Higher	2399, 0.454	E
49	CASTLE A.L. INC	190 MAST	ENVIROSTOR, HIST CORTESE	Higher	2580, 0.489	W
50	COSMO LANE	BEHIND CANDY PARK	Notify 65	Lower	3734, 0.701	W

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
 Proposed NPL..... Proposed National Priority List Sites
 NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
 SEMS..... Superfund Enterprise Management System

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
 RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
 US ENG CONTROLS..... Engineering Controls Sites List
 US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

EXECUTIVE SUMMARY

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites..... Historical Calsites Database

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs

Toxic Pits..... Toxic Pits Cleanup Act Sites

US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS..... Environmental Liens Listing

EXECUTIVE SUMMARY

LIENS 2..... CERCLA Lien Information
 DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
 CHMIRS..... California Hazardous Material Incident Report System
 LDS..... Land Disposal Sites Listing
 MCS..... Military Cleanup Sites Listing
 SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites
 DOD..... Department of Defense Sites
 SCR DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
 US FIN ASSUR..... Financial Assurance Information
 EPA WATCH LIST..... EPA WATCH LIST
 2020 COR ACTION..... 2020 Corrective Action Program List
 TSCA..... Toxic Substances Control Act
 TRIS..... Toxic Chemical Release Inventory System
 SSTs..... Section 7 Tracking Systems
 ROD..... Records Of Decision
 RMP..... Risk Management Plans
 RAATS..... RCRA Administrative Action Tracking System
 PRP..... Potentially Responsible Parties
 PADS..... PCB Activity Database System
 ICIS..... Integrated Compliance Information System
 FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
 MLTS..... Material Licensing Tracking System
 COAL ASH DOE..... Steam-Electric Plant Operation Data
 COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
 PCB TRANSFORMER..... PCB Transformer Registration Database
 RADINFO..... Radiation Information Database
 HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
 DOT OPS..... Incident and Accident Data
 CONSENT..... Superfund (CERCLA) Consent Decrees
 INDIAN RESERV..... Indian Reservations
 FUSRAP..... Formerly Utilized Sites Remedial Action Program
 UMTRA..... Uranium Mill Tailings Sites
 LEAD SMELTERS..... Lead Smelter Sites
 US AIRS..... Aerometric Information Retrieval System Facility Subsystem
 US MINES..... Mines Master Index File
 ABANDONED MINES..... Abandoned Mines
 FINDS..... Facility Index System/Facility Registry System
 UXO..... Unexploded Ordnance Sites
 DOCKET HWC..... Hazardous Waste Compliance Docket Listing
 ECHO..... Enforcement & Compliance History Information
 FUELS PROGRAM..... EPA Fuels Program Registered Listing
 CA BOND EXP. PLAN..... Bond Expenditure Plan
 EMI..... Emissions Inventory Data
 ENF..... Enforcement Action Listing
 Financial Assurance..... Financial Assurance Information Listing
 HAZNET..... Facility and Manifest Data

EXECUTIVE SUMMARY

ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
SAN JOSE HAZMAT.....	Hazardous Material Facilities
UIC.....	UIC Listing
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has

EXECUTIVE SUMMARY

determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 02/07/2017 has revealed that there are 4 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLIN CORP MORGAN HIL	425 TENNANT AVE	SW 0 - 1/8 (0.086 mi.)	D13	45
CUSTOM CHROME	16100 JACQUELINE COU	NW 1/8 - 1/4 (0.141 mi.)	E18	50
ASCO AIR CONDITIONIN	16250 RAILROAD AVENU	WNW 1/8 - 1/4 (0.174 mi.)	G23	54
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DEMETRON INC	235 TENNANT AVE	WSW 1/4 - 1/2 (0.280 mi.)	M43	79

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SADONNA'S HOLIDAY CL	602 TENNANT STATION	ESE 0 - 1/8 (0.026 mi.)	B3	24
SHAW PIPELINE SERVIC	16080 CAPUTO DR	N 0 - 1/8 (0.105 mi.)	C16	48
LEPRECHAUN ELECTRONIC	16120 CAPUTO DR	NNW 1/8 - 1/4 (0.173 mi.)	F21	51
BAS PRECISION SHEET	16170 JACQUELINE CT.	NW 1/8 - 1/4 (0.207 mi.)	K34	69

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/31/2017 has revealed that there are 7 ENVIROSTOR sites within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
A FRENCH CLEANER Facility Id: 60000130 Status: Certified	602 TENNANT STATION	ESE 0 - 1/8 (0.026 mi.)	B2	8
ASCO AIR CONDITIONIN Facility Id: 43340081 Status: Refer: Other Agency	16250 RAILROAD AVE.	WNW 1/8 - 1/4 (0.174 mi.)	G22	53
BAS PRECISION SHEET Facility Id: 71003139 Status: Inactive - Needs Evaluation	16170 JAUQUELINE CT	NW 1/8 - 1/4 (0.207 mi.)	K35	70
UNAXIS MATERIALS, IN Facility Id: 71002906 Status: No Further Action	16035 VINEYARD BOULE	WSW 1/4 - 1/2 (0.257 mi.)	L42	77
BARRETT AVENUE ELEME Facility Id: 43010020 Status: Certified	895 BARRETT AVENUE	NNE 1/4 - 1/2 (0.454 mi.)	48	92
CASTLE A.L. INC Facility Id: 43510004 Status: Refer: RWQCB	190 MAST	WNW 1/4 - 1/2 (0.489 mi.)	49	96
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JACKSON FAMILY TRUST Facility Id: 71002096 Status: Certified	235 TENNANT AVENUE	WSW 1/4 - 1/2 (0.280 mi.)	M44	81

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OAKLEY PLYWOOD Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014 Date Closed: 08/25/1993 SCVWD ID: 09S3E27N01F	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H24	55
TM COBB COMPANY Database: LUST REG 3, Date of Government Version: 05/19/2003 Database: LUST, Date of Government Version: 06/12/2017 Status: Completed - Case Closed Status: Case Closed Global Id: T0608500010 Global ID: T0608500010	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H26	58
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
U-SAVE ROCKERY Database: LUST, Date of Government Version: 06/12/2017	15760 RAILROAD	S 1/8 - 1/4 (0.207 mi.)	J30	63

EXECUTIVE SUMMARY

Status: Completed - Case Closed
Global Id: T0608502174

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there are 4 SLIC sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLIN CORPORATION Database: SLIC REG 3, Date of Government Version: 05/18/2006 Facility Status: Remediation Plan	425 TENNANT AVE.	SW 0 - 1/8 (0.086 mi.)	D11	29
OLIN/STD FUSEE SITE Database: SLIC, Date of Government Version: 06/12/2017 Facility Status: Open - Remediation Global Id: SL0608756247	425 TENNANT	SW 0 - 1/8 (0.086 mi.)	D12	31
FORMER CASTLE VEGTEC Database: SLIC, Date of Government Version: 06/12/2017 Facility Status: Open - Assessment & Interim Remedial Action Global Id: SL0608727312	16470 VINEYARD BOULE	WNW 1/4 - 1/2 (0.391 mi.)	N46	84
CASTLE VEGTECH Database: SLIC REG 3, Date of Government Version: 05/18/2006 Facility Status: Remedial Action Plan Underway/Ongoing	16470 VINEYARD BLVD.	WNW 1/4 - 1/2 (0.391 mi.)	N47	92

HIST LUST: A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there is 1 HIST LUST site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TM COBB COMPANY SCVWD ID: 09S3E27N01	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H26	58

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 07/31/2017 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
A FRENCH CLEANER Status: Certified Facility Id: 60000130	602 TENNANT STATION	ESE 0 - 1/8 (0.026 mi.)	B2	8

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 03/13/2017 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GREEN SOUTH BAY CORP Cert Id: RC132080.001	16290 RAILROAD AVE	WNW 1/4 - 1/2 (0.281 mi.)	45	83

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLIN/STD FUSEE SITE Status: A Tank Status: A Comp Number: 44910	425 TENNANT	SW 0 - 1/8 (0.086 mi.)	D12	31
OAKLEY PLYWOOD Status: A Tank Status: A Comp Number: 1040	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H24	55
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORMER JOHNSON LUMBE Comp Number: 116	15770 RAILROAD AVE	S 1/8 - 1/4 (0.207 mi.)	J31	64

EXECUTIVE SUMMARY

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 5 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLIN/STD FUSEE SITE Facility Id: 00000044910	425 TENNANT	SW 0 - 1/8 (0.086 mi.)	D12	31
MORGAN HILL PLANT Facility Id: 00000043034	425 TENNANT AVE	SW 0 - 1/8 (0.086 mi.)	D14	47
OAKLEY PLYWOOD Facility Id: 00000001040	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H25	57
TM COBB COMPANY	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H26	58
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
U-SAVE ROCKERY OF MO Facility Id: 00000052694	15760 RAILROAD AVE	S 1/8 - 1/4 (0.207 mi.)	J32	65

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 2 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLIN/STD FUSEE SITE Facility Id: 43012173 Status: A	425 TENNANT	SW 0 - 1/8 (0.086 mi.)	D12	31
OAKLEY PLYWOOD Facility Id: 43001816 Status: A Status: I	375 TENNANT AVE	W 1/8 - 1/4 (0.175 mi.)	H24	55

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/12/2016 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LEPRECHAUN ELECTRONIC	16075 CAPUTO DR	NNW 0 - 1/8 (0.079 mi.)	C8	27
BAS PRECISION SHEETM	16155 CAPUTO DR	NNW 1/8 - 1/4 (0.200 mi.)	F29	62
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MELVIN C DILL CO, IN	15940 CONCORD CIRCLE	SSW 1/8 - 1/4 (0.220 mi.)	I36	71

EXECUTIVE SUMMARY

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/28/2016 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLIN/STD FUSEE SITE	425 TENNANT	SW 0 - 1/8 (0.086 mi.)	D12	31

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 18 CUPA Listings sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MICMAR INC Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16035 CAPUTO DR UNIT	N 0 - 1/8 (0.018 mi.)	A1	8
STRICTLY WICKED CYCL Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16055 CAPUTO DR STE	N 0 - 1/8 (0.029 mi.)	A5	26
PACIFIC GEOTECHNICAL Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16055 CAPUTO DR D	NNW 0 - 1/8 (0.049 mi.)	A6	26
SATELLITE DIALYSIS Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16060 CAPUTO DR 140	N 0 - 1/8 (0.074 mi.)	C7	27
ART'S SHEET METAL Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16075 CAPUTO DR	NNW 0 - 1/8 (0.079 mi.)	C9	28
NELSON BIOTECHNOLOGI Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16080 CAPUTO DR UNIT	N 0 - 1/8 (0.105 mi.)	C17	49
MISSION BELL MANUFAC Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16100 JACQUELINE CT	NW 1/8 - 1/4 (0.141 mi.)	E19	51
ASCO AIR CONDITIONIN Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16250 RAILROAD AVE.	WNW 1/8 - 1/4 (0.174 mi.)	G22	53
B A S PRECISION SHEE Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16155 CAPUTO DRIVE	NNW 1/8 - 1/4 (0.200 mi.)	F28	61
B A S PRECISION SHEE Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16170 JACQUELINE COU	NW 1/8 - 1/4 (0.207 mi.)	K33	67
PACIFIC GAS & ELECTR Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16160 CAPUTO DR	N 1/8 - 1/4 (0.220 mi.)	F37	73
AMERICAN SCISSOR LIF Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16120 VINEYARD BL	W 1/8 - 1/4 (0.229 mi.)	L38	74
ALTANOVA MANUFACTURI Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16170 VINEYARD BL 16	W 1/8 - 1/4 (0.237 mi.)	39	74
C & M AUTO SERVICE I Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16169 CAPUTO DR	NNW 1/8 - 1/4 (0.240 mi.)	40	76
AT&T MOBILITY - MONT Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	16170 VINEYARD BL	W 1/8 - 1/4 (0.249 mi.)	L41	77
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JOHNSON LUMBER Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	600 TENNANT AV	SE 0 - 1/8 (0.103 mi.)	15	48

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NOVA MICROWAVE INC Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	380 TENNANT AV STE 5	SW 1/8 - 1/4 (0.159 mi.)	20	51
ANAEROBE SYSTEMS Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017	15906 CONCORD CL	SSW 1/8 - 1/4 (0.195 mi.)	I27	61

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 03/09/2017 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
A FRENCH CLEANER EPA Id: CAL000207389	602 TENNANT STATION	ESE 0 - 1/8 (0.026 mi.)	B2	8

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CASTLE A.L. INC Reg Id: 3 432021001	190 MAST	WNW 1/4 - 1/2 (0.489 mi.)	49	96

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
U-SAVE ROCKERY Reg Id: 463	15760 RAILROAD	S 1/8 - 1/4 (0.207 mi.)	J30	63

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COSMO LANE	BEHIND CANDY PARK	WSW 1/2 - 1 (0.707 mi.)	50	97

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
24 HOUR TOWING	761 TENNANT AVE	E 0 - 1/8 (0.082 mi.)	10	29

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SADONNAS HOLIDAY CLE	602 TENNANT STA	ESE 0 - 1/8 (0.026 mi.)	B4	25

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name

JOLEEN WAY GROUNDWATER REMEDIATION

Database(s)

ENVIROSTOR



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 National Priority List Sites

 Dept. Defense Sites

 Indian Reservations BIA

 Power transmission lines

 100-year flood zone

 500-year flood zone

 National Wetland Inventory

 State Wetlands

 Upgradient Area

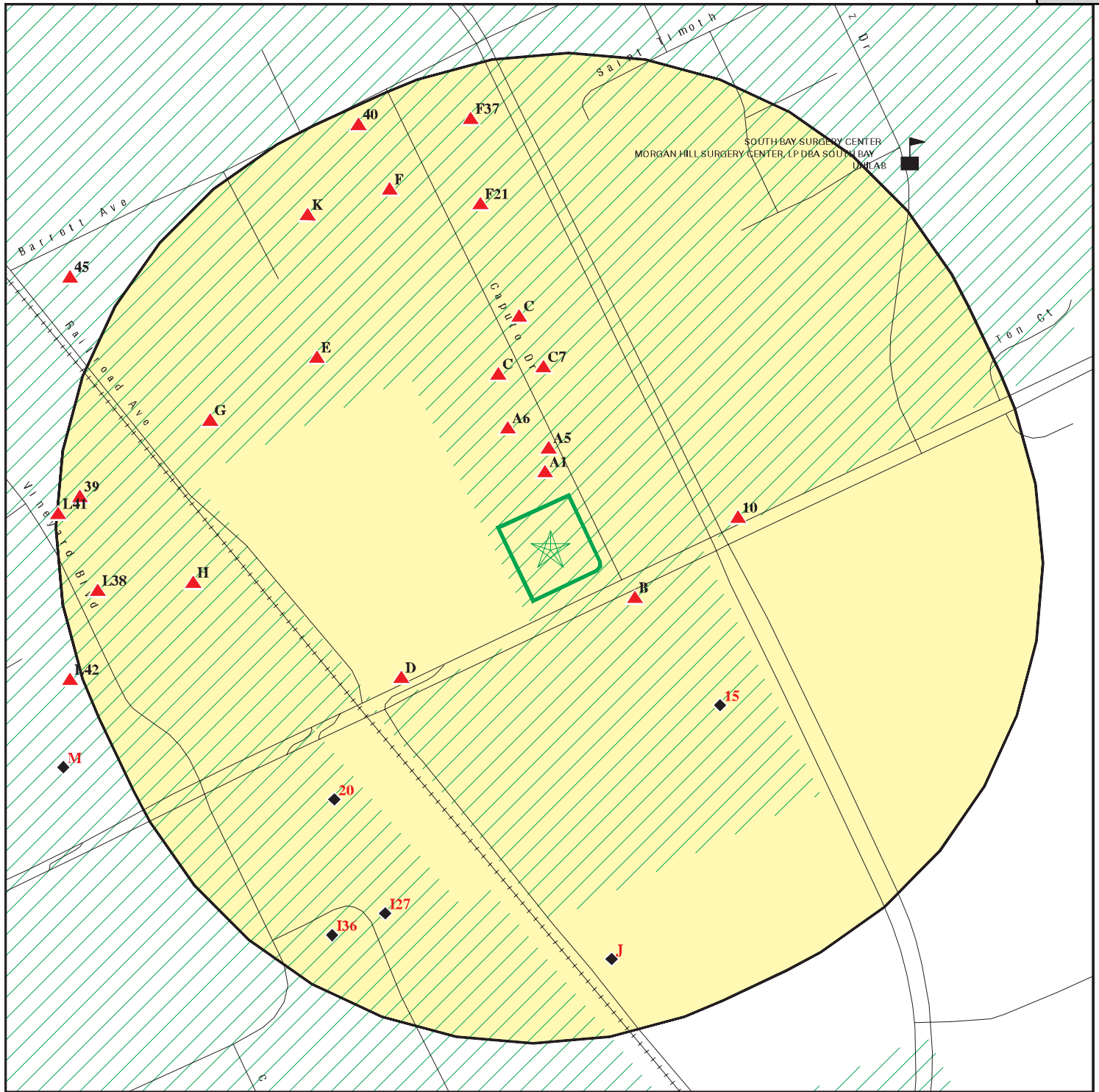
 Areas of Concern

This report includes Interactive Map Layers display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL CA 95037
LAT/LONG: 37.116874 / 121.634183

CLIENT: Harris & Lee Env. Sciences
CONTACT: Cathy Neumann
INQUIRY #: 5052107.2S
DATE: September 18, 2017 12:49 pm

Packet Pg. 325



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone

- Areas of Concern

0 1/16 1/8 1/4 Miles



This report includes Interactive Map Layers display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Paul Sagayaraj
 ADDRESS: 16015 CAPUTO DR
 MORGAN HILL CA 95037
 LAT/LONG: 37.116874 / 121.634183

CLIENT: Harris & Lee Env. Sciences
 CONTACT: Cathy Neumann
 INQUIRY #: 5052107.2s
 DATE: September 18, 2017 12:50 pm

Packet Pg. 326

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		1	2	1	NR	NR	4
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		2	2	NR	NR	NR	4
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		1	2	4	0	NR	7
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	3	0	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		2	0	2	NR	NR	4
HIST LUST	0.500		0	1	0	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		1	0	0	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	1	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	2	NR	NR	NR	3
HIST UST	0.250		2	3	NR	NR	NR	5
CA FID UST	0.250		1	1	NR	NR	NR	2
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	2	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		1	0	0	NR	NR	1
CUPA Listings	0.250		7	11	NR	NR	NR	18
DRYCLEANERS	0.250		1	0	NR	NR	NR	1
EMI	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	1	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
SAN JOSE HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
<u>EDR HIGH RISK HISTORICAL RECORDS</u>								
<i>EDR Exclusive Records</i>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	23	30	9	1	0	63

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

A1
North
< 1/8
0.018 mi.
95 ft.

MICMAR INC
16035 CAPUTO DR UNIT D
MORGAN HILL, CA 95037

Site 1 of 3 in cluster A

CUPA Listings **S117892387**
N/A

Relative: CUPA SANTA CLARA:
Higher Region: SANTA CLARA
PE#: 2201
Actual: Program Description: GENERATES WASTE OIL ONLY
332 ft. Latitude: 37.117392
Longitude: -121.634597

B2
ESE
< 1/8
0.026 mi.
136 ft.

A FRENCH CLEANER
602 TENNANT STATION WAY
MORGAN HILL, CA 95037

Site 1 of 3 in cluster B

ENVIROSTOR **S106166652**
VCP **N/A**
DRYCLEANERS
EMI

Relative: ENVIROSTOR:
Higher Facility ID: 60000130
Status: Certified
Actual: Status Date: 11/28/2016
331 ft. Site Code: 201604
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 0.05
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Henry Chui
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Assembly: 30
Senate: 17
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.11281
Longitude: -121.6385
APN: 817-06-055, 81706057
Past Use: DRY CLEANING, DRY CLEANING
Potential COC: Tetrachloroethylene (PCE Tetrachloroethylene (PCE
Confirmed COC: Tetrachloroethylene (PCE Tetrachloroethylene (PCE
Potential Description: SOIL, SV, SOIL
Alias Name: Morgan Hill Bowl
Alias Type: Alternate Name
Alias Name: 817-06-055
Alias Type: APN
Alias Name: 81706057
Alias Type: APN
Alias Name: 110013820017
Alias Type: EPA (FRS #)
Alias Name: 201604
Alias Type: Project Code (Site Code)
Alias Name: 60000130
Alias Type: Envirostor ID Number

Completed Info:

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 09/30/2013
Comments: DTSC determined that the post-RAW remedy changes, from soil excavation with a soil vapor extraction contingency remedy to soil vapor extraction with no soil excavation is exempt from CEQA review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/09/2012
Comments: Annual DTSC oversight cost estimate for fiscal year 2012/2013 is \$23,484.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/03/2013
Comments: The estimated annual oversight cost for the 2013/14 fiscal year is \$27,986.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2016
Comments: The DTSC oversight cost estimate for all the project activities for fiscal year 2016/2017. The project activities include review of the Sub-slab and Soil Vapor Sampling Report, Well Decommissioning Workplan and Report, and preparation of the Site Certification.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 11/05/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 06/17/2011
Comments: Collection Letter-Second Request

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 11/14/2006
Comments: Fieldwork has been completed. A report will be submitted in the 2nd week of December.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/09/2007
Comments: PCE concentration in indoor air is above acceptable limit for commercial use.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 10/31/2007
Comments: Field work was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/07/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/07/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 05/16/2007
Comments: Field work completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 01/15/2008
Comments: The approval letter references a workplan dated 1-11-08 however the approval letter should have referred to a later version dated 1-14-08 (a correction to the letter was made and initialed. The confusion occurred because the consultant provided two drafts dated 1-11-08 and later corrected the date on the latter version to 1-14-08.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/18/2008
Comments: Field work was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/17/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 11/09/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan w/ESD
Completed Date: 10/02/2013
Comments: A French Cleaner has requested to modify the selected remedy for the

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

A French Cleaner Site (Site) located at 650 Tennant Station, Morgan Hill, California. The modified remedy will not require the excavation of impacted soil from beneath the suite where the former dry cleaner operated as originally proposed in the RAW. Soil vapor extraction will be implemented at the Site as the primary cleanup action, rather than as a contingency cleanup action as outlined in the RAW. DTSC has determined that this is a significant, but not fundamental, change to the remedy as described in the RAW and has prepared and approved this Explanation of Significant Differences.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 11/24/2008
Comments: The Community Profile summarized responses to a public survey that DTSC conducted to gauge community interest in the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 09/15/2010
Comments: Draft RAW public comment period schedule the run from October 20, 2010 thru November 20, 2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 10/17/2010
Comments: Public Notice announcing Draft RAW public comment period completed. Public Notice ran in the Morgan Hill Dispatch on October 20, 2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 12/14/2011
Comments: Sub-Slab Ventilation System Pilot Test Work Plan approved for implementation. The results of the pilot test will help determine if the ventilation system be either continued or extended to facilitate sub-surface soil gas remediation at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 12/11/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/21/2013
Comments: Remedy changed from soil excavation with soil vapor extraction as a contingency remedy to soil vapor extraction as the selected remedy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/26/2011

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Work Notice

Completed Date: 07/27/2012

Comments: DTSC distributed this notice to inform the community about the upcoming pilot test of a soil vapor extraction system to determine if soil vapor extraction is an effective cleanup method for the Site.

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Pilot/Treatability Study Report

Completed Date: 01/24/2013

Comments: Pilot study indicates that soil vapor extraction is an appropriate remediation technology for the Site. DTSC will modify the selected Site remedy to soil vapor extraction.

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Monitoring Report

Completed Date: 12/13/2013

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Monitoring Report

Completed Date: 12/13/2013

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Monitoring Report

Completed Date: 12/13/2013

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Operations and Maintenance Report

Completed Date: 06/19/2014

Comments: The Report summarizes the operation of the soil vapor extraction (SVE) system from October 1, 2013 to March 31, 2014. Rebound testing was conducted between January 28 and March 20, 2014 and verification sample results showed that the SVE inlet PCE concentrations exceeded the SVE system restart parameter of 200 micrograms per cubic meter. The SVE system was restarted on March 21, 2014.

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Technical Workplan

Completed Date: 02/12/2014

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/02/2015

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/23/2015
Comments: DTSC had provided comments on the 1st Quarter SVE Status Report and expressed a number of concerns regarding sampling methods and continued leak detections in the sample results. DTSC comments and concerns will be addressed in the revised Sampling Workplan and in future Quarterly SVE Reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/22/2015
Comments: The Second Quarter, 2015 - SVE System Status Report summarizes remedial activities conducted at the site from April 1 to June 30, 2015. DTSC provided comments on the Report and conveyed concerns regarding the sampling methods and continued leak detections in the sample results. DTSC comments and concerns are to be addressed in the revised Sampling Workplan and in future quarterly SVE reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/08/2016
Comments: The Report details the results of the sub-slab and soil gas confirmation sampling that was performed to confirm that the PCE soil vapor concentrations at the Site are below the removal goals established in the Final Removal Action Workplan. PCE was not detected in the confirmation sub-slab and soil gas samples. Additionally, a significant reduction in the PCE concentrations in soil vapor extraction system influent has been observed since startup, and the mass removal by the system has become negligible. DTSC has determined that no further action is required at the Site. A certification will be issued once confirmation is received that the soil vapor extraction and monitoring wells have been properly decommissioned.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 10/17/2016
Comments: The Work Plan describes the procedures to properly abandon the monitoring and soil vapor extraction wells and to remove the soil vapor extraction system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Report

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Date: 11/22/2016
Comments: The report documents the decommissioning of the four soil vapor monitoring wells and five soil vapor extraction system wells that were on the site, which was performed in accordance with the DTSC-approved work plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/22/2011
Comments: Annual Oversight Cost Estimate completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/28/2016
Comments: DTSC certified the completion of the removal actions at the site. A soil vapor extraction system was constructed and operated until the tetrachloroethene concentrations in soil vapor were reduced to non-detectable levels in the vapor monitoring wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 03/28/2007
Comments: Amendment requires PDF submission of documents in addition to paper copy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2014
Comments: A French Cleaner REW and schedule for FY14/15. Scheduled activities included are SVE quarterly reports and Closure Workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 08/10/2006
Comments: PEA approved which recommends additional soil gas and groundwater sampling.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 11/17/2006
Comments: Workplan approved requiring groundwater and indoor air assessments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Date: 05/12/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 11/21/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 05/20/2011
Comments: Letter #1

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:

Facility ID: 60000130
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 0.05
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Henry Chui
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Site Code: 201604
Assembly: 30
Senate: 17
Special Programs Code: Voluntary Cleanup Program
Status: Certified
Status Date: 11/28/2016
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 37.11281 / -121.6385
APN: 817-06-055, 81706057
Past Use: DRY CLEANING, DRY CLEANING
Potential COC: 30022, 30022
Confirmed COC: 30022,, 30022

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Potential Description: SOIL, SV, SOIL
Alias Name: Morgan Hill Bowl
Alias Type: Alternate Name
Alias Name: 817-06-055
Alias Type: APN
Alias Name: 81706057
Alias Type: APN
Alias Name: 110013820017
Alias Type: EPA (FRS #)
Alias Name: 201604
Alias Type: Project Code (Site Code)
Alias Name: 60000130
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 09/30/2013
Comments: DTSC determined that the post-RAW remedy changes, from soil excavation with a soil vapor extraction contingency remedy to soil vapor extraction with no soil excavation is exempt from CEQA review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/09/2012
Comments: Annual DTSC oversight cost estimate for fiscal year 2012/2013 is \$23,484.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/03/2013
Comments: The estimated annual oversight cost for the 2013/14 fiscal year is \$27,986.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2016
Comments: The DTSC oversight cost estimate for all the project activities for fiscal year 2016/2017. The project activities include review of the Sub-slab and Soil Vapor Sampling Report, Well Decommissioning Workplan and Report, and preparation of the Site Certification.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 11/05/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 06/17/2011
Comments: Collection Letter-Second Request

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 11/14/2006
Comments: Fieldwork has been completed. A report will be submitted in the 2nd week of December.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/09/2007
Comments: PCE concentration in indoor air is above acceptable limit for commercial use.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 10/31/2007
Comments: Field work was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/07/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/07/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 05/16/2007
Comments: Field work completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 01/15/2008
Comments: The approval letter references a workplan dated 1-11-08 however the approval letter should have referred to a later version dated 1-14-08 (a correction to the letter was made and initialed. The confusion occurred because the consultant provided two drafts dated 1-11-08 and later corrected the date on the latter version to 1-14-08.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/18/2008
Comments: Field work was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Date: 03/17/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 11/09/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan w/ESD
Completed Date: 10/02/2013
Comments: A French Cleaner has requested to modify the selected remedy for the A French Cleaner Site (Site) located at 650 Tennant Station, Morgan Hill, California. The modified remedy will not require the excavation of impacted soil from beneath the suite where the former dry cleaner operated as originally proposed in the RAW. Soil vapor extraction will be implemented at the Site as the primary cleanup action, rather than as a contingency cleanup action as outlined in the RAW. DTSC has determined that this is a significant, but not fundamental, change to the remedy as described in the RAW and has prepared and approved this Explanation of Significant Differences.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 11/24/2008
Comments: The Community Profile summarized responses to a public survey that DTSC conducted to gauge community interest in the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 09/15/2010
Comments: Draft RAW public comment period schedule the run from October 20, 2010 thru November 20, 2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 10/17/2010
Comments: Public Notice announcing Draft RAW public comment period completed. Public Notice ran in the Morgan Hill Dispatch on October 20, 2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 12/14/2011
Comments: Sub-Slab Ventilation System Pilot Test Work Plan approved for implementation. The results of the pilot test will help determine if the ventilation system be either continued or extended to facilitate sub-surface soil gas remediation at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Date: 12/11/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/21/2013
Comments: Remedy changed from soil excavation with soil vapor extraction as a contingency remedy to soil vapor extraction as the selected remedy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/26/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 07/27/2012
Comments: DTSC distributed this notice to inform the community about the upcoming pilot test of a soil vapor extraction system to determine if soil vapor extraction is an effective cleanup method for the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 01/24/2013
Comments: Pilot study indicates that soil vapor extraction is an appropriate remediation technology for the Site. DTSC will modify the selected Site remedy to soil vapor extraction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/19/2014
Comments: The Report summarizes the operation of the soil vapor extraction (SVE) system from October 1, 2013 to March 31, 2014. Rebound testing was conducted between January 28 and March 20, 2014 and verification

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

sample results showed that the SVE inlet PCE concentrations exceeded the SVE system restart parameter of 200 micrograms per cubic meter. The SVE system was restarted on March 21, 2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 02/12/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 09/02/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/23/2015
Comments: DTSC had provided comments on the 1st Quarter SVE Status Report and expressed a number of concerns regarding sampling methods and continued leak detections in the sample results. DTSC comments and concerns will be addressed in the revised Sampling Workplan and in future Quarterly SVE Reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/22/2015
Comments: The Second Quarter, 2015 - SVE System Status Report summarizes remedial activities conducted at the site from April 1 to June 30, 2015. DTSC provided comments on the Report and conveyed concerns regarding the sampling methods and continued leak detections in the sample results. DTSC comments and concerns are to be addressed in the revised Sampling Workplan and in future quarterly SVE reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/08/2016
Comments: The Report details the results of the sub-slab and soil gas confirmation sampling that was performed to confirm that the PCE soil vapor concentrations at the Site are below the removal goals established in the Final Removal Action Workplan. PCE was not detected in the confirmation sub-slab and soil gas samples. Additionally, a significant reduction in the PCE concentrations in soil vapor extraction system influent has been observed since startup, and the mass removal by the system has become negligible. DTSC has determined that no further action is required at the Site. A certification will be issued once confirmation is received that the

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

soil vapor extraction and monitoring wells have been properly decommissioned.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 10/17/2016
Comments: The Work Plan describes the procedures to properly abandon the monitoring and soil vapor extraction wells and to remove the soil vapor extraction system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Report
Completed Date: 11/22/2016
Comments: The report documents the decommissioning of the four soil vapor monitoring wells and five soil vapor extraction system wells that were on the site, which was performed in accordance with the DTSC-approved work plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/22/2011
Comments: Annual Oversight Cost Estimate completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/28/2016
Comments: DTSC certified the completion of the removal actions at the site. A soil vapor extraction system was constructed and operated until the tetrachloroethene concentrations in soil vapor were reduced to non-detectable levels in the vapor monitoring wells.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 03/28/2007
Comments: Amendment requires PDF submission of documents in addition to paper copy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2014
Comments: A French Cleaner REW and schedule for FY14/15. Scheduled activities included are SVE quarterly reports and Closure Workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 08/10/2006
Comments: PEA approved which recommends additional soil gas and groundwater sampling.

Completed Area Name: PROJECT WIDE

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 11/17/2006
Comments: Workplan approved requiring groundwater and indoor air assessments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/22/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 05/12/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 11/21/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 05/20/2011
Comments: Letter #1

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

DRYCLEANERS:

EPA Id: CAL000207389
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial
Create Date: 05/27/1999
Facility Active: No
Inactive Date: 06/30/2000
Facility Addr2: Not reported
Owner Name: ALAIN BARAN
Owner Address: 602 TENNANT STATION WAY

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)

S106166652

Owner Address 2: Not reported
Owner Telephone: 0000000000
Contact Name: ALAIN BARAN/OWNER
Contact Address: 415 VINEYARD TOWN CENTER
Contact Address 2: Not reported
Contact Telephone: 4087780087
Mailing Name: Not reported
Mailing Address 1: 415 VINEYARD TOWN CENTER
Mailing Address 2: Not reported
Mailing City: MORGAN HILL
Mailing State: CA
Mailing Zip: 950370000
Owner Fax: Not reported
Region Code: 2

EMI:

Year: 2013
County Code: 43
Air Basin: SF
Facility ID: 21429
Air District Name: BA
SIC Code: 1799
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.002
Reactive Organic Gases Tons/Yr: 0.0013972
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year: 2014
County Code: 43
Air Basin: SF
Facility ID: 21429
Air District Name: BA
SIC Code: 1799
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.00264164
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year: 2015
County Code: 43
Air Basin: SF
Facility ID: 21429
Air District Name: BA
SIC Code: 1799
Air District Name: BAY AREA AQMD

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A FRENCH CLEANER (Continued)**S106166652**

Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2.0262e-005
Reactive Organic Gases Tons/Yr: 1.41550332e-005
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

B3
ESE
< 1/8
0.026 mi.
136 ft.

SADONNA'S HOLIDAY CLEANERS
602 TENNANT STATION WY
MORGAN HILL, CA 95037

RCRA-SQG **1000247925**
FINDS **CAD981649841**
ECHO

Site 2 of 3 in cluster B

Relative:
Higher

RCRA-SQG:

Actual:
331 ft.

Date form received by agency: 03/05/1987
Facility name: HOLIDAY CLEANERS
Facility address: 602 TENNANT STATION WAY
MORGAN HILL, CA 95037
EPA ID: CAD981649841
Contact: ENVIRONMENTAL MANAGER
Contact address: 602 TENNANT STATION WAY
MORGAN HILL, CA 95037
Contact country: US
Contact telephone: (408) 778-0087
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: GARY TOWNER
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SADONNA'S HOLIDAY CLEANERS (Continued)**1000247925**

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110001188795

Environmental Interest/Information System

HAZARDOUS AIR POLLUTANT MAJOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000247925
Registry ID: 110001188795
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110001188795>

B4
ESE
< 1/8
0.026 mi.
136 ft.

SADONNAS HOLIDAY CLEANERS
602 TENNANT STA
MORGAN HILL, CA 95037

EDR Hist Cleaner **1020079722**
N/A

Site 3 of 3 in cluster B

Relative:
Higher

EDR Hist Cleaner

Actual:
331 ft.

Year:	Name:	Type:
1992	SA DONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1993	SA DONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1994	SA DONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1995	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1996	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1997	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SADONNAS HOLIDAY CLEANERS (Continued)**1020079722**

1998	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1999	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
2000	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
2001	FRENCH CLEANER	Drycleaning Plants, Except Rugs
2001	SADONNAS HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
2002	A-FRENCH CLEANERS	Drycleaning Plants, Except Rugs
2003	A-FRENCH CLEANERS	Drycleaning Plants, Except Rugs
2004	A-FRENCH CLEANERS	Drycleaning Plants, Except Rugs

A5
North
< 1/8
0.029 mi.
155 ft.

STRICTLY WICKED CYCLES
16055 CAPUTO DR STE I
MORGAN HILL, CA 95037

CUPA Listings **S114555340**
N/A

Site 2 of 3 in cluster A

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2201

Actual:
332 ft.

Program Description: GENERATES WASTE OIL ONLY
Latitude: 37.117884
Longitude: -121.634508

A6
NNW
< 1/8
0.049 mi.
260 ft.

PACIFIC GEOTECHNICAL ENGINEERI
16055 CAPUTO DR D
MORGAN HILL, CA 95037

CUPA Listings **S117892393**
N/A

Site 3 of 3 in cluster A

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2502

Actual:
333 ft.

Program Description: HAZMAT STORAGE FACILITY-MINIMAL STORAGE SITE
Latitude: 37.117828
Longitude: -121.634322

Region: SANTA CLARA
PE#: BP01
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: Not reported
Longitude: Not reported

Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: Not reported
Longitude: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

C7
North
< 1/8
0.074 mi.
393 ft.

SATELLITE DIALYSIS
16060 CAPUTO DR 140
MORGAN HILL, CA 95037

CUPA Listings **S114555325**
N/A

Relative:
Higher

CUPA SANTA CLARA:

Region:

SANTA CLARA

PE#:

BP01

Actual:
334 ft.

Program Description:

HMBP FACILITY, 1-3 CHEMICALS

Latitude:

37.118610

Longitude:

-121.634604

C8
NNW
< 1/8
0.079 mi.
418 ft.

LEPRECHAUN ELECTRONICS
16075 CAPUTO DR
MORGAN HILL, CA 95037

RCRA NonGen / NLR **1000355280**
FINDS **CAD981163041**
ECHO

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 11/05/1985

Facility name:

LEPRECHAUN ELECTRONICS

Facility address:

16075 CAPUTO DR

MORGAN HILL, CA 95037

EPA ID:

CAD981163041

Mailing address:

CAPUTO DR

MORGAN HILL, CA 95037

Contact:

ENVIRONMENTAL MANAGER

Contact address:

16075 CAPUTO DR

MORGAN HILL, CA 95037

Contact country:

US

Contact telephone:

(408) 778-1920

Contact email:

Not reported

EPA Region:

09

Classification:

Non-Generator

Description:

Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:

KARYN REYNOLDS

Owner/operator address:

NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country:

Not reported

Owner/operator telephone:

(415) 555-1212

Legal status:

Private

Owner/Operator Type:

Owner

Owner/Op start date:

Not reported

Owner/Op end date:

Not reported

Owner/operator name:

NOT REQUIRED

Owner/operator address:

NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country:

Not reported

Owner/operator telephone:

(415) 555-1212

Legal status:

Private

Owner/Operator Type:

Operator

Owner/Op start date:

Not reported

Owner/Op end date:

Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEPRECHAUN ELECTRONICS (Continued)

1000355280

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002679414

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000355280
Registry ID: 110002679414
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002679414>

C9
NNW
< 1/8
0.079 mi.
418 ft.

ART'S SHEET METAL
16075 CAPUTO DR
MORGAN HILL, CA 95037

CUPA Listings **S112345327**
N/A

Site 3 of 5 in cluster C

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.118150
Longitude: -121.634515

Actual:
334 ft.

Region: SANTA CLARA
PE#: BP03
Program Description: HMBP FACILITY, 7-9 CHEMICALS
Latitude: 37.118150

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ART'S SHEET METAL (Continued)

S112345327

Longitude: -121.634515

10
East
< 1/8
0.082 mi.
434 ft.

24 HOUR TOWING
761 TENNANT AVE
MORGAN HILL, CA 95037

EDR Hist Auto 1020427611
N/A

Relative:
Higher

EDR Hist Auto

Actual:
332 ft.

Year:	Name:	Type:
2005	24 HOUR TOWING	Gasoline Service Stations
2006	24 HOUR TOWING	Gasoline Service Stations
2007	24 HOUR TOWING	Gasoline Service Stations
2008	24 HOUR TOWING	Gasoline Service Stations
2009	24 HOUR TOWING	Gasoline Service Stations

D11
SW
< 1/8
0.086 mi.
454 ft.

OLIN CORPORATION
425 TENNANT AVE.
MORGAN HILL, CA

SLIC S105619065
CHMIRS N/A

Site 1 of 4 in cluster D

Relative:
Higher

SLIC REG 3:
Region: 3
Leak Site Cross Street: Not reported
Regional Board Case#: S297
Entered Into Database: Not reported
Discovered: Not reported
RB Case In: OLIN COPORATION
Responsible Party: RICK MCCLURE
RP Contact: Not reported
RP Phone: Not reported
RP Number: Not reported
RP Address: P.O. BOX 248
RP City,St,Zip: CHARLESTON, TN 37310
Date First Reported: Not reported
Lead Agency: Regional Board
Program Type: SLIC
Facility Status: Remediation Plan
Case Type: A, W
Case Type Undetermined: No
Case Type Soil Impacted: No
Case Type Surface Water: No
Case Type Drinkin Water Well: Yes
Case Type Drinking Water Aqfr: Yes
Case Type Other Grnd Wtr: No
PCA: 2030001

CHMIRS:

OES Incident Number:	0-3892
OES notification:	08/29/2000
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	Not reported
Property Use:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN CORPORATION (Continued)

S105619065

Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agency Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	ground water wells
Spill Site:	Not reported
Cleanup By:	TBD
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2000
Agency:	Lawyer for Olin Corp.
Incident Date:	8/29/200012:00:00 AM
Admin Agency:	Santa Clara County Health Department
Amount:	Not reported
Contained:	Unknown
Site Type:	Waterways
E Date:	Not reported
Substance:	perchlorate
Gallons:	0.000000
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN CORPORATION (Continued)

S105619065

Fatals: Not reported
Comments: Not reported
Description: Contaminated ground water. Discovered during routine testing of the wells. They received the lab report today. It shows 1 well with 21 parts per billion and 1 well with 55 parts per billion.

D12
SW
< 1/8
0.086 mi.
454 ft.

OLIN/STD FUSEE SITE
425 TENNANT
MORGAN HILL, CA 95037

Site 2 of 4 in cluster D

Relative:
Higher

Actual:
331 ft.

SLIC:

Region: STATE
Facility Status: **Open - Remediation**
Status Date: 04/08/2004
Global Id: SL0608756247
Lead Agency: CENTRAL COAST RWQCB (REGION 3)
Lead Agency Case Number: Not reported
Latitude: 37.1166288482038
Longitude: -121.635904312134
Case Type: Cleanup Program Site
Case Worker: DT
Local Agency: Not reported
RB Case Number: S297
File Location: Regional Board
Potential Media Affected: Aquifer used for drinking water supply, Well used for drinking water supply

Potential Contaminants of Concern: Perchlorate, * Perchlorate
Site History: RP is implementing onsite cleanup. RP continues to conduct offsite monitoring and working on offsite cleanup. For current update on cleanup status, and to review technical reports, please refer to our Olin FTP Site at:
<ftp://swrcb2a.swrcb.ca.gov/pub/rwqcb3/Olin%20Perchlorate/>

SLIC
SWEEPS UST
HIST UST
CA FID UST
Cortese
ENF
NPDES

1000304682
N/A

[Click here to access the California GeoTracker records for this facility:](#)

SWEEPS UST:

Status: Active
Comp Number: 44910
Number: 9
Board Of Equalization: 44-025954
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 43-004-044910-000001
Tank Status: A
Capacity: 585
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 1

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Status: Active
Comp Number: 44910
Number: 9
Board Of Equalization: 44-025954
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 43-004-044910-000001
Tank Status: A
Capacity: 585
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 1

Status: Active
Comp Number: 44910
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 49-000-044910-000001
Tank Status: A
Capacity: 585
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 1

HIST UST:

File Number: 00020695
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020695.pdf>
Region: STATE
Facility ID: 00000044910
Facility Type: Other
Other Type: MANUFACTURING
Contact Name: P.J. LINK
Telephone: 4087792196
Owner Name: OLIN CORP.
Owner Address: 425 TENNANT AVE
Owner City,St,Zip: MORGAN HILL, CA 95037
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1955
Tank Capacity: 00000585
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Tank Num: 001
Container Num: 1
Year Installed: 1955
Tank Capacity: 00000585
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

[Click here for Geo Tracker PDF:](#)

CA FID UST:

Facility ID: 43012173
Regulated By: UTNKA
Regulated ID: 00044910
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4087792196
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: MORGAN HILL 95037
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:

Region: CORTESE
Envirostor Id: Not reported
Site/Facility Type: Not reported
Cleanup Status: Not reported
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: CORTESE
Order No: R3-2004-0119
Waste Discharge System No: Not reported
Effective Date: 07/09/2004
Region 2: 3
WID Id: 3 430311118
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported

Region: CORTESE
Envirostor Id: Not reported
Site/Facility Type: Not reported
Cleanup Status: Not reported
Status Date: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: CORTESE
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported

ENF:

Region: 3
Facility Id: 245930
Agency Name: Not reported
Place Type: Development
Place Subtype: Development Site, NEC
Facility Type: All other facilities
Agency Type: Not reported
Of Agencies: Not reported
Place Latitude: 37.115766
Place Longitude: -121.635668
SIC Code 1: Not reported
SIC Desc 1: Not reported
SIC Code 2: Not reported
SIC Desc 2: Not reported
SIC Code 3: Not reported
SIC Desc 3: Not reported
NAICS Code 1: Not reported
NAICS Desc 1: Not reported
NAICS Code 2: Not reported
NAICS Desc 2: Not reported
NAICS Code 3: Not reported
NAICS Desc 3: Not reported
Of Places: 1
Source Of Facility: Enf Action
Design Flow: Not reported
Threat To Water Quality: Not reported
Complexity: Not reported
Pretreatment: Not reported
Facility Waste Type: Not reported
Facility Waste Type 2: Not reported
Facility Waste Type 3: Not reported
Facility Waste Type 4: Not reported
Program: Not reported
Program Category1: Not reported
Program Category2: WDR
Of Programs: Not reported
WDID: Not reported
Reg Measure Id: Not reported
Reg Measure Type: Not reported
Region: Not reported
Order #: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	338752
Region:	3
Order / Resolution Number:	R3-2006-0112
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	12/21/2006
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Never Active
Title:	CAO R3-2006-0112 for Olin Corporation 425 Tennant Avenue Site
Description:	This CAO was active (see Reg Measure 338750), but multiple reg measures (also 338751) were created in error at the same time. R3 CIWQS Coord changed this reg measure to "Never Active" on 8/17/11.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	3
Facility Id:	245930
Agency Name:	Not reported
Place Type:	Development
Place Subtype:	Development Site, NEC
Facility Type:	All other facilities
Agency Type:	Not reported
# Of Agencies:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Place Latitude: 37.115766
Place Longitude: -121.635668
SIC Code 1: Not reported
SIC Desc 1: Not reported
SIC Code 2: Not reported
SIC Desc 2: Not reported
SIC Code 3: Not reported
SIC Desc 3: Not reported
NAICS Code 1: Not reported
NAICS Desc 1: Not reported
NAICS Code 2: Not reported
NAICS Desc 2: Not reported
NAICS Code 3: Not reported
NAICS Desc 3: Not reported
Of Places: 1
Source Of Facility: Enf Action
Design Flow: Not reported
Threat To Water Quality: Not reported
Complexity: Not reported
Pretreatment: Not reported
Facility Waste Type: Not reported
Facility Waste Type 2: Not reported
Facility Waste Type 3: Not reported
Facility Waste Type 4: Not reported
Program: Not reported
Program Category1: Not reported
Program Category2: WDR
Of Programs: Not reported
WDID: Not reported
Reg Measure Id: Not reported
Reg Measure Type: Not reported
Region: Not reported
Order #: Not reported
Npdes# CA#: Not reported
Major-Minor: Not reported
Npdes Type: Not reported
Reclamation: Not reported
Dredge Fill Fee: Not reported
301H: Not reported
Application Fee Amt Received: Not reported
Status: Not reported
Status Date: Not reported
Effective Date: Not reported
Expiration/Review Date: Not reported
Termination Date: Not reported
WDR Review - Amend: Not reported
WDR Review - Revise/Renew: Not reported
WDR Review - Rescind: Not reported
WDR Review - No Action Required: Not reported
WDR Review - Pending: Not reported
WDR Review - Planned: Not reported
Status Enrollee: Not reported
Individual/General: Not reported
Fee Code: Not reported
Direction/Voice: Not reported
Enforcement Id(EID): 338751
Region: 3

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Order / Resolution Number:	R3-2006-0112
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	12/21/2006
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Never Active
Title:	CAO R3-2006-0112 for Olin Corporation 425 Tennant Avenue Site
Description:	This CAO was active (see Reg Measure 338750), but multiple reg measures (also 338752) were created in error at the same time. R3 CIWQS Coord changed this reg measure to "Never Active" on 8/17/11.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	3
Facility Id:	245930
Agency Name:	Not reported
Place Type:	Development
Place Subtype:	Development Site, NEC
Facility Type:	All other facilities
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.115766
Place Longitude:	-121.635668
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Program:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	338750
Region:	3
Order / Resolution Number:	R3-2006-0112
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	12/21/2006
Adoption/Issuance Date:	12/21/2006
Achieve Date:	Not reported
Termination Date:	12/13/2007
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	CAO R3-2006-0112 for Olin Corporation 425 Tennant Avenue Site
Description:	This order amends CAO R3-2005-0014 for groundwater south and southeast of Olin's 425 Tennant Avenue site that is degraded or threatened by perchlorate.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Region:	3
Facility Id:	245930
Agency Name:	Not reported
Place Type:	Development
Place Subtype:	Development Site, NEC
Facility Type:	All other facilities
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.115766
Place Longitude:	-121.635668
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	255682
Region:	3
Order / Resolution Number:	R3-2005-0014
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	03/10/2005
Adoption/Issuance Date:	03/10/2005
Achieve Date:	Not reported
Termination Date:	12/13/2007
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	CAO R3-2005-0014 for Olin Corp 425 Tennant Ave.
Description:	CAO for groundwater south and southeast of Olin's 425 Tennant Avenue site that is degraded or threatened by perchlorate.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	3
Facility Id:	245930
Agency Name:	Oolin Corporation ERG
Place Type:	Development
Place Subtype:	Development Site, NEC
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	37.115766
Place Longitude:	-121.635668
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRNONMUNIPRCS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	3 430311118
Reg Measure Id:	132482
Reg Measure Type:	Waiver
Region:	3
Order #:	R3-2004-0119
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	872
Status:	Historical
Status Date:	05/09/2014
Effective Date:	07/09/2004
Expiration/Review Date:	07/09/2009
Termination Date:	07/09/2009
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	318621
Region:	3
Order / Resolution Number:	R3-2007-0077
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	12/14/2007
Adoption/Issuance Date:	12/14/2007
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	CAO R3-2007-0077 for Olin Corporation 425 Tennant Avenue Site
Description:	This order rescinds CAO R3-2005-0014, as amended by R3-2006-0112, but does not remove any requirements of the prior order. CAO R3-2007-0077 requires Olin to cleanup perchlorate-impacted groundwater to background concentrations.
Program:	WDR
Latest Milestone Completion Date:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	3
Facility Id:	245930
Agency Name:	Not reported
Place Type:	Development
Place Subtype:	Development Site, NEC
Facility Type:	All other facilities
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.115766
Place Longitude:	-121.635668
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	251665
Region:	3
Order / Resolution Number:	R3-2004-0101
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	07/06/2004
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	CAO R3-2004-0101 to Olin Corp/Std Fusee, 425 Tennant Ave., Replacement Wtr
Description:	CAO requires discharger to provide replacement drinking water to well owners affected by perchlorate-impacted groundwater associated with CAO R3-2007-0077 (and preceding CAOs).
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
NPDES:	
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	3
Regulatory Measure Id:	423604
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	3 43C362957
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

Termination Date Of Regulatory Measure: 7/27/2012
 Discharge Name: Not reported
 Discharge Address: Not reported
 Discharge City: Not reported
 Discharge State: Not reported
 Discharge Zip: Not reported
 RECEIVED DATE: 1/24/2012
 PROCESSED DATE: 2/7/2012
 STATUS CODE NAME: Terminated
 STATUS DATE: 8/13/2012
 PLACE SIZE: 11.5
 PLACE SIZE UNIT: Acres
 FACILITY CONTACT NAME: Richard McClure
 FACILITY CONTACT TITLE: Not reported
 FACILITY CONTACT PHONE: 423-336-4576
 FACILITY CONTACT PHONE EXT: Not reported
 FACILITY CONTACT EMAIL: rwmclure@olin.com
 OPERATOR NAME: Olin Corporation
 OPERATOR ADDRESS: 3855 N Ocoee
 OPERATOR CITY: Cleveland
 OPERATOR STATE: Tennessee
 OPERATOR ZIP: 37312
 OPERATOR CONTACT NAME: Richard McClure
 OPERATOR CONTACT TITLE: Not reported
 OPERATOR CONTACT PHONE: 423-336-4576
 OPERATOR CONTACT PHONE EXT: Not reported
 OPERATOR CONTACT EMAIL: rwmclure@olin.com
 OPERATOR TYPE: Private Business
 DEVELOPER NAME: Olin Corporation
 DEVELOPER ADDRESS: 3855 N Ocoee
 DEVELOPER CITY: Cleveland
 DEVELOPER STATE: Tennessee
 DEVELOPER ZIP: 37312
 DEVELOPER CONTACT NAME: Richard McClure
 DEVELOPER CONTACT TITLE: Not reported
 CONSTYPE LINEAR UTILITY IND: Y
 EMERGENCY PHONE NO: Not reported
 EMERGENCY PHONE EXT: Not reported
 CONSTYPE ABOVE GROUND IND: Not reported
 CONSTYPE BELOW GROUND IND: Y
 CONSTYPE CABLE LINE IND: Not reported
 CONSTYPE COMM LINE IND: Not reported
 CONSTYPE COMMERTIAL IND: Not reported
 CONSTYPE ELECTRICAL LINE IND: Not reported
 CONSTYPE GAS LINE IND: Not reported
 CONSTYPE INDUSTRIAL IND: Not reported
 CONSTYPE OTHER DESRIPTION: Not reported
 CONSTYPE OTHER IND: Not reported
 CONSTYPE RECONS IND: Not reported
 CONSTYPE RESIDENTIAL IND: Not reported
 CONSTYPE TRANSPORT IND: Not reported
 CONSTYPE UTILITY DESCRIPTION: Not reported
 CONSTYPE UTILITY IND: Not reported
 CONSTYPE WATER SEWER IND: Not reported
 DIR DISCHARGE USWATER IND: N
 RECEIVING WATER NAME: Not reported
 CERTIFIER NAME: Richard McClure

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN/STD FUSEE SITE (Continued)

1000304682

CERTIFIER TITLE: Not reported
CERTIFICATION DATE: 24-JAN-12
PRIMARY SIC: Not reported
SECONDARY SIC: Not reported
TERTIARY SIC: Not reported

D13
SW
< 1/8
0.086 mi.
454 ft.

OLIN CORP MORGAN HILL PLT
425 TENNANT AVE
MORGAN HILL, CA 95037

SEMS-ARCHIVE 1002850372
EMI CAD009183831

Site 3 of 4 in cluster D

Relative:
Higher

SEMS-ARCHIVE:
Site ID: 901198
EPA ID: CAD009183831
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Actual:
331 ft.

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0901198
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13287599.00000
Person ID: 13003854.00000

Contact Sequence ID: 13293194.00000
Person ID: 13003858.00000

Contact Sequence ID: 13299052.00000
Person ID: 13004003.00000

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: / /
Date Completed: 11/01/79
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 02/14/89
Priority Level: Low priority for further assessment

Action: SITE INSPECTION
Date Started: / /
Date Completed: 03/22/90
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 03/22/90
Priority Level: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN CORP MORGAN HILL PLT (Continued)

1002850372

EMI:

Year: 1987
County Code: 43
Air Basin: SF
Facility ID: 3315
Air District Name: BA
SIC Code: 2899
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 6
Reactive Organic Gases Tons/Yr: 6
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year: 1990
County Code: 43
Air Basin: SF
Facility ID: 3315
Air District Name: BA
SIC Code: 2899
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 9
Reactive Organic Gases Tons/Yr: 9
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year: 1995
County Code: 43
Air Basin: SF
Facility ID: 3315
Air District Name: BA
SIC Code: 2899
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 8
Reactive Organic Gases Tons/Yr: 8
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Year: 1996
County Code: 43
Air Basin: SF
Facility ID: 3315
Air District Name: BA

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OLIN CORP MORGAN HILL PLT (Continued)

1002850372

SIC Code: 2899
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 8
Reactive Organic Gases Tons/Yr: 8
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

D14
SW
< 1/8
0.086 mi.
454 ft.

MORGAN HILL PLANT
425 TENNANT AVE
MORGAN HILL, CA 95037

HIST UST U001601588
N/A

Site 4 of 4 in cluster D

Relative:
Higher

HIST UST:

Actual:
331 ft.

File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000043034
Facility Type: Other
Other Type: CHEMICAL PLANT
Contact Name: PLANT MANAGER
Telephone: 4087792196
Owner Name: OLIN CORPORATION
Owner Address: 425 TENNANT AVENUE
Owner City,St,Zip: MORGAN HILL, CA 95037
Total Tanks: 0003

Tank Num: 001
Container Num: 2
Year Installed: 1955
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 3
Year Installed: 1975
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 1
Year Installed: 1955
Tank Capacity: 00000585
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

15
SE
< 1/8
0.103 mi.
544 ft.

JOHNSON LUMBER
600 TENNANT AV
MORGAN HILL, CA 95037

CUPA Listings

S108210541
N/A

Relative:
Lower

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: BP02

Actual:
330 ft.

Program Description: HMBP FACILITY, 4-6 CHEMICALS
Latitude: 37.116573
Longitude: -121.633258

Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.116573
Longitude: -121.633258

C16
North
< 1/8
0.105 mi.
556 ft.

SHAW PIPELINE SERVICES
16080 CAPUTO DR
MORGAN HILL, CA 95037

RCRA-SQG

1016955093
CAR000248088

Site 4 of 5 in cluster C

Relative:
Higher

RCRA-SQG:

Date form received by agency: 07/28/2014

Facility name: SHAW PIPELINE SERVICES
Facility address: 16080 CAPUTO DR
STE 160

MORGAN HILL, CA 95037
EPA ID: CAR000248088

Mailing address: 1725 W RENO ST
BROKEN ARROW, OK 74012

Contact: THORON J BENNETT
Contact address: 1725 W RENO ST
BROKEN ARROW, OK 74012

Contact country: US
Contact telephone: 918-893-7808
Contact email: TJBENNETT@SPS.SHAWCOR.COM

EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: LELAND B EVANS MONTEREY BUS CTR
Owner/operator address: 8 HARRIS CT STE A-1
MONTEREY, CA 93940

Owner/operator country: US
Owner/operator telephone: 831-657-1300
Legal status: Private

Owner/Operator Type: Owner
Owner/Op start date: 05/17/1999
Owner/Op end date: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHAW PIPELINE SERVICES (Continued)

1016955093

Owner/operator name: SHAW PIPELINE SERVICES
Owner/operator address: Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/13/2014
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D011
. Waste name: SILVER

Violation Status: No violations found

C17
North
< 1/8
0.105 mi.
556 ft.

NELSON BIOTECHNOLOGIES, INC
16080 CAPUTO DR UNIT 150
MORGAN HILL, CA 95037

CUPA Listings S106093795
N/A

Site 5 of 5 in cluster C

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2205

Actual:
335 ft.

Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.118363
Longitude: -121.634269

Region: SANTA CLARA
PE#: BP01
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.118363
Longitude: -121.634269

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

E18
NW
1/8-1/4
0.141 mi.
744 ft.

CUSTOM CHROME
16100 JACQUELINE COURT
MORGAN HILL, CA 95037

Site 1 of 2 in cluster E

SEMS-ARCHIVE **1003877958**
CAD983566134

Relative:
Higher

SEMS-ARCHIVE:

Site ID: 900036

EPA ID: CAD983566134

Federal Facility: N

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Actual:
334 ft.

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0900036

Federal Facility: Not a Federal Facility

NPL Status: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13289558.00000

Person ID: 13003854.00000

Contact Sequence ID: 13295153.00000

Person ID: 13003858.00000

Contact Sequence ID: 13301011.00000

Person ID: 13004003.00000

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY

Date Started: / /

Date Completed: 02/16/90

Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT

Date Started: / /

Date Completed: 12/18/90

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE

Date Started: / /

Date Completed: 12/18/90

Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT

Date Started: / /

Date Completed: 12/18/90

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

E19 NW 1/8-1/4 0.141 mi. 744 ft.	MISSION BELL MANUFACTURING 16100 JACQUELINE CT MORGAN HILL, CA 95037	CUPA Listings	S107145646 N/A
	Site 2 of 2 in cluster E		
Relative: Higher	CUPA SANTA CLARA: Region: SANTA CLARA PE#: 2206 Program Description: GENERATES 5 TO <25 TONS/YR Latitude: 37.118476 Longitude: -121.636620		
Actual: 334 ft.	Region: SANTA CLARA PE#: BP01 Program Description: HMBP FACILITY, 1-3 CHEMICALS Latitude: 37.118476 Longitude: -121.636620		
20 SW 1/8-1/4 0.159 mi. 838 ft.	NOVA MICROWAVE INC 380 TENNANT AV STE 5 MORGAN HILL, CA 95037	CUPA Listings	S112346372 N/A
	Site 2 of 2 in cluster E		
Relative: Lower	CUPA SANTA CLARA: Region: SANTA CLARA PE#: 2240 Program Description: GENERATES < 10 GAL/YR Latitude: 37.115190 Longitude: -121.636701		
Actual: 327 ft.			
F21 NNW 1/8-1/4 0.173 mi. 911 ft.	LEPRECHAUN ELECTRONICS 16120 CAPUTO DR MORGAN HILL, CA 95037	RCRA-SQG FINDS ECHO	1000355281 CAD982519670
	Site 1 of 4 in cluster F		
Relative: Higher	RCRA-SQG: Date form received by agency: 04/05/1989 Facility name: LEPRECHAUN ELECTRONICS Facility address: 16120 CAPUTO DR MORGAN HILL, CA 95037 EPA ID: CAD982519670 Mailing address: CAPUTO DR MORGAN HILL, CA 95037 Contact: ENVIRONMENTAL MANAGER Contact address: 16120 CAPUTO DR MORGAN HILL, CA 95037 Contact country: US Contact telephone: (408) 778-1920 Contact email: Not reported EPA Region: 09 Classification: Small Small Quantity Generator Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of		
Actual: 337 ft.			

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEPRECHAUN ELECTRONICS (Continued)

1000355281

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: JOHN W QUINN
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002840070

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEPRECHAUN ELECTRONICS (Continued)

1000355281

ECHO:

Envid: 1000355281
Registry ID: 110002840070
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002840070>

G22
WNW
1/8-1/4
0.174 mi.
918 ft.

ASCO AIR CONDITIONING
16250 RAILROAD AVE.
MORGAN HILL, CA 95037

Site 1 of 2 in cluster G

ENVIROSTOR 1000483007
CUPA Listings N/A

Relative:
Higher

ENVIROSTOR:

Actual:
334 ft.

Facility ID: 43340081
Status: Refer: Other Agency
Status Date: 07/29/1994
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Rick Jones
Supervisor: Antonia Becker
Division Branch: Cleanup Berkeley
Assembly: 30
Senate: 17
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.11791
Longitude: -121.6377
APN: 817-32-043
Past Use: NONE SPECIFIED
Potential COC: * HALOGENATED SOLVENTS * ACID SOLUTION 2>PH WITH METALS Lead
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 817-32-043
Alias Type: APN
Alias Name: 43340081
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 07/01/1991
Comments: Though the operation process and waste handling practices at this site do not appear to be hazardous to human health and/or the environment, no verification has been conducted. The EPA's FIT program did not conduct a site reconnaissance visit to verify the facts. This fenced facility comprised of a single 20,000 sq ft warehouse building and asphalt pavement around it, was started in 1978 by James Price. Asco operates a business for sheet metal fabrication and servicing & installation of residential air conditioning units. Asco's operations involve a small quantity of hydro-chloric acid (HCL), R-22 freon and generates a lot of lead scraps.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASCO AIR CONDITIONING (Continued)

1000483007

The site was suspected to be potential source of high levels of methylene chloride in site soils of Olin Corp., an adjacent site. Both a history of chemical usage and waste disposal practice at asco have proved asco to be harmless in the matter. Asco's location, process or waste management practice also do not appear to have potential of propagatin contami- nation through groundwater, surface water, air or contact routes. The site is currently under the oversight of the city of Morgan Hill Fire Depart- ment with no involvement of the Regional Water Quality control Board (RWQCB) or the Department.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: BP01
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.114988
Longitude: -121.635276

Region: SANTA CLARA
PE#: 2206
Program Description: GENERATES 5 TO <25 TONS/YR
Latitude: 37.114988
Longitude: -121.635276

G23
WNW
1/8-1/4
0.174 mi.
918 ft.

ASCO AIR CONDITIONING
16250 RAILROAD AVENUE
MORGAN HILL, CA 95037

Site 2 of 2 in cluster G

SEMS-ARCHIVE 1003879474
CAD983566142

Relative:
Higher

SEMS-ARCHIVE:

Site ID: 903707
EPA ID: CAD983566142
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Actual:
334 ft.

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0903707
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13286724.00000
Person ID: 13003854.00000

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASCO AIR CONDITIONING (Continued)**1003879474**

Contact Sequence ID: 13292319.00000
Person ID: 13003858.00000

Contact Sequence ID: 13298177.00000
Person ID: 13004003.00000

CERCLIS-NFRAP Assessment History:

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 02/14/91
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 02/14/91
Priority Level: Not reported

Action: DISCOVERY
Date Started: / /
Date Completed: 02/16/90
Priority Level: Not reported

H24
West
1/8-1/4
0.175 mi.
925 ft.

OAKLEY PLYWOOD
375 TENNANT AVE
MORGAN HILL, CA 95037

Site 1 of 3 in cluster H

LUST
SWEEPS UST
CA FID UST

S101625251
N/A

Relative:
Higher

LUST SANTA CLARA:

Region: SANTA CLARA
SCVWD ID: 09S3E27N01F
Date Closed: 08/25/1993
EDR Link ID: 09S3E27N01F

Actual:
332 ft.

SWEEPS UST:

Status: Not reported
Comp Number: 1040
Number: Not reported
Board Of Equalization: 44-025924
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-004-001040-000001
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: 2

Status: Not reported
Comp Number: 1040
Number: Not reported
Board Of Equalization: 44-025924
Referral Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OAKLEY PLYWOOD (Continued)

S101625251

Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-004-001040-000002
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 1040
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 49-000-001040-000001
Tank Status: A
Capacity: 2000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 2

Status: Active
Comp Number: 1040
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 49-000-001040-000002
Tank Status: A
Capacity: 2000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

CA FID UST:

Facility ID: 43001816
Regulated By: UTNKA
Regulated ID: 00001040
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4082275152
Mail To: Not reported
Mailing Address: 375 TENNANT AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: MORGAN HILL 95037

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OAKLEY PLYWOOD (Continued)**S101625251**

Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 43001816
Regulated By: UTKNI
Regulated ID: 00001040
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4082275152
Mail To: Not reported
Mailing Address: 375 TENNANT AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: MORGAN HILL 95037
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

H25
West
1/8-1/4
0.175 mi.
925 ft.

OAKLEY PLYWOOD
375 TENNANT AVE
MORGAN HILL, CA 95037

Site 2 of 3 in cluster H

HIST UST **U001601593**
N/A

Relative:
Higher

HIST UST:

Actual:
332 ft.

File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000001040
Facility Type: Other
Other Type: DISTRIBUTOR
Contact Name: D. HERNANDEZ
Telephone: 4082275152
Owner Name: SOUTHERN PACIFIC LAND COMPANY
Owner Address: 201 MISSION STREET
Owner City,St,Zip: SAN FRANCISCO, CA 94105
Total Tanks: 0002

Tank Num: 001
Container Num: 0000000001
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 02
Year Installed: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OAKLEY PLYWOOD (Continued)**U001601593**

Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual

H26
West
1/8-1/4
0.175 mi.
925 ft.

TM COBB COMPANY
375 TENNANT AVE
MORGAN HILL, CA 95037

Site 3 of 3 in cluster H

LUST
HIST LUST
HIST UST

S103881429
N/A

Relative:
Higher

LUST:

Actual:
332 ft.

Region: STATE
Global Id: T0608500010
Latitude: 37.1160984196938
Longitude: -121.63768529892
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/25/1993
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: 2114
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0608500010
Contact Type: Regional Board Caseworker
Contact Name: RB3 STAFF
Organization Name: CENTRAL COAST RWQCB (REGION 3)
Address: 895 AEROVISTA PL, SUITE 101
City: SAN LUIS OBISPO
Email: centralcoast@waterboards.ca.gov
Phone Number: 8055493147

Global Id: T0608500010
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:

Global Id: T0608500010
Status: Completed - Case Closed
Status Date: 08/25/1993

Global Id: T0608500010
Status: Open - Case Begin Date

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TM COBB COMPANY (Continued)

S103881429

Status Date: 01/01/1991

Regulatory Activities:

Global Id: T0608500010
Action Type: Other
Date: 01/01/1991
Action: Leak Reported

Global Id: T0608500010
Action Type: ENFORCEMENT
Date: 08/25/1993
Action: Closure/No Further Action Letter

Global Id: T0608500010
Action Type: RESPONSE
Date: 07/04/1993
Action: Other Report / Document

LUST REG 3:

Region: 3
Regional Board: Central Coast Region
Facility County: Santa Clara
Global ID: T0608500010
Status: Case Closed
Case Number: 2114
Local Case Num: 09S3E27N01f
Case Type: S
Substance: 0
Quantity: Not reported
Abatement Method: Not reported
Leak Source: Not reported
Leak Cause: Not reported
How Stopped: Not reported
How Discovered: Not reported
Release Date: 01/01/1991
Discovered Date: Not reported
Enter Date: / /
Stop Date: Not reported
Review Date: / /
Enforce Date: Not reported
Close Date: 8/25/93
Enforcement Type: Not reported
Responsible Party: Not reported
RP Address: Not reported
Contact: Not reported
Cross Street: Not reported
Local Agency: 43099L
Lead Agency: Local Agency
Staff Initials: JHM
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: / /
Remedial Plan: Not reported
Remedial Action: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TM COBB COMPANY (Continued)

S103881429

Monitoring: / /
Pilot Program: LUST
Interim Action: Not reported
Funding: Not reported
MTBE Class: *
Max MTBE Grnd Wtr: Not reported
Max MTBE Soil: Not reported
Max MTBE Data: / /
MTBE Tested: NRQ
Lat/Long: 37.1158562 / -121.6371689
Soil Qualifier: Not reported
Grnd Wtr Qualifier: Not reported
Mtbe Concentratn: 0
Mtbe Fuel: 0
Org Name: Not reported
Basin Plan: Not reported
Beneficial: MUN
Priority: Not reported
UST Cleanup Fund ID: Not reported
Suspended: Not reported
Operator: Not reported
Water System: CITY OF MORGAN HILL
Well Name: TENNANT WELL
Distance From Well: 0
Assigned Name: 09S/03E-34D06 M
Summary: Not reported

HIST LUST SANTA CLARA:

Region: SANTA CLARA
Region Code: 3
SCVWD ID: 09S3E27N01
Oversite Agency: SCVWD
Date Listed: 1992-07-09 00:00:00
Closed Date: 1993-08-25 00:00:00

HIST UST:

File Number: 0002091B
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002091B.pdf>
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TM COBB COMPANY (Continued)**S103881429**

Leak Detection: Not reported

[Click here for Geo Tracker PDF:](#)

I27
SSW
1/8-1/4
0.195 mi.
1032 ft.
ANAEROBE SYSTEMS
15906 CONCORD CL
MORGAN HILL, CA 95037
Site 1 of 2 in cluster I

CUPA Listings **S112345302**
N/A

Relative:
Lower

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: BP01

Actual:
326 ft.

Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.125370
Longitude: -121.661339

Region: SANTA CLARA
PE#: 2202
Program Description: GENERATES < 100 KG/YR
Latitude: 37.125370
Longitude: -121.661339

F28
NNW
1/8-1/4
0.200 mi.
1055 ft.
B A S PRECISION SHEET METAL
16155 CAPUTO DRIVE
MORGAN HILL, CA 95037
Site 2 of 4 in cluster F

CUPA Listings **S106826575**
EMI **N/A**

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2201

Actual:
337 ft.

Program Description: GENERATES WASTE OIL ONLY
Latitude: 37.119821
Longitude: -121.635827

EMI:

Year: 1987
County Code: 43
Air Basin: SF
Facility ID: 2407
Air District Name: BA
SIC Code: 3491
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 7
Reactive Organic Gases Tons/Yr: 4
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

F29	BAS PRECISION SHEETMETAL INC	RCRA NonGen / NLR	1000128319
NNW	16155 CAPUTO DR	FINDS	CAD981981558
1/8-1/4	MORGAN HILL, CA 95037	ECHO	

0.200 mi.
1055 ft.

Site 3 of 4 in cluster F

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 04/07/1987

Facility name: BAS PRECISION SHEETMETAL INC

Facility address: 16155 CAPUTO DR

MORGAN HILL, CA 95037

EPA ID: CAD981981558

Mailing address: CAPUTO DR

MORGAN HILL, CA 95037

Contact: ENVIRONMENTAL MANAGER

Contact address: 16155 CAPUTO DR

MORGAN HILL, CA 95037

Contact country: US

Contact telephone: (408) 779-7713

Contact email: Not reported

EPA Region: 09

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: GARY BLODGETT

Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported

Owner/operator telephone: (415) 555-1212

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: Not reported

Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED

Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported

Owner/operator telephone: (415) 555-1212

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: Not reported

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. Importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: No

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Furnace exemption: No

Used oil fuel burner: No

Used oil processor: No

User oil refiner: No

Used oil fuel marketer to burner: No

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BAS PRECISION SHEETMETAL INC (Continued)

1000128319

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002763741

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000128319
Registry ID: 110002763741
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002763741>

J30
South
1/8-1/4
0.207 mi.
1093 ft.

U-SAVE ROCKERY
15760 RAILROAD
MORGAN HILL, CA 95037

LUST
HIST CORTESE
S110060920
N/A

Site 1 of 3 in cluster J

Relative:
Lower

LUST:

Actual:
326 ft.

Region: STATE
Global Id: T0608502174
Latitude: 37.113902
Longitude: -121.632577
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/13/1987
Lead Agency: CENTRAL COAST RWQCB (REGION 3)
Case Worker: RB
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: 463
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0608502174
Contact Type: Regional Board Caseworker
Contact Name: RB3 STAFF
Organization Name: CENTRAL COAST RWQCB (REGION 3)

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

U-SAVE ROCKERY (Continued)

S110060920

Address: 895 AEROVISTA PL, SUITE 101
City: SAN LUIS OBISPO
Email: centralcoast@waterboards.ca.gov
Phone Number: 8055493147

Global Id: T0608502174
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:

Global Id: T0608502174
Status: Completed - Case Closed
Status Date: 08/13/1987

Global Id: T0608502174
Status: Open - Case Begin Date
Status Date: 02/20/1987

Regulatory Activities:

Global Id: T0608502174
Action Type: Other
Date: 03/05/1987
Action: Leak Reported

Global Id: T0608502174
Action Type: Other
Date: 02/20/1987
Action: Leak Discovery

Global Id: T0608502174
Action Type: Other
Date: 02/20/1987
Action: Leak Stopped

HIST CORTESE:

Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 463

J31
South
1/8-1/4
0.207 mi.
1093 ft.

FORMER JOHNSON LUMBER COMPANY YARD
15770 RAILROAD AVE
MORGAN HILL, CA 95020

SWEEPS UST **S106926332**
N/A

Site 2 of 3 in cluster J

Relative:
Lower

SWEEPS UST:
Status: Not reported
Comp Number: 116

Actual:
326 ft.

Number: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER JOHNSON LUMBER COMPANY YARD (Continued)**S106926332**

Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-000-000116-000001
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: 1

J32
South
1/8-1/4
0.207 mi.
1093 ft.

U-SAVE ROCKERY OF MORGAN HILL
15760 RAILROAD AVE
MORGAN HILL, CA 95037

HIST UST **U001601631**
CHMIRS **N/A**

Site 3 of 3 in cluster J

Relative:
Lower

HIST UST:

File Number: 000209E3
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000209E3.pdf>

Actual:
326 ft.

Region: STATE
Facility ID: 00000052694
Facility Type: Other
Other Type: LANDSCAPE SUPPLY
Contact Name: RAY BURT
Telephone: 4087798441
Owner Name: U-SAVE ROCKERY OF MORGAN HILL
Owner Address: 15760 RAILROAD AVE
Owner City,St,Zip: MORGAN HILL, CA 95037
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1979
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor

Click here for Geo Tracker PDF:

CHMIRS:

OES Incident Number: 7-4120
OES notification: 10/16/1997
OES Date: Not reported
OES Time: Not reported
Date Completed: Not reported
Property Use: Not reported
Agency Id Number: Not reported
Agency Incident Number: Not reported
Time Notified: Not reported
Time Completed: Not reported
Surrounding Area: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

U-SAVE ROCKERY OF MORGAN HILL (Continued)

U001601631

Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agency Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	1997
Agency:	PG&E
Incident Date:	7/11/1997 12:00:00 AM
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Road
E Date:	Not reported
Substance:	Transformer Oil, non PCB
Gallons:	40
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Car hit a pole, knocked transformer down

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

K33
NW
1/8-1/4
0.207 mi.
1095 ft.

B A S PRECISION SHEET METAL
16170 JACQUELINE COURT
MORGAN HILL, CA 95037

CUPA Listings
EMI

S105936630
N/A

Site 1 of 3 in cluster K

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2205

Actual:
336 ft.

Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.119611
Longitude: -121.636669

EMI:

Year: 1990
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 1761
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 13
Reactive Organic Gases Tons/Yr: 12
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr: 0

Year: 1993
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 1761
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 10
Reactive Organic Gases Tons/Yr: 10
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr: 0

Year: 1995
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 1761
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 14
Reactive Organic Gases Tons/Yr: 14

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B A S PRECISION SHEET METAL (Continued)

S105936630

Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 1996
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 1761
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 11
Reactive Organic Gases Tons/Yr: 11
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 1997
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 1761
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 11
Reactive Organic Gases Tons/Yr: 11
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 1998
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 1761
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 4
Reactive Organic Gases Tons/Yr: 4
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B A S PRECISION SHEET METAL (Continued)**S105936630**

Year: 1999
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 3471
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 2
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr: 0

Year: 2000
County Code: 43
Air Basin: SF
Facility ID: 5252
Air District Name: BA
SIC Code: 3471
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 2
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr: 0

K34
NW
1/8-1/4
0.207 mi.
1095 ft.

BAS PRECISION SHEET METAL INC
16170 JACQUELINE CT.
MORGAN HILL, CA 95037
Site 2 of 3 in cluster K

RCRA-SQG **1000597036**
CAD983610304

Relative:
Higher

RCRA-SQG:

Date form received by agency: 03/04/1999

Facility name: BAS PRECISION SHEET METAL INC

Site name: B.A.S. PRECISION SHEET METAL

Facility address: 16170 JACQUELINE CT.
MORGAN HILL, CA 95037

EPA ID: CAD983610304

Contact: PATRICK DIRKS

Contact address: Not reported
Not reported

Contact country: US

Contact telephone: (408) 779-7713

Telephone ext.: 19

Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous
waste during any calendar month and accumulates less than 6000 kg of

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BAS PRECISION SHEET METAL INC (Continued)**1000597036**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 09/01/1996
Site name: BAS PRECISION SHEET METAL INC
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: BAS PRECISION SHEET METAL INC
Classification: Small Quantity Generator

Date form received by agency: 05/14/1996
Site name: B.A.S. PRECISION SHEET METAL
Classification: Large Quantity Generator

Date form received by agency: 03/23/1994
Site name: B.A.S. PRECISION SHEET METAL
Classification: Large Quantity Generator

Date form received by agency: 10/30/1991
Site name: BAS PRECISION SHEET METAL INC
Classification: Small Quantity Generator

Violation Status: No violations found

K35 **BAS PRECISION SHEET METAL, INC.**
NW **16170 JAQUELINE CT**
1/8-1/4 **MORGAN HILL, CA 95037**
0.207 mi.
1095 ft. **Site 3 of 3 in cluster K**

ENVIROSTOR **S108741781**
N/A

Relative:
Higher

ENVIROSTOR:
Facility ID: 71003139
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported

Actual:
336 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BAS PRECISION SHEET METAL, INC. (Continued)

S108741781

NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Berkeley
Assembly: 30
Senate: 17
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.11968
Longitude: -121.6366
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD983610304
Alias Type: EPA Identification Number
Alias Name: 110000785348
Alias Type: EPA (FRS #)
Alias Name: 71003139
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

I36
SSW
1/8-1/4
0.220 mi.
1163 ft.

MELVIN C DILL CO, INC
15940 CONCORD CIRCLE
MORGAN HILL, CA 95037

Site 2 of 2 in cluster I

RCRA NonGen / NLR
FINDS
ECHO

1000433229
CAD981166515

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 12/13/1985
Facility name: MELVIN C DILL CO, INC
Facility address: 15940 CONCORD CIRCLE
MORGAN HILL, CA 95037
EPA ID: CAD981166515
Mailing address: P O BOX 1319
MORGAN HILL, CA 95037
Contact: ENVIRONMENTAL MANAGER

Actual:
328 ft.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MELVIN C DILL CO, INC (Continued)

1000433229

Contact address: 15940 CONCORD CIRCLE
MORGAN HILL, CA 95037
Contact country: US
Contact telephone: (408) 778-5647
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: MELVIN C DILL
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002680162

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MELVIN C DILL CO, INC (Continued)**1000433229**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000433229
Registry ID: 110002680162
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002680162>

F37
North
1/8-1/4
0.220 mi.
1164 ft.

PACIFIC GAS & ELECTRIC
16160 CAPUTO DR
MORGAN HILL, CA 95037

CUPA Listings
HAZNET

S112945092
N/A

Site 4 of 4 in cluster F

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: BP01
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: Not reported
Longitude: Not reported

Actual:
338 ft.

Region: SANTA CLARA
PE#: 2201
Program Description: GENERATES WASTE OIL ONLY
Latitude: Not reported
Longitude: Not reported

HAZNET:

envid: S112945092
Year: 2005
GEPAID: CAC002589694
Contact: RALPH MCCULLERS
Telephone: 4083652268
Mailing Name: Not reported
Mailing Address: 6402 SANTA TERESA BLVD
Mailing City,St,Zip: SAN JOSE, CA 95119
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.83
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

L38
West
1/8-1/4
0.229 mi.
1209 ft.

AMERICAN SCISSOR LIFT
16120 VINEYARD BL
MORGAN HILL, CA 95037

CUPA Listings **S118289248**
N/A

Site 1 of 3 in cluster L

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA

PE#: 2205

Program Description: GENERATES 100 KG YR TO <5 TONS/YR

Latitude: 37.116596

Longitude: -121.638648

Actual:
332 ft.

Region: SANTA CLARA

PE#: BP02

Program Description: HMBP FACILITY, 4-6 CHEMICALS

Latitude: 37.116596

Longitude: -121.638648

39
West
1/8-1/4
0.237 mi.
1251 ft.

ALTANOVA MANUFACTURING
16170 VINEYARD BL 160/ 170
MORGAN HILL, CA 95037

CUPA Listings **S113080504**
HAZNET **N/A**
PEST LIC

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA

PE#: BP01

Program Description: HMBP FACILITY, 1-3 CHEMICALS

Latitude: 37.116772

Longitude: -121.638979

Actual:
333 ft.

Region: SANTA CLARA

PE#: 2202

Program Description: GENERATES < 100 KG/YR

Latitude: 37.116772

Longitude: -121.638979

HAZNET:

envid: S113080504

Year: 2004

GEPAID: CAL000146414

Contact: SCOTT MALLINSON/DEPOT MGR

Telephone: 4087827696

Mailing Name: Not reported

Mailing Address: 2350 BERING DR

Mailing City,St,Zip: SAN JOSE, CA 951311121

Gen County: Not reported

TSD EPA ID: CAD009452657

TSD County: Not reported

Waste Category: Laboratory waste chemicals

Disposal Method: Recycler

Tons: 0.11

Cat Decode: Not reported

Method Decode: Not reported

Facility County: Santa Clara

envid: S113080504

Year: 2004

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ALTANOVA MANUFACTURING (Continued)

S113080504

GEPAID: CAL000146414
 Contact: SCOTT MALLINSON/DEPOT MGR
 Telephone: 4087827696
 Mailing Name: Not reported
 Mailing Address: 2350 BERING DR
 Mailing City,St,Zip: SAN JOSE, CA 951311121
 Gen County: Not reported
 TSD EPA ID: CAD009452657
 TSD County: Not reported
 Waste Category: Laboratory waste chemicals
 Disposal Method: Recycler
 Tons: 0.11
 Cat Decode: Not reported
 Method Decode: Not reported
 Facility County: Santa Clara

envid: S113080504
 Year: 2004
 GEPAID: CAL000146414
 Contact: SCOTT MALLINSON/DEPOT MGR
 Telephone: 4087827696
 Mailing Name: Not reported
 Mailing Address: 2350 BERING DR
 Mailing City,St,Zip: SAN JOSE, CA 951311121
 Gen County: Not reported
 TSD EPA ID: CAD982444481
 TSD County: Not reported
 Waste Category: Unspecified oil-containing waste
 Disposal Method: Not reported
 Tons: 1.37
 Cat Decode: Not reported
 Method Decode: Not reported
 Facility County: Santa Clara

envid: S113080504
 Year: 2004
 GEPAID: CAL000146414
 Contact: SCOTT MALLINSON/DEPOT MGR
 Telephone: 4087827696
 Mailing Name: Not reported
 Mailing Address: 2350 BERING DR
 Mailing City,St,Zip: SAN JOSE, CA 951311121
 Gen County: Not reported
 TSD EPA ID: CAD982444481
 TSD County: Not reported
 Waste Category: Unspecified oil-containing waste
 Disposal Method: Not reported
 Tons: 1.37
 Cat Decode: Not reported
 Method Decode: Not reported
 Facility County: Santa Clara

envid: S113080504
 Year: 2004
 GEPAID: CAL000146414
 Contact: SCOTT MALLINSON/DEPOT MGR
 Telephone: 4087827696

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ALTANOVA MANUFACTURING (Continued)**S113080504**

Mailing Name: Not reported
Mailing Address: 2350 BERING DR
Mailing City,St,Zip: SAN JOSE, CA 951311121
Gen County: Not reported
TSD EPA ID: CAD009452657
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Recycler
Tons: 0.3
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

[Click this hyperlink](#) while viewing on your computer to access
45 additional CA_HAZNET: record(s) in the EDR Site Report.

PEST LIC:

Facility Type: QAC
Categories: AB
License No: 137755
Issued or Renewed Date: 07/14/2016
Expiration Date: 12/31/2017

Facility Type: QAC
Categories: AB
License No: 139740
Issued or Renewed Date: 01/01/2017
Expiration Date: 12/31/2018

40
NNW
1/8-1/4
0.240 mi.
1269 ft.

C & M AUTO SERVICE INC
16169 CAPUTO DR
MORGAN HILL, CA 95037

CUPA Listings **S112345467**
N/A

Relative:
Higher

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.119661
Longitude: -121.635421

Actual:
338 ft.

Region: SANTA CLARA
PE#: BP02
Program Description: HMBP FACILITY, 4-6 CHEMICALS
Latitude: 37.119661
Longitude: -121.635421

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

L41
West
1/8-1/4
0.249 mi.
1314 ft.

AT&T MOBILITY - MONTEREY HIGHWAY (USID47392)
16170 VINEYARD BL
MORGAN HILL, CA 95037

Site 2 of 3 in cluster L

CUPA Listings **S120049934**
N/A

Relative: CUPA SANTA CLARA:
Higher Region: SANTA CLARA
PE#: BP01
Actual: Program Description: HMBP FACILITY, 1-3 CHEMICALS
333 ft. Latitude: Not reported
Longitude: Not reported

L42
WSW
1/4-1/2
0.257 mi.
1355 ft.

UNAXIS MATERIALS, INC./CONTRAVES, INC.
16035 VINEYARD BOULEVARD
MORGAN HILL, CA 95037

Site 3 of 3 in cluster L

ENVIROSTOR **S108742043**
CUPA Listings **N/A**

Relative: ENVIROSTOR:
Higher Facility ID: 71002906
Status: No Further Action
Actual: Status Date: 06/27/2014
331 ft. Site Code: 550004
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: 0.5
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Mark Piros
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Assembly: 30
Senate: 17
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.11581
Longitude: -121.6390
APN: NONE SPECIFIED
Past Use: MANUFACTURING - METAL
Potential COC: TPH-MOTOR OIL
Confirmed COC: TPH-MOTOR OIL
Potential Description: SOIL
Alias Name: CAD981665532
Alias Type: EPA Identification Number
Alias Name: 550004
Alias Type: Project Code (Site Code)
Alias Name: 71002906
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/25/2006
Comments: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNAXIS MATERIALS, INC./CONTRAVES, INC. (Continued)

S108742043

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 01/14/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 10/27/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase I Verification
Completed Date: 01/14/2004
Comments: Inspection report sent on 1/14/2004

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Agreement
Completed Date: 09/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 10/14/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * LUC Inspection Complete
Completed Date: 01/30/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Agreement
Completed Date: 09/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Acknowledgement of Satisfaction
Completed Date: 05/14/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedy Selection and Statement of Basis
Completed Date: 12/30/2007
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNAXIS MATERIALS, INC./CONTRAVES, INC. (Continued)**S108742043**

Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CUPA SANTA CLARA:

Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.115338
Longitude: -121.638375

Region: SANTA CLARA
PE#: BP01
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.115338
Longitude: -121.638375

M43
WSW
1/4-1/2
0.280 mi.
1479 ft.

DEMETRON INC
235 TENNANT AVE
MORGAN HILL, CA 95037

Site 1 of 2 in cluster M

SEMS-ARCHIVE
RCRA NonGen / NLR
FINDS
ECHO

1000223906
CAT080029457

Relative:
Lower

SEMS-ARCHIVE:
Site ID: 902697
EPA ID: CAT080029457
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Actual:
330 ft.

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0902697
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13288610.00000
Person ID: 13003854.00000

Contact Sequence ID: 13294205.00000
Person ID: 13003858.00000

Contact Sequence ID: 13300063.00000
Person ID: 13004003.00000

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: / /
Date Completed: 02/01/81
Priority Level: Not reported

Action: ARCHIVE SITE

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DEMETRON INC (Continued)

1000223906

Date Started: / /
Date Completed: 11/01/87
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: 01/01/86
Date Completed: 11/01/87
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

RCRA NonGen / NLR:

Date form received by agency: 02/04/1981
Facility name: DEMETRON INC
Facility address: 235 TENNANT AVE
MORGAN HILL, CA 95037
EPA ID: CAT080029457
Mailing address: PO BOX 1450
MORGAN HILL, CA 95037
Contact: LARRY HAIMOWITZ
Contact address: 16035 VINEYARD BLVD
MORGAN HILL, CA 95037
Contact country: US
Contact telephone: (408) 779-0636
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: DEMETRON GMBH HANAU GERMANY
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DEMETRON INC (Continued)

1000223906

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/04/1981
Site name: DEMETRON INC
Classification: Not a generator, verified

Violation Status: No violations found

FINDS:

Registry ID: 110002955295

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000223906
Registry ID: 110002955295
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002955295>

M44
WSW
1/4-1/2
0.280 mi.
1479 ft.

JACKSON FAMILY TRUST
235 TENNANT AVENUE
MORGAN HILL, CA 95037

ENVIROSTOR S110493952
N/A

Site 2 of 2 in cluster M

Relative:
Lower

ENVIROSTOR:

Facility ID: 71002096
Status: Certified
Status Date: 05/13/2014
Site Code: 550495
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: 1.14
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Robert Senga
Supervisor: Robert Senga
Division Branch: Cleanup Cypress

Actual:
330 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JACKSON FAMILY TRUST (Continued)

S110493952

Assembly: 30
Senate: 17
Special Program: Voluntary Cleanup Program
Restricted Use: YES
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.11513
Longitude: -121.6392
APN: 817-04-030
Past Use: NONE
Potential COC: TPH-diesel TPH-gas TPH-JET FUEL TPH-MOTOR OIL
Confirmed COC: TPH-diesel
Potential Description: SOIL
Alias Name: 817-04-030
Alias Type: APN
Alias Name: 540033
Alias Type: Project Code (Site Code)
Alias Name: 550495
Alias Type: Project Code (Site Code)
Alias Name: 71002096
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Oversight
Completed Date: 10/07/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Release/Rescission
Completed Date: 03/12/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 02/27/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/04/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 05/13/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Agreement
Completed Date: 06/28/2013
Comments: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JACKSON FAMILY TRUST (Continued)

S110493952

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 09/23/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 11/06/2013
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

45
WNW
1/4-1/2
0.281 mi.
1482 ft.

GREEN SOUTH BAY CORPORATION/WESTSIDE RECYCLING
16290 RAILROAD AVE
MORGAN HILL, CA 95037

SWRCY **S107138343**
CUPA Listings **N/A**

Relative:
Higher

SWRCY:

Actual:
336 ft.

Reg Id: 132080
Cert Id: RC132080.001
Mailing Address: 390 James Bowie Ct
Mailing City: Alamo
Mailing State: CA
Mailing Zip Code: 94507
Website: Not reported
Email: bemam12@gmail.com
Phone Number: (408) 782-2555
Grand Father: N
Rural: N
Operation Begin Date: 09/30/2010
Aluminium: Y
Glass: Y
Plastic: Y
Bimetal: Y
Agency: N/A
Monday Hours Of Operation: 8:30 am - 4:30 pm
Tuesday Hours Of Operation: 8:30 am - 4:30 pm
Wednesday Hours Of Operation: 8:30 am - 4:30 pm
Thursday Hours Of Operation: 8:30 am - 4:30 pm
Friday Hours Of Operation: 8:30 am - 4:30 pm
Saturday Hours Of Operation: 9:00 am - 4:30 pm
Sunday Hours Of Operation: CLOSED
Organization ID: 64596
Organization Name: Green South Bay Corporation

CUPA SANTA CLARA:

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GREEN SOUTH BAY CORPORATION/WESTSIDE RECYCLING (Continued)

S107138343

Region: SANTA CLARA
PE#: BP01
Program Description: HMBP FACILITY, 1-3 CHEMICALS
Latitude: 37.119065
Longitude: -121.639449

Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.119065
Longitude: -121.639449

N46
WNW
1/4-1/2
0.391 mi.
2067 ft.

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACIL
16470 VINEYARD BOULEVARD
MORGAN HILL, CA 95037

SLIC S108746824
ENF N/A

Site 1 of 2 in cluster N

Relative:
Higher

SLIC:

Actual:
337 ft.

Region: STATE
Facility Status: **Open - Assessment & Interim Remedial Action**
Status Date: 03/17/2017
Global Id: SL0608727312
Lead Agency: CENTRAL COAST RWQCB (REGION 3)
Lead Agency Case Number: Not reported
Latitude: 37.120156449
Longitude: -121.641487342
Case Type: Cleanup Program Site
Case Worker: DT
Local Agency: Not reported
RB Case Number: s296
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: 1,1,1-Trichloroethane (TCA), Other Insecticides / Pesticide / Fumigants / Herbicides, Toxaphene
Site History: From 1958 to 1986, Castle Vegtech, Inc., owned or controlled by Tom Castle, operated a pesticide formulation, sales, and application business at 16470 Vineyard Boulevard (formerly 190 Mast Street), Morgan Hill. In the course doing business, Castle Vegtech allowed pesticide related wastes to leak or spill into or onto the ground, which have contaminated soils and groundwater beneath the site and the surrounding area. Regional Board opened this case in 1987. Castle Vegtech (CV) was initially identified and named as the responsible party. In October 1988, during a public hearing for an ACL imposed to CV, Regional Board staff learned that Jamina Investments, a General Partnership of Tom Castles three children, acquired the CV property on April 4, 1986. Since then, both CV and Jamina Investments (Jamina) had been identified and named as the responsible parties until 2001, when CV property was sold to Alan Hui. After CV and Jamina sold the property in 2001, all correspondences from the Regional Board to the RPs have been directed to Michael Mangano, who was Alan Hui's initial representative and apparently later became the current owner of the CV property. Since opening this case, the Regional Board has issued several Cleanup or Abatement Orders (CAO) as well as several ACLs to CV and Jamina. After the public hearing for the first ACL in October 1988, the Regional Board raised the staff recommended ACL amount of \$6,000 to \$25,000. On February 7, 1989, the Regional Board issued the first CAO, No. 89-66, to CV and Jamina, requiring delineation and

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)

S108746824

remediation of soil and groundwater at the site. To date, three CAOs (No.s 92-104, 93-111, and 96-63), one Settlement Agreement between the Regional Board and CV responsible parties, including CV, Jamina, James A. Castle, Michael C. Castle, and Nancy Buchanan (Tom Castles daughter), a General NPDES Permit Order, and a groundwater Monitoring and Reporting Program Order are in effect (see attached Active Orders for CV). All of these existing orders from the Regional Board were issued to CV and Jamina. In 1997, a Settlement Agreement was reached between the RPs and the Regional Board to resolve a total of \$85,000 outstanding balance of two previous ACL orders (No. 92-78 and 92-83) adopted by the Regional Board in June 1992. The Settlement Agreement requires Castle Vegtech, Jamina Investments, James A. Castle, Michael C. Castle, and Nancy Buchanan to pay \$85,000 plus 10% interest from May 8, 1997, if the Executive Officer notifies the Castle Family that he has found that the cleanup of the property is not proceeding in accordance with the requirements and time schedules in Cleanup or Abatement Order No. 96-63, or any then current cleanup order(s) issued by the Regional Board, or is not proceeding to the Executive Officers satisfaction. During the following years until early 2001, the Castle Family generally complied with the Regional Boards orders and requirements. In a letter dated March 22, 2001, Michael Castle informed the staff that CV property was sold to Mr. Alan Hui. Since then, although staff who worked on this case did not, either verbally or in writing, release the CV and Jaminas responsibility for this site, all discussions and requests have been directed to Michael Mangano who was initially acting as Alan Huis representative and at some unknown later time became the owner.

[Click here to access the California GeoTracker records for this facility:](#)

ENF:

Region:	3
Facility Id:	213502
Agency Name:	Not reported
Place Type:	Service/Commercial
Place Subtype:	Service/Commercial Site, NEC
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.119915
Place Longitude:	-121.641827
SIC Code 1:	2879
SIC Desc 1:	Pesticides and Agricultural Chemicals, NEC
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)

S108746824

Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	TANKS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	382275
Region:	3
Order / Resolution Number:	Not reported
Enforcement Action Type:	Settlement - Court Order
Effective Date:	12/21/2010
Adoption/Issuance Date:	12/21/2010
Achieve Date:	Not reported
Termination Date:	10/02/2015
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Court Settlement 12/21/2010 for Jamina Investments
Description:	Santa Clara County Superior Court No. 109CV158833. Court ordered settlement resolving past-due collection of civil liability related to polluted property located at 16495 and 16470 Vineyard Blvd, Morgan Hill, Ca. Collection of liability due per ACL Order 92-78 and Order 92-083 conditionally waived pending compliance with settlement terms. Court deemed ACL Order 94-71 beyond statute of limitations. Final payment due 11/15/2012.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)**S108746824**

Program: SLIC
 Latest Milestone Completion Date: 2014-05-16
 # Of Programs1: 1
 Total Assessment Amount: 40000
 Initial Assessed Amount: 833.409999
 Liability \$ Amount: 40000
 Project \$ Amount: 0
 Liability \$ Paid: 40000
 Project \$ Completed: 0
 Total \$ Paid/Completed Amount: 40000

 Region: 3
 Facility Id: 213502
 Agency Name: Jamina Investments
 Place Type: Service/Commercial
 Place Subtype: Service/Commercial Site, NEC
 Facility Type: Industrial
 Agency Type: Privately-Owned Business
 # Of Agencies: 1
 Place Latitude: 37.119915
 Place Longitude: -121.641827
 SIC Code 1: 2879
 SIC Desc 1: Pesticides and Agricultural Chemicals, NEC
 SIC Code 2: Not reported
 SIC Desc 2: Not reported
 SIC Code 3: Not reported
 SIC Desc 3: Not reported
 NAICS Code 1: Not reported
 NAICS Desc 1: Not reported
 NAICS Code 2: Not reported
 NAICS Desc 2: Not reported
 NAICS Code 3: Not reported
 NAICS Desc 3: Not reported
 # Of Places: 1
 Source Of Facility: Reg Meas
 Design Flow: 0
 Threat To Water Quality: 3
 Complexity: C
 Pretreatment: X - Facility is not a POTW
 Facility Waste Type: Contaminated ground water
 Facility Waste Type 2: Not reported
 Facility Waste Type 3: Not reported
 Facility Waste Type 4: Not reported
 Program: NPDNONMUNIPRCS
 Program Category1: NPDESWW
 Program Category2: NPDESWW
 # Of Programs: 1
 WDID: 3 432021002
 Reg Measure Id: 186257
 Reg Measure Type: Enrollee
 Region: 3
 Order #: 01-134
 Npdes# CA#: CAG993002
 Major-Minor: Not reported
 Npdes Type: Not reported
 Reclamation: N - No
 Dredge Fill Fee: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)

S108746824

301H:	Not reported
Application Fee Amt Received:	2000
Status:	Historical
Status Date:	06/16/2008
Effective Date:	02/10/1995
Expiration/Review Date:	Not reported
Termination Date:	05/19/2006
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	15 - WDRs pending rescission
Direction/Voice:	Passive
Enforcement Id(EID):	304040
Region:	3
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	04/26/2006
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	04/26/2006
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV for Castle Vegtech
Description:	Quarterly report 43 days late as of 6/2/2006
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	3
Facility Id:	213502
Agency Name:	Not reported
Place Type:	Service/Commercial
Place Subtype:	Service/Commercial Site, NEC
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.119915
Place Longitude:	-121.641827
SIC Code 1:	2879
SIC Desc 1:	Pesticides and Agricultural Chemicals, NEC
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)

S108746824

NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	TANKS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	395094
Region:	3
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	02/21/2014
Adoption/Issuance Date:	02/21/2014
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)

S108746824

Status:	Active
Title:	NOV 2/21/14 for Tansy, Castle Vegtech Cleanup Site
Description:	For failure to provide complete workplan addendum by 10/30/13 pursuant to 8/29/13 13267 Order.
Program:	SLIC
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	3
Facility Id:	213502
Agency Name:	Not reported
Place Type:	Service/Commercial
Place Subtype:	Service/Commercial Site, NEC
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	37.119915
Place Longitude:	-121.641827
SIC Code 1:	2879
SIC Desc 1:	Pesticides and Agricultural Chemicals, NEC
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	TANKS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER CASTLE VEGTECH AGRICULTURAL CHEMICALS FACILITY (Continued)**S108746824**

Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	395084
Region:	3
Order / Resolution Number:	Not reported
Enforcement Action Type:	13267 Letter
Effective Date:	08/29/2013
Adoption/Issuance Date:	08/29/2013
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	13267 Order 8/29/13 for Tansy, Castle Vegtech Cleanup Site
Description:	Letter includes outcome of initial workplan discussions and describes requirements to progress toward case closure of Western Property and establish interim pollutant containment strategy for Eastern Property. Tansy Development Inc and Mr. Tansy are required to submit a Workplan Addendum no later than October 30, 2013 to address the requirements described.
Program:	SLIC
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

N47
WNW
1/4-1/2
0.391 mi.
2067 ft.

CASTLE VEGTECH
16470 VINEYARD BLVD.
MORGAN HILL, CA

Site 2 of 2 in cluster N

SLIC **S105619064**
N/A

Relative:
Higher

SLIC REG 3:

Actual:
337 ft.

Region: 3
Leak Site Cross Street: Not reported
Regional Board Case#: s296
Entered Into Database: Not reported
Discovered: Not reported
RB Case In: MANGANO & ASSOCIATES, LIC
Responsible Party: MICHAEL MANGANO
RP Contact: Not reported
RP Phone: Not reported
RP Number: Not reported
RP Address: 901 COMMERCIAL ST. , SUITE 110
RP City,St,Zip: SAN JOSE, CA 95112
Date First Reported: Not reported
Lead Agency: Regional Board
Program Type: SLIC
Facility Status: Remedial Action Plan Underway/Ongoing
Case Type: Other ground water affected
Case Type Undetermined: No
Case Type Soil Impacted: No
Case Type Surface Water: No
Case Type Drinkin Water Well: No
Case Type Drinking Water Aqfr: No
Case Type Other Grnd Wtr: Yes
PCA: 2030002

48
NNE
1/4-1/2
0.454 mi.
2399 ft.

BARRETT AVENUE ELEMENTARY
895 BARRETT AVENUE
MORGAN HILL, CA 95037

ENVIROSTOR **S104567919**
SCH **N/A**

Relative:
Higher

ENVIROSTOR:

Actual:
345 ft.

Facility ID: 43010020
Status: Certified
Status Date: 09/07/2000
Site Code: 204007
Site Type: School Cleanup
Site Type Detailed: School
Acres: 10
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Jose Salcedo
Division Branch: Northern California Schools & Santa Susana
Assembly: 30
Senate: 17
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 37.12358
Longitude: -121.6315

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRETT AVENUE ELEMENTARY (Continued)

S104567919

APN: 817-10-052
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: * Pesticides - Wastes From Production * delta-BHC (delta-HCH Arsenic
DDD DDE DDT Endrin Lead Toxaphene Copper and compounds Dieldrin
Endosulfan Heptachlor epoxide HCH (alpha Tin
Toxaphene Dieldrin
Confirmed COC: Toxaphene Dieldrin
Potential Description: SOIL
Alias Name: BARRETT AVENUE ELEMENTARY
Alias Type: Alternate Name
Alias Name: BARRETT ELEMENTARY SCHOOL/VCA
Alias Type: Alternate Name
Alias Name: MORGAN HILL USD - BARRETT AV. ELEM.
Alias Type: Alternate Name
Alias Name: 817-10-052
Alias Type: APN
Alias Name: 110033617085
Alias Type: EPA (FRS #)
Alias Name: 201278
Alias Type: Project Code (Site Code)
Alias Name: 204007
Alias Type: Project Code (Site Code)
Alias Name: 43010020
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/13/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/17/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 10/20/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/07/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Action Memorandum (if <\$1M)
Completed Date: 06/30/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRETT AVENUE ELEMENTARY (Continued)

S104567919

Completed Date: 06/30/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 10/06/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/17/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 09/07/2000
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Facility ID: 43010020
Site Type: School Cleanup
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 10
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Jose Salcedo
Division Branch: Northern California Schools & Santa Susana
Site Code: 204007
Assembly: 30
Senate: 17
Special Program Status: Not reported
Status: Certified
Status Date: 09/07/2000
Restricted Use: NO
Funding: School District
Latitude: 37.12358
Longitude: -121.6315
APN: 817-10-052
Past Use: AGRICULTURAL - ROW CROPS

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRETT AVENUE ELEMENTARY (Continued)

S104567919

Potential COC: * Pesticides - Wastes From Production, * delta-BHC (delta-HCH, Arsenic, DDD, DDE, DDT, Endrin, Lead, Toxaphene, Copper and compounds, Dieldrin, Endosulfan, Heptachlor epoxide, HCH (alpha, Tin Toxaphene, Dieldrin

Confirmed COC: Toxaphene, Dieldrin

Potential Description: SOIL

Alias Name: BARRETT AVENUE ELEMENTARY

Alias Type: Alternate Name

Alias Name: BARRETT ELEMENTARY SCHOOL/VCA

Alias Type: Alternate Name

Alias Name: MORGAN HILL USD - BARRETT AV. ELEM.

Alias Type: Alternate Name

Alias Name: 817-10-052

Alias Type: APN

Alias Name: 110033617085

Alias Type: EPA (FRS #)

Alias Name: 201278

Alias Type: Project Code (Site Code)

Alias Name: 204007

Alias Type: Project Code (Site Code)

Alias Name: 43010020

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Voluntary Cleanup Agreement

Completed Date: 01/13/2000

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Site Inspections/Visit (Non LUR)

Completed Date: 10/17/1999

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Phase 1

Completed Date: 10/20/1999

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 09/07/2000

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: *Action Memorandum (if <\$1M)

Completed Date: 06/30/2000

Comments: Not reported

Completed Area Name: PROJECT WIDE

Completed Sub Area Name: Not reported

Completed Document Type: * CEQA

Completed Date: 06/30/2000

Comments: Not reported

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BARRETT AVENUE ELEMENTARY (Continued)**S104567919**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 10/06/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/17/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 09/07/2000
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

49
WNW
1/4-1/2
0.489 mi.
2580 ft.

CASTLE A.L. INC
190 MAST
MORGAN HILL, CA 95037

ENVIROSTOR **S100195591**
HIST CORTESE **N/A**

Relative:
Higher

ENVIROSTOR:

Actual:
340 ft.

Facility ID: 43510004
Status: Refer: RWQCB
Status Date: 06/13/1994
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Assembly: 30
Senate: 17
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.12027
Longitude: -121.6427
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CASTLE A.L. INC (Continued)**S100195591**

Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 43510004
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HIST CORTESE:

Region: CORTESE
Facility County Code: 43
Reg By: WBC&D
Reg Id: 3 432021001

50
WSW
1/2-1
0.707 mi.
3734 ft.

COSMO LANE
BEHIND CANDY PARK
MORGAN HILL, CA 93065

Notify 65 S100179393
N/A

Relative:
Lower

NOTIFY 65:

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Actual:
330 ft.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MORGAN HILL	S100714925	JOLEEN WAY GROUNDWATER REMEDIATION	S. END OF JOLEEN WAY	95037	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/08/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 10/16/2017
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 10/16/2017
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 10/16/2017
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 10/16/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017	Source: EPA
Date Data Arrived at EDR: 04/19/2017	Telephone: 800-424-9346
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/21/2017
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017	Source: EPA
Date Data Arrived at EDR: 04/19/2017	Telephone: 800-424-9346
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/28/2017
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016	Source: EPA
Date Data Arrived at EDR: 12/28/2016	Telephone: 800-424-9346
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 08/11/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (415) 495-8895
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 08/11/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (415) 495-8895
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 08/11/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (415) 495-8895
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 08/11/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/28/2016	Telephone: (415) 495-8895
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 08/11/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017	Source: Department of the Navy
Date Data Arrived at EDR: 06/13/2017	Telephone: 843-820-7326
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 08/10/2017
Number of Days to Update: 94	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/28/2017	Telephone: 703-603-0695
Date Made Active in Reports: 06/09/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 101	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/28/2017	Telephone: 703-603-0695
Date Made Active in Reports: 06/09/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 101	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016

Date Data Arrived at EDR: 09/29/2016

Date Made Active in Reports: 11/11/2016

Number of Days to Update: 43

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 06/28/2017

Next Scheduled EDR Contact: 10/09/2017

Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/31/2017

Date Data Arrived at EDR: 08/01/2017

Date Made Active in Reports: 08/15/2017

Number of Days to Update: 14

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 08/01/2017

Next Scheduled EDR Contact: 11/13/2017

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/31/2017

Date Data Arrived at EDR: 08/01/2017

Date Made Active in Reports: 08/15/2017

Number of Days to Update: 14

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 08/01/2017

Next Scheduled EDR Contact: 11/13/2017

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017

Date Data Arrived at EDR: 02/15/2017

Date Made Active in Reports: 05/02/2017

Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 08/17/2017

Next Scheduled EDR Contact: 11/27/2017

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
 Date Data Arrived at EDR: 02/26/2004
 Date Made Active in Reports: 03/24/2004
 Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
 Telephone: 760-776-8943
 Last EDR Contact: 08/01/2011
 Next Scheduled EDR Contact: 11/14/2011
 Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
 Date Data Arrived at EDR: 06/14/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 69

Source: State Water Resources Control Board
 Telephone: see region list
 Last EDR Contact: 09/12/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
 Date Data Arrived at EDR: 04/23/2001
 Date Made Active in Reports: 05/21/2001
 Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
 Telephone: 858-637-5595
 Last EDR Contact: 09/26/2011
 Next Scheduled EDR Contact: 01/09/2012
 Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
 Date Data Arrived at EDR: 02/15/2005
 Date Made Active in Reports: 03/28/2005
 Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
 Telephone: 909-782-4496
 Last EDR Contact: 08/15/2011
 Next Scheduled EDR Contact: 11/28/2011
 Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
 Date Data Arrived at EDR: 06/07/2005
 Date Made Active in Reports: 06/29/2005
 Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
 Telephone: 760-241-7365
 Last EDR Contact: 09/12/2011
 Next Scheduled EDR Contact: 12/26/2011
 Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
 Date Data Arrived at EDR: 09/10/2003
 Date Made Active in Reports: 10/07/2003
 Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
 Telephone: 530-542-5572
 Last EDR Contact: 09/12/2011
 Next Scheduled EDR Contact: 12/26/2011
 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2008
 Date Data Arrived at EDR: 07/22/2008
 Date Made Active in Reports: 07/31/2008
 Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
 Telephone: 916-464-4834
 Last EDR Contact: 07/01/2011
 Next Scheduled EDR Contact: 10/17/2011
 Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
 Date Data Arrived at EDR: 09/07/2004
 Date Made Active in Reports: 10/12/2004
 Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
 Telephone: 213-576-6710
 Last EDR Contact: 09/06/2011
 Next Scheduled EDR Contact: 12/19/2011
 Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
 Date Data Arrived at EDR: 05/19/2003
 Date Made Active in Reports: 06/02/2003
 Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
 Telephone: 805-542-4786
 Last EDR Contact: 07/18/2011
 Next Scheduled EDR Contact: 10/31/2011
 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
 Date Data Arrived at EDR: 10/20/2004
 Date Made Active in Reports: 11/19/2004
 Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
 Telephone: 510-622-2433
 Last EDR Contact: 09/19/2011
 Next Scheduled EDR Contact: 01/02/2012
 Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
 Date Data Arrived at EDR: 02/28/2001
 Date Made Active in Reports: 03/29/2001
 Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
 Telephone: 707-570-3769
 Last EDR Contact: 08/01/2011
 Next Scheduled EDR Contact: 11/14/2011
 Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
 Date Data Arrived at EDR: 01/26/2017
 Date Made Active in Reports: 05/05/2017
 Number of Days to Update: 99

Source: EPA Region 6
 Telephone: 214-665-6597
 Last EDR Contact: 07/27/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
 Date Data Arrived at EDR: 01/27/2017
 Date Made Active in Reports: 05/05/2017
 Number of Days to Update: 98

Source: EPA Region 4
 Telephone: 404-562-8677
 Last EDR Contact: 07/28/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016	Source: EPA Region 7
Date Data Arrived at EDR: 01/26/2017	Telephone: 913-551-7003
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016	Source: EPA, Region 5
Date Data Arrived at EDR: 01/26/2017	Telephone: 312-886-7439
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016	Source: EPA Region 8
Date Data Arrived at EDR: 01/26/2017	Telephone: 303-312-6271
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/26/2017	Telephone: 415-972-3372
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/26/2017	Telephone: 206-553-2857
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016	Source: EPA Region 1
Date Data Arrived at EDR: 01/26/2017	Telephone: 617-918-1313
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/14/2017	Telephone: 866-480-1028
Date Made Active in Reports: 08/23/2017	Last EDR Contact: 09/12/2017
Number of Days to Update: 70	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
 Date Data Arrived at EDR: 04/07/2003
 Date Made Active in Reports: 04/25/2003
 Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
 Telephone: 707-576-2220
 Last EDR Contact: 08/01/2011
 Next Scheduled EDR Contact: 11/14/2011
 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
 Date Data Arrived at EDR: 10/20/2004
 Date Made Active in Reports: 11/19/2004
 Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
 Telephone: 510-286-0457
 Last EDR Contact: 09/19/2011
 Next Scheduled EDR Contact: 01/02/2012
 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
 Date Data Arrived at EDR: 05/18/2006
 Date Made Active in Reports: 06/15/2006
 Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
 Telephone: 805-549-3147
 Last EDR Contact: 07/18/2011
 Next Scheduled EDR Contact: 10/31/2011
 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
 Date Data Arrived at EDR: 11/18/2004
 Date Made Active in Reports: 01/04/2005
 Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
 Telephone: 213-576-6600
 Last EDR Contact: 07/01/2011
 Next Scheduled EDR Contact: 10/17/2011
 Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
 Date Data Arrived at EDR: 04/05/2005
 Date Made Active in Reports: 04/21/2005
 Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
 Telephone: 916-464-3291
 Last EDR Contact: 09/12/2011
 Next Scheduled EDR Contact: 12/26/2011
 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
 Date Data Arrived at EDR: 05/25/2005
 Date Made Active in Reports: 06/16/2005
 Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
 Telephone: 619-241-6583
 Last EDR Contact: 08/15/2011
 Next Scheduled EDR Contact: 11/28/2011
 Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
 Date Data Arrived at EDR: 09/07/2004
 Date Made Active in Reports: 10/12/2004
 Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
 Telephone: 530-542-5574
 Last EDR Contact: 08/15/2011
 Next Scheduled EDR Contact: 11/28/2011
 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
 Date Data Arrived at EDR: 11/29/2004
 Date Made Active in Reports: 01/04/2005
 Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
 Telephone: 760-346-7491
 Last EDR Contact: 08/01/2011
 Next Scheduled EDR Contact: 11/14/2011
 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
 Date Data Arrived at EDR: 04/03/2008
 Date Made Active in Reports: 04/14/2008
 Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
 Telephone: 951-782-3298
 Last EDR Contact: 09/12/2011
 Next Scheduled EDR Contact: 12/26/2011
 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
 Date Data Arrived at EDR: 09/11/2007
 Date Made Active in Reports: 09/28/2007
 Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
 Telephone: 858-467-2980
 Last EDR Contact: 08/08/2011
 Next Scheduled EDR Contact: 11/21/2011
 Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
 Date Data Arrived at EDR: 02/16/2010
 Date Made Active in Reports: 04/12/2010
 Number of Days to Update: 55

Source: FEMA
 Telephone: 202-646-5797
 Last EDR Contact: 07/14/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/12/2017
 Date Data Arrived at EDR: 06/14/2017
 Date Made Active in Reports: 08/23/2017
 Number of Days to Update: 70

Source: SWRCB
 Telephone: 916-341-5851
 Last EDR Contact: 09/12/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 06/21/2017
Number of Days to Update: 69	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017	Source: EPA Region 5
Date Data Arrived at EDR: 01/26/2017	Telephone: 312-886-6136
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016	Source: EPA Region 7
Date Data Arrived at EDR: 01/26/2017	Telephone: 913-551-7003
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations).

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/28/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016	Source: EPA, Region 1
Date Data Arrived at EDR: 01/26/2017	Telephone: 617-918-1313
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/26/2017	Telephone: 206-553-2857
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016	Source: EPA Region 9
Date Data Arrived at EDR: 01/26/2017	Telephone: 415-972-3368
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016	Source: EPA Region 8
Date Data Arrived at EDR: 01/26/2017	Telephone: 303-312-6137
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016	Source: EPA Region 6
Date Data Arrived at EDR: 01/26/2017	Telephone: 214-665-7591
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/27/2017
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/31/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/01/2017	Telephone: 916-323-3400
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 08/01/2017
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/13/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
 Date Data Arrived at EDR: 01/04/2017
 Date Made Active in Reports: 03/02/2017
 Number of Days to Update: 57

Source: State Water Resources Control Board
 Telephone: 916-323-7905
 Last EDR Contact: 06/28/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/19/2017
 Date Data Arrived at EDR: 06/20/2017
 Date Made Active in Reports: 09/15/2017
 Number of Days to Update: 87

Source: Environmental Protection Agency
 Telephone: 202-566-2777
 Last EDR Contact: 06/20/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
 Date Data Arrived at EDR: 04/10/2000
 Date Made Active in Reports: 05/10/2000
 Number of Days to Update: 30

Source: State Water Resources Control Board
 Telephone: 916-227-4448
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
 Date Data Arrived at EDR: 03/14/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 50

Source: Department of Conservation
 Telephone: 916-323-3836
 Last EDR Contact: 09/12/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/30/2017
 Date Data Arrived at EDR: 05/31/2017
 Date Made Active in Reports: 08/15/2017
 Number of Days to Update: 76

Source: Integrated Waste Management Board
 Telephone: 916-341-6422
 Last EDR Contact: 08/10/2017
 Next Scheduled EDR Contact: 11/27/2017
 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
 Date Data Arrived at EDR: 12/03/2007
 Date Made Active in Reports: 01/24/2008
 Number of Days to Update: 52

Source: Environmental Protection Agency
 Telephone: 703-308-8245
 Last EDR Contact: 08/01/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
 Date Data Arrived at EDR: 05/07/2009
 Date Made Active in Reports: 09/21/2009
 Number of Days to Update: 137

Source: EPA, Region 9
 Telephone: 415-947-4219
 Last EDR Contact: 07/24/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
 Date Data Arrived at EDR: 08/09/2004
 Date Made Active in Reports: 09/17/2004
 Number of Days to Update: 39

Source: Environmental Protection Agency
 Telephone: 800-424-9346
 Last EDR Contact: 06/09/2004
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
 Date Data Arrived at EDR: 08/06/2014
 Date Made Active in Reports: 01/29/2015
 Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
 Telephone: 301-443-1452
 Last EDR Contact: 08/29/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017
 Date Data Arrived at EDR: 03/08/2017
 Date Made Active in Reports: 06/09/2017
 Number of Days to Update: 93

Source: Drug Enforcement Administration
 Telephone: 202-307-1000
 Last EDR Contact: 08/30/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/08/2005
 Date Data Arrived at EDR: 08/03/2006
 Date Made Active in Reports: 08/24/2006
 Number of Days to Update: 21

Source: Department of Toxic Substance Control
 Telephone: 916-323-3400
 Last EDR Contact: 02/23/2009
 Next Scheduled EDR Contact: 05/25/2009
 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/31/2017
 Date Data Arrived at EDR: 08/01/2017
 Date Made Active in Reports: 08/15/2017
 Number of Days to Update: 14

Source: Department of Toxic Substances Control
 Telephone: 916-323-3400
 Last EDR Contact: 08/01/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
 Date Data Arrived at EDR: 03/17/2017
 Date Made Active in Reports: 05/10/2017
 Number of Days to Update: 54

Source: Department of Toxic Substances Control
 Telephone: 916-255-6504
 Last EDR Contact: 08/14/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
 Date Data Arrived at EDR: 08/30/1995
 Date Made Active in Reports: 09/26/1995
 Number of Days to Update: 27

Source: State Water Resources Control Board
 Telephone: 916-227-4364
 Last EDR Contact: 01/26/2009
 Next Scheduled EDR Contact: 04/27/2009
 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/09/2017
 Date Data Arrived at EDR: 03/08/2017
 Date Made Active in Reports: 06/09/2017
 Number of Days to Update: 93

Source: Drug Enforcement Administration
 Telephone: 202-307-1000
 Last EDR Contact: 08/30/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/01/1994
 Date Data Arrived at EDR: 07/07/2005
 Date Made Active in Reports: 08/11/2005
 Number of Days to Update: 35

Source: State Water Resources Control Board
 Telephone: N/A
 Last EDR Contact: 06/03/2005
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/02/2017
 Date Data Arrived at EDR: 06/06/2017
 Date Made Active in Reports: 08/25/2017
 Number of Days to Update: 80

Source: Department of Public Health
 Telephone: 707-463-4466
 Last EDR Contact: 08/24/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
 Date Data Arrived at EDR: 01/25/1991
 Date Made Active in Reports: 02/12/1991
 Number of Days to Update: 18

Source: State Water Resources Control Board
 Telephone: 916-341-5851
 Last EDR Contact: 07/26/2001
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
 Date Data Arrived at EDR: 09/05/1995
 Date Made Active in Reports: 09/29/1995
 Number of Days to Update: 24

Source: California Environmental Protection Agency
 Telephone: 916-341-5851
 Last EDR Contact: 12/28/1998
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/02/2017
 Date Data Arrived at EDR: 06/06/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 77

Source: Department of Toxic Substances Control
 Telephone: 916-323-3400
 Last EDR Contact: 08/31/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
 Date Data Arrived at EDR: 03/18/2014
 Date Made Active in Reports: 04/24/2014
 Number of Days to Update: 37

Source: Environmental Protection Agency
 Telephone: 202-564-6023
 Last EDR Contact: 07/26/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/05/2017	Source: DTSC and SWRCB
Date Data Arrived at EDR: 06/06/2017	Telephone: 916-323-3400
Date Made Active in Reports: 08/10/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 65	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 12/28/2016	Telephone: 202-366-4555
Date Made Active in Reports: 02/03/2017	Last EDR Contact: 06/28/2017
Number of Days to Update: 37	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016	Source: Office of Emergency Services
Date Data Arrived at EDR: 01/25/2017	Telephone: 916-845-8400
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 07/26/2017
Number of Days to Update: 105	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017	Source: State Water Quality Control Board
Date Data Arrived at EDR: 06/14/2017	Telephone: 866-480-1028
Date Made Active in Reports: 08/18/2017	Last EDR Contact: 09/12/2017
Number of Days to Update: 65	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/14/2017	Telephone: 866-480-1028
Date Made Active in Reports: 08/22/2017	Last EDR Contact: 09/12/2017
Number of Days to Update: 69	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012

Date Data Arrived at EDR: 01/03/2013

Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch

Telephone: N/A

Last EDR Contact: 01/03/2013

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016

Date Data Arrived at EDR: 12/28/2016

Date Made Active in Reports: 02/10/2017

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: (415) 495-8895

Last EDR Contact: 08/11/2017

Next Scheduled EDR Contact: 10/09/2017

Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015

Date Data Arrived at EDR: 07/08/2015

Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285

Last EDR Contact: 08/25/2017

Next Scheduled EDR Contact: 12/04/2017

Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005

Date Data Arrived at EDR: 11/10/2006

Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747

Last EDR Contact: 07/12/2017

Next Scheduled EDR Contact: 10/23/2017

Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005

Date Data Arrived at EDR: 02/06/2006

Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey

Telephone: 888-275-8747

Last EDR Contact: 07/14/2017

Next Scheduled EDR Contact: 10/23/2017

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
 Date Data Arrived at EDR: 02/03/2017
 Date Made Active in Reports: 04/07/2017
 Number of Days to Update: 63

Source: Environmental Protection Agency
 Telephone: 615-532-8599
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 11/27/2017
 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/10/2017
 Date Data Arrived at EDR: 05/17/2017
 Date Made Active in Reports: 09/15/2017
 Number of Days to Update: 121

Source: Environmental Protection Agency
 Telephone: 202-566-1917
 Last EDR Contact: 08/11/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
 Date Data Arrived at EDR: 03/21/2014
 Date Made Active in Reports: 06/17/2014
 Number of Days to Update: 88

Source: Environmental Protection Agency
 Telephone: 617-520-3000
 Last EDR Contact: 08/07/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
 Date Data Arrived at EDR: 03/03/2015
 Date Made Active in Reports: 03/09/2015
 Number of Days to Update: 6

Source: Environmental Protection Agency
 Telephone: 703-308-4044
 Last EDR Contact: 08/24/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
 Date Data Arrived at EDR: 01/15/2015
 Date Made Active in Reports: 01/29/2015
 Number of Days to Update: 14

Source: EPA
 Telephone: 202-260-5521
 Last EDR Contact: 06/21/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014
 Date Data Arrived at EDR: 11/24/2015
 Date Made Active in Reports: 04/05/2016
 Number of Days to Update: 133

Source: EPA
 Telephone: 202-566-0250
 Last EDR Contact: 08/23/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
 Date Data Arrived at EDR: 12/10/2010
 Date Made Active in Reports: 02/25/2011
 Number of Days to Update: 77

Source: EPA
 Telephone: 202-564-4203
 Last EDR Contact: 07/28/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
 Date Data Arrived at EDR: 12/12/2013
 Date Made Active in Reports: 02/24/2014
 Number of Days to Update: 74

Source: EPA
 Telephone: 703-416-0223
 Last EDR Contact: 09/08/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
 Date Data Arrived at EDR: 02/09/2017
 Date Made Active in Reports: 04/07/2017
 Number of Days to Update: 57

Source: Environmental Protection Agency
 Telephone: 202-564-8600
 Last EDR Contact: 07/24/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
 Date Data Arrived at EDR: 07/03/1995
 Date Made Active in Reports: 08/07/1995
 Number of Days to Update: 35

Source: EPA
 Telephone: 202-564-4104
 Last EDR Contact: 06/02/2008
 Next Scheduled EDR Contact: 09/01/2008
 Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 08/08/2017
Number of Days to Update: 3	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 04/10/2017
Number of Days to Update: 127	Next Scheduled EDR Contact: 07/24/2017
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 07/28/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/23/2017
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 08/01/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 09/08/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/08/2017
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 07/28/2017
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2017	Telephone: 202-343-9775
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 07/12/2017
Number of Days to Update: 35	Next Scheduled EDR Contact: 10/16/2017
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
 Date Data Arrived at EDR: 03/01/2007
 Date Made Active in Reports: 04/10/2007
 Number of Days to Update: 40

Source: Environmental Protection Agency
 Telephone: 202-564-2501
 Last EDR Contact: 12/17/2008
 Next Scheduled EDR Contact: 03/17/2008
 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
 Date Data Arrived at EDR: 08/07/2012
 Date Made Active in Reports: 09/18/2012
 Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
 Telephone: 202-366-4595
 Last EDR Contact: 08/01/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
 Date Data Arrived at EDR: 11/18/2016
 Date Made Active in Reports: 02/03/2017
 Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
 Telephone: Varies
 Last EDR Contact: 06/21/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
 Date Data Arrived at EDR: 02/24/2015
 Date Made Active in Reports: 09/30/2015
 Number of Days to Update: 218

Source: EPA/NTIS
 Telephone: 800-424-9346
 Last EDR Contact: 08/25/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
 Date Data Arrived at EDR: 07/14/2015
 Date Made Active in Reports: 01/10/2017
 Number of Days to Update: 546

Source: USGS
 Telephone: 202-208-3710
 Last EDR Contact: 07/11/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
 Date Data Arrived at EDR: 12/27/2016
 Date Made Active in Reports: 02/17/2017
 Number of Days to Update: 52

Source: Department of Energy
 Telephone: 202-586-3559
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010
 Date Data Arrived at EDR: 10/07/2011
 Date Made Active in Reports: 03/01/2012
 Number of Days to Update: 146

Source: Department of Energy
 Telephone: 505-845-0011
 Last EDR Contact: 08/22/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017
 Date Data Arrived at EDR: 06/09/2017
 Date Made Active in Reports: 09/15/2017
 Number of Days to Update: 98

Source: Environmental Protection Agency
 Telephone: 703-603-8787
 Last EDR Contact: 07/07/2017
 Next Scheduled EDR Contact: 10/16/2017
 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
 Date Data Arrived at EDR: 10/27/2010
 Date Made Active in Reports: 12/02/2010
 Number of Days to Update: 36

Source: American Journal of Public Health
 Telephone: 703-305-6451
 Last EDR Contact: 12/02/2009
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
 Date Data Arrived at EDR: 10/26/2016
 Date Made Active in Reports: 02/03/2017
 Number of Days to Update: 100

Source: EPA
 Telephone: 202-564-2496
 Last EDR Contact: 08/11/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
 Date Data Arrived at EDR: 10/26/2016
 Date Made Active in Reports: 02/03/2017
 Number of Days to Update: 100

Source: EPA
 Telephone: 202-564-2496
 Last EDR Contact: 08/11/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
 Date Data Arrived at EDR: 02/28/2017
 Date Made Active in Reports: 04/07/2017
 Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
 Telephone: 303-231-5959
 Last EDR Contact: 08/30/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: 703-648-7709
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 09/01/2017
Number of Days to Update: 49	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 09/01/2017
Number of Days to Update: 97	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017	Source: Department of Interior
Date Data Arrived at EDR: 03/17/2017	Telephone: 202-208-2609
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 09/07/2017
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017	Source: EPA
Date Data Arrived at EDR: 09/06/2017	Telephone: (415) 947-8000
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 9	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/24/2017
Number of Days to Update: 91	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 07/17/2017
Number of Days to Update: 67	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2017	Telephone: 202-564-2280
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 52	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2017	Source: EPA
Date Data Arrived at EDR: 08/17/2017	Telephone: 800-385-6164
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 08/17/2017
Number of Days to Update: 29	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 12/28/2016	Telephone: 916-323-3400
Date Made Active in Reports: 03/02/2017	Last EDR Contact: 06/28/2017
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 04/11/2017	Telephone: 916-327-4498
Date Made Active in Reports: 05/23/2017	Last EDR Contact: 08/08/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015	Source: California Air Resources Board
Date Data Arrived at EDR: 03/21/2017	Telephone: 916-322-2990
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 06/23/2017
Number of Days to Update: 147	Next Scheduled EDR Contact: 10/02/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 05/01/2017	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/03/2017	Telephone: 916-445-9379
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 08/18/2017
Number of Days to Update: 104	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 06/05/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/09/2017	Telephone: 916-255-3628
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 07/21/2017
Number of Days to Update: 67	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/16/2017	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 05/19/2017	Telephone: 916-341-6066
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 08/10/2017
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/12/2016	Telephone: 916-255-1136
Date Made Active in Reports: 12/15/2016	Last EDR Contact: 07/12/2017
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/23/2017
	Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/22/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/24/2017	Telephone: 877-786-9427
Date Made Active in Reports: 08/18/2017	Last EDR Contact: 08/22/2017
Number of Days to Update: 86	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/22/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/24/2017	Telephone: 916-323-3400
Date Made Active in Reports: 08/18/2017	Last EDR Contact: 08/22/2017
Number of Days to Update: 86	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/13/2017	Telephone: 916-440-7145
Date Made Active in Reports: 04/26/2017	Last EDR Contact: 07/12/2017
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/23/2017
	Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016	Source: Department of Conservation
Date Data Arrived at EDR: 09/14/2016	Telephone: 916-322-1080
Date Made Active in Reports: 10/14/2016	Last EDR Contact: 09/12/2017
Number of Days to Update: 30	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/25/2017	Source: Department of Public Health
Date Data Arrived at EDR: 06/06/2017	Telephone: 916-558-1784
Date Made Active in Reports: 08/23/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/15/2016	Telephone: 916-445-9379
Date Made Active in Reports: 03/02/2017	Last EDR Contact: 08/17/2017
Number of Days to Update: 107	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/05/2017	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 06/07/2017	Telephone: 916-445-4038
Date Made Active in Reports: 08/25/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/13/2017
 Date Data Arrived at EDR: 03/14/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 50

Source: Department of Conservation
 Telephone: 916-323-3836
 Last EDR Contact: 09/12/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
 Date Data Arrived at EDR: 12/22/2016
 Date Made Active in Reports: 03/02/2017
 Number of Days to Update: 70

Source: State Water Resources Control Board
 Telephone: 916-445-3846
 Last EDR Contact: 06/16/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
 Date Data Arrived at EDR: 03/14/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 50

Source: Department of Conservation
 Telephone: 916-445-2408
 Last EDR Contact: 09/12/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board's review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
 Date Data Arrived at EDR: 04/17/2015
 Date Made Active in Reports: 06/23/2015
 Number of Days to Update: 67

Source: RWQCB, Central Valley Region
 Telephone: 559-445-5577
 Last EDR Contact: 07/14/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
 Date Data Arrived at EDR: 06/20/2007
 Date Made Active in Reports: 06/29/2007
 Number of Days to Update: 9

Source: State Water Resources Control Board
 Telephone: 916-341-5227
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
 Date Data Arrived at EDR: 07/21/2009
 Date Made Active in Reports: 08/03/2009
 Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
 Telephone: 213-576-6726
 Last EDR Contact: 06/27/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
 Date Data Arrived at EDR: 07/01/2013
 Date Made Active in Reports: 01/13/2014
 Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
 Telephone: N/A
 Last EDR Contact: 06/01/2012
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
 Date Data Arrived at EDR: 07/01/2013
 Date Made Active in Reports: 12/30/2013
 Number of Days to Update: 182

Source: State Water Resources Control Board
 Telephone: N/A
 Last EDR Contact: 06/01/2012
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
 Date Data Arrived at EDR: 04/11/2017
 Date Made Active in Reports: 05/12/2017
 Number of Days to Update: 31

Source: Alameda County Environmental Health Services
 Telephone: 510-567-6700
 Last EDR Contact: 07/07/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2017
 Date Data Arrived at EDR: 07/11/2017
 Date Made Active in Reports: 08/23/2017
 Number of Days to Update: 43

Source: Alameda County Environmental Health Services
 Telephone: 510-567-6700
 Last EDR Contact: 07/07/2017
 Next Scheduled EDR Contact: 04/24/2047
 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2017
 Date Data Arrived at EDR: 06/21/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 49

Source: Amador County Environmental Health
 Telephone: 209-223-6439
 Last EDR Contact: 08/31/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/21/2017
 Date Data Arrived at EDR: 04/25/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 106

Source: Public Health Department
 Telephone: 530-538-7149
 Last EDR Contact: 09/06/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 04/25/2017
 Date Data Arrived at EDR: 04/27/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 104

Source: Calveras County Environmental Health
 Telephone: 209-754-6399
 Last EDR Contact: 09/01/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List Cupa facility list.

Date of Government Version: 02/23/2017
 Date Data Arrived at EDR: 02/24/2017
 Date Made Active in Reports: 05/12/2017
 Number of Days to Update: 77

Source: Health & Human Services
 Telephone: 530-458-0396
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/26/2017
 Date Data Arrived at EDR: 05/30/2017
 Date Made Active in Reports: 07/27/2017
 Number of Days to Update: 58

Source: Contra Costa Health Services Department
 Telephone: 925-646-2286
 Last EDR Contact: 07/31/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List Cupa Facility list

Date of Government Version: 05/02/2017
 Date Data Arrived at EDR: 05/04/2017
 Date Made Active in Reports: 08/04/2017
 Number of Days to Update: 92

Source: Del Norte County Environmental Health Division
 Telephone: 707-465-0426
 Last EDR Contact: 07/27/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/19/2017
 Date Data Arrived at EDR: 06/20/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 50

Source: El Dorado County Environmental Management Department
 Telephone: 530-621-6623
 Last EDR Contact: 07/31/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2017
 Date Data Arrived at EDR: 07/05/2017
 Date Made Active in Reports: 08/04/2017
 Number of Days to Update: 30

Source: Dept. of Community Health
 Telephone: 559-445-3271
 Last EDR Contact: 06/29/2017
 Next Scheduled EDR Contact: 10/16/2017
 Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
 Date Data Arrived at EDR: 02/03/2017
 Date Made Active in Reports: 05/25/2017
 Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
 Telephone: 830-934-6500
 Last EDR Contact: 07/21/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
 Date Data Arrived at EDR: 03/21/2017
 Date Made Active in Reports: 05/17/2017
 Number of Days to Update: 57

Source: Humboldt County Environmental Health
 Telephone: N/A
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/24/2017
 Date Data Arrived at EDR: 04/25/2017
 Date Made Active in Reports: 08/04/2017
 Number of Days to Update: 101

Source: San Diego Border Field Office
 Telephone: 760-339-2777
 Last EDR Contact: 07/21/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

INYO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List Cupa facility list

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 05/11/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 90

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List Cupa facility list

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
 Date Data Arrived at EDR: 03/31/2009
 Date Made Active in Reports: 10/23/2009
 Number of Days to Update: 206

Source: EPA Region 9
 Telephone: 415-972-3178
 Last EDR Contact: 06/16/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/18/2017
 Date Data Arrived at EDR: 04/25/2017
 Date Made Active in Reports: 08/18/2017
 Number of Days to Update: 115

Source: Department of Public Works
 Telephone: 626-458-3517
 Last EDR Contact: 07/07/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
 Date Data Arrived at EDR: 04/18/2017
 Date Made Active in Reports: 05/02/2017
 Number of Days to Update: 14

Source: La County Department of Public Works
 Telephone: 818-458-5185
 Last EDR Contact: 07/18/2017
 Next Scheduled EDR Contact: 10/30/2017
 Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
 Date Data Arrived at EDR: 01/26/2016
 Date Made Active in Reports: 03/22/2016
 Number of Days to Update: 56

Source: Engineering & Construction Division
 Telephone: 213-473-7869
 Last EDR Contact: 07/13/2017
 Next Scheduled EDR Contact: 10/30/2017
 Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
 Date Data Arrived at EDR: 04/06/2016
 Date Made Active in Reports: 06/13/2016
 Number of Days to Update: 68

Source: Community Health Services
 Telephone: 323-890-7806
 Last EDR Contact: 07/17/2017
 Next Scheduled EDR Contact: 10/30/2017
 Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
 Date Data Arrived at EDR: 01/18/2017
 Date Made Active in Reports: 05/10/2017
 Number of Days to Update: 112

Source: City of El Segundo Fire Department
 Telephone: 310-524-2236
 Last EDR Contact: 07/13/2017
 Next Scheduled EDR Contact: 10/30/2017
 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
 Date Data Arrived at EDR: 03/10/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 54

Source: City of Long Beach Fire Department
 Telephone: 562-570-2563
 Last EDR Contact: 07/21/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
 Date Data Arrived at EDR: 01/13/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 110

Source: City of Torrance Fire Department
 Telephone: 310-618-2973
 Last EDR Contact: 07/07/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/01/2017
 Date Data Arrived at EDR: 06/02/2017
 Date Made Active in Reports: 08/04/2017
 Number of Days to Update: 63

Source: Madera County Environmental Health
 Telephone: 559-675-7823
 Last EDR Contact: 08/21/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
 Date Data Arrived at EDR: 04/06/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 27

Source: Public Works Department Waste Management
 Telephone: 415-473-6647
 Last EDR Contact: 06/29/2017
 Next Scheduled EDR Contact: 10/16/2017
 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 02/22/2017
 Date Data Arrived at EDR: 02/23/2017
 Date Made Active in Reports: 05/17/2017
 Number of Days to Update: 83

Source: Merced County Environmental Health
 Telephone: 209-381-1094
 Last EDR Contact: 08/31/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 02/21/2017
 Date Data Arrived at EDR: 03/02/2017
 Date Made Active in Reports: 05/17/2017
 Number of Days to Update: 76

Source: Mono County Health Department
 Telephone: 760-932-5580
 Last EDR Contact: 08/08/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/22/2017
 Date Data Arrived at EDR: 06/23/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 47

Source: Monterey County Health Department
 Telephone: 831-796-1297
 Last EDR Contact: 08/21/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
 Date Data Arrived at EDR: 01/11/2017
 Date Made Active in Reports: 03/02/2017
 Number of Days to Update: 50

Source: Napa County Department of Environmental Management
 Telephone: 707-253-4269
 Last EDR Contact: 08/24/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 05/31/2017
 Date Data Arrived at EDR: 06/01/2017
 Date Made Active in Reports: 08/25/2017
 Number of Days to Update: 85

Source: Napa County Department of Environmental Management
 Telephone: 707-253-4269
 Last EDR Contact: 08/24/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/08/2017
 Date Data Arrived at EDR: 05/09/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 92

Source: Community Development Agency
 Telephone: 530-265-1467
 Last EDR Contact: 07/27/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/03/2017
 Date Data Arrived at EDR: 05/11/2017
 Date Made Active in Reports: 08/18/2017
 Number of Days to Update: 99

Source: Health Care Agency
 Telephone: 714-834-3446
 Last EDR Contact: 08/07/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
 Date Data Arrived at EDR: 11/11/2016
 Date Made Active in Reports: 01/23/2017
 Number of Days to Update: 73

Source: Health Care Agency
 Telephone: 714-834-3446
 Last EDR Contact: 08/07/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
 Date Data Arrived at EDR: 02/07/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 85

Source: Health Care Agency
 Telephone: 714-834-3446
 Last EDR Contact: 08/09/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/02/2017
 Date Data Arrived at EDR: 06/06/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 77

Source: Placer County Health and Human Services
 Telephone: 530-745-2363
 Last EDR Contact: 08/31/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 06/19/2017
 Date Data Arrived at EDR: 07/05/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 35

Source: Plumas County Environmental Health
 Telephone: 530-283-6355
 Last EDR Contact: 07/21/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
 Date Data Arrived at EDR: 04/20/2017
 Date Made Active in Reports: 04/21/2017
 Number of Days to Update: 1

Source: Department of Environmental Health
 Telephone: 951-358-5055
 Last EDR Contact: 06/19/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
 Date Data Arrived at EDR: 01/25/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 98

Source: Department of Environmental Health
 Telephone: 951-358-5055
 Last EDR Contact: 06/19/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/06/2017
 Date Data Arrived at EDR: 04/04/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 127

Source: Sacramento County Environmental Management
 Telephone: 916-875-8406
 Last EDR Contact: 07/06/2017
 Next Scheduled EDR Contact: 10/16/2017
 Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2017
 Date Data Arrived at EDR: 07/06/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 47

Source: Sacramento County Environmental Management
 Telephone: 916-875-8406
 Last EDR Contact: 07/06/2017
 Next Scheduled EDR Contact: 10/16/2017
 Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
 Date Data Arrived at EDR: 02/09/2017
 Date Made Active in Reports: 05/25/2017
 Number of Days to Update: 105

Source: San Benito County Environmental Health
 Telephone: N/A
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/30/2017
 Date Data Arrived at EDR: 06/01/2017
 Date Made Active in Reports: 08/25/2017
 Number of Days to Update: 85

Source: San Bernardino County Fire Department Hazardous Materials Division
 Telephone: 909-387-3041
 Last EDR Contact: 08/07/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/05/2017
 Date Data Arrived at EDR: 06/07/2017
 Date Made Active in Reports: 08/15/2017
 Number of Days to Update: 69

Source: Hazardous Materials Management Division
 Telephone: 619-338-2268
 Last EDR Contact: 09/06/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
 Date Data Arrived at EDR: 11/07/2015
 Date Made Active in Reports: 01/04/2016
 Number of Days to Update: 58

Source: Department of Health Services
 Telephone: 619-338-2209
 Last EDR Contact: 07/21/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
 Date Data Arrived at EDR: 06/15/2010
 Date Made Active in Reports: 07/09/2010
 Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
 Telephone: 619-338-2371
 Last EDR Contact: 08/31/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
 Date Data Arrived at EDR: 09/19/2008
 Date Made Active in Reports: 09/29/2008
 Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
 Telephone: 415-252-3920
 Last EDR Contact: 08/07/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/03/2017
 Date Data Arrived at EDR: 05/08/2017
 Date Made Active in Reports: 08/25/2017
 Number of Days to Update: 109

Source: Department of Public Health
 Telephone: 415-252-3920
 Last EDR Contact: 08/21/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
 Date Data Arrived at EDR: 03/23/2017
 Date Made Active in Reports: 05/09/2017
 Number of Days to Update: 47

Source: Environmental Health Department
 Telephone: N/A
 Last EDR Contact: 08/28/2017
 Next Scheduled EDR Contact: 10/02/2017
 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/05/2017
 Date Data Arrived at EDR: 06/16/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 54

Source: San Luis Obispo County Public Health Department
 Telephone: 805-781-5596
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

SAN MATEO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
 Date Data Arrived at EDR: 04/07/2017
 Date Made Active in Reports: 05/10/2017
 Number of Days to Update: 33

Source: San Mateo County Environmental Health Services Division
 Telephone: 650-363-1921
 Last EDR Contact: 09/07/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/15/2017
 Date Data Arrived at EDR: 06/19/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
 Telephone: 650-363-1921
 Last EDR Contact: 09/07/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
 Date Data Arrived at EDR: 09/09/2011
 Date Made Active in Reports: 10/07/2011
 Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
 Telephone: 805-686-8167
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 02/22/2017
 Date Data Arrived at EDR: 02/23/2017
 Date Made Active in Reports: 05/23/2017
 Number of Days to Update: 89

Source: Department of Environmental Health
 Telephone: 408-918-1973
 Last EDR Contact: 08/07/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
 Date Data Arrived at EDR: 03/30/2005
 Date Made Active in Reports: 04/21/2005
 Number of Days to Update: 22

Source: Santa Clara Valley Water District
 Telephone: 408-265-2600
 Last EDR Contact: 03/23/2009
 Next Scheduled EDR Contact: 06/22/2009
 Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
 Date Data Arrived at EDR: 03/05/2014
 Date Made Active in Reports: 03/18/2014
 Number of Days to Update: 13

Source: Department of Environmental Health
 Telephone: 408-918-3417
 Last EDR Contact: 08/24/2017
 Next Scheduled EDR Contact: 12/11/2017
 Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/04/2017
 Date Data Arrived at EDR: 05/08/2017
 Date Made Active in Reports: 07/27/2017
 Number of Days to Update: 80

Source: City of San Jose Fire Department
 Telephone: 408-535-7694
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017
 Date Data Arrived at EDR: 02/22/2017
 Date Made Active in Reports: 05/23/2017
 Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
 Telephone: 831-464-2761
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017
 Date Data Arrived at EDR: 06/19/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 51

Source: Shasta County Department of Resource Management
 Telephone: 530-225-5789
 Last EDR Contact: 08/21/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/15/2017
 Date Data Arrived at EDR: 06/20/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 63

Source: Solano County Department of Environmental Management
 Telephone: 707-784-6770
 Last EDR Contact: 09/07/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/15/2017
 Date Data Arrived at EDR: 06/21/2017
 Date Made Active in Reports: 08/29/2017
 Number of Days to Update: 69

Source: Solano County Department of Environmental Management
 Telephone: 707-784-6770
 Last EDR Contact: 09/07/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List

Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017
 Date Data Arrived at EDR: 06/27/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 43

Source: County of Sonoma Fire & Emergency Services Department
 Telephone: 707-565-1174
 Last EDR Contact: 06/21/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/05/2017
 Date Data Arrived at EDR: 07/06/2017
 Date Made Active in Reports: 08/22/2017
 Number of Days to Update: 47

Source: Department of Health Services
 Telephone: 707-565-6565
 Last EDR Contact: 06/21/2017
 Next Scheduled EDR Contact: 10/09/2017
 Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 05/10/2017
 Date Data Arrived at EDR: 05/16/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 85

Source: Stanislaus County Department of Environmental Protection
 Telephone: 209-525-6751
 Last EDR Contact: 07/17/2017
 Next Scheduled EDR Contact: 10/30/2017
 Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2017
 Date Data Arrived at EDR: 06/06/2017
 Date Made Active in Reports: 08/25/2017
 Number of Days to Update: 80

Source: Sutter County Department of Agriculture
 Telephone: 530-822-7500
 Last EDR Contact: 08/31/2017
 Next Scheduled EDR Contact: 12/18/2017
 Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 05/01/2017
 Date Data Arrived at EDR: 05/08/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 93

Source: Tehama County Department of Environmental Health
 Telephone: 530-527-8020
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 04/24/2017
 Date Data Arrived at EDR: 04/25/2017
 Date Made Active in Reports: 08/09/2017
 Number of Days to Update: 106

Source: Department of Toxic Substances Control
 Telephone: 760-352-0381
 Last EDR Contact: 07/21/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

TULARE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

Cupa program facilities

Date of Government Version: 01/05/2017
 Date Data Arrived at EDR: 02/10/2017
 Date Made Active in Reports: 05/25/2017
 Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
 Telephone: 559-624-7400
 Last EDR Contact: 09/05/2017
 Next Scheduled EDR Contact: 11/20/2017
 Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 04/27/2017
 Date Data Arrived at EDR: 04/27/2017
 Date Made Active in Reports: 08/10/2017
 Number of Days to Update: 105

Source: Divison of Environmental Health
 Telephone: 209-533-5633
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
 Date Data Arrived at EDR: 01/27/2017
 Date Made Active in Reports: 05/10/2017
 Number of Days to Update: 103

Source: Ventura County Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 07/24/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
 Date Data Arrived at EDR: 12/01/2011
 Date Made Active in Reports: 01/19/2012
 Number of Days to Update: 49

Source: Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 06/29/2017
 Next Scheduled EDR Contact: 10/16/2017
 Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
 Date Data Arrived at EDR: 06/24/2008
 Date Made Active in Reports: 07/31/2008
 Number of Days to Update: 37

Source: Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 08/10/2017
 Next Scheduled EDR Contact: 11/27/2017
 Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
 Date Data Arrived at EDR: 10/27/2016
 Date Made Active in Reports: 01/24/2017
 Number of Days to Update: 89

Source: Ventura County Resource Management Agency
 Telephone: 805-654-2813
 Last EDR Contact: 07/24/2017
 Next Scheduled EDR Contact: 11/08/2017
 Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
 Date Data Arrived at EDR: 03/15/2017
 Date Made Active in Reports: 05/03/2017
 Number of Days to Update: 49

Source: Environmental Health Division
 Telephone: 805-654-2813
 Last EDR Contact: 09/12/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 06/29/2017
 Date Data Arrived at EDR: 07/05/2017
 Date Made Active in Reports: 08/25/2017
 Number of Days to Update: 51

Source: Yolo County Department of Health
 Telephone: 530-666-8646
 Last EDR Contact: 06/29/2017
 Next Scheduled EDR Contact: 10/13/2017
 Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
 Date Data Arrived at EDR: 01/31/2017
 Date Made Active in Reports: 05/23/2017
 Number of Days to Update: 112

Source: Yuba County Environmental Health Department
 Telephone: 530-749-7523
 Last EDR Contact: 07/27/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
 Date Data Arrived at EDR: 08/19/2013
 Date Made Active in Reports: 10/03/2013
 Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
 Telephone: 860-424-3375
 Last EDR Contact: 08/18/2017
 Next Scheduled EDR Contact: 11/27/2017
 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
 Date Data Arrived at EDR: 04/11/2017
 Date Made Active in Reports: 07/27/2017
 Number of Days to Update: 107

Source: Department of Environmental Protection
 Telephone: N/A
 Last EDR Contact: 07/10/2017
 Next Scheduled EDR Contact: 10/23/2017
 Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
 Date Data Arrived at EDR: 02/01/2017
 Date Made Active in Reports: 02/13/2017
 Number of Days to Update: 12

Source: Department of Environmental Conservation
 Telephone: 518-402-8651
 Last EDR Contact: 08/03/2017
 Next Scheduled EDR Contact: 11/13/2017
 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
 Date Data Arrived at EDR: 07/22/2016
 Date Made Active in Reports: 11/22/2016
 Number of Days to Update: 123

Source: Department of Environmental Protection
 Telephone: 717-783-8990
 Last EDR Contact: 07/17/2017
 Next Scheduled EDR Contact: 10/30/2017
 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
 Date Data Arrived at EDR: 06/19/2015
 Date Made Active in Reports: 07/15/2015
 Number of Days to Update: 26

Source: Department of Environmental Management
 Telephone: 401-222-2797
 Last EDR Contact: 08/21/2017
 Next Scheduled EDR Contact: 12/04/2017
 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
 Date Data Arrived at EDR: 04/13/2017
 Date Made Active in Reports: 07/14/2017
 Number of Days to Update: 92

Source: Department of Natural Resources
 Telephone: N/A
 Last EDR Contact: 09/11/2017
 Next Scheduled EDR Contact: 12/25/2017
 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
 Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
 Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish & Game

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PAUL SAGAYARAJ
16015 CAPUTO DR
MORGAN HILL, CA 95037

TARGET PROPERTY COORDINATES

Latitude (North):	37.116874 - 37° 7' 0.75"
Longitude (West):	121.634183 - 121° 38' 3.06"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	621344.9
UTM Y (Meters):	4108507.0
Elevation:	331 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640078 MOUNT MADONNA, CA
Version Date:	2012
Northeast Map:	5640104 MOUNT SIZER, CA
Version Date:	2012
Southeast Map:	5640386 GILROY, CA
Version Date:	2012
Northwest Map:	5640402 MORGAN HILL, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

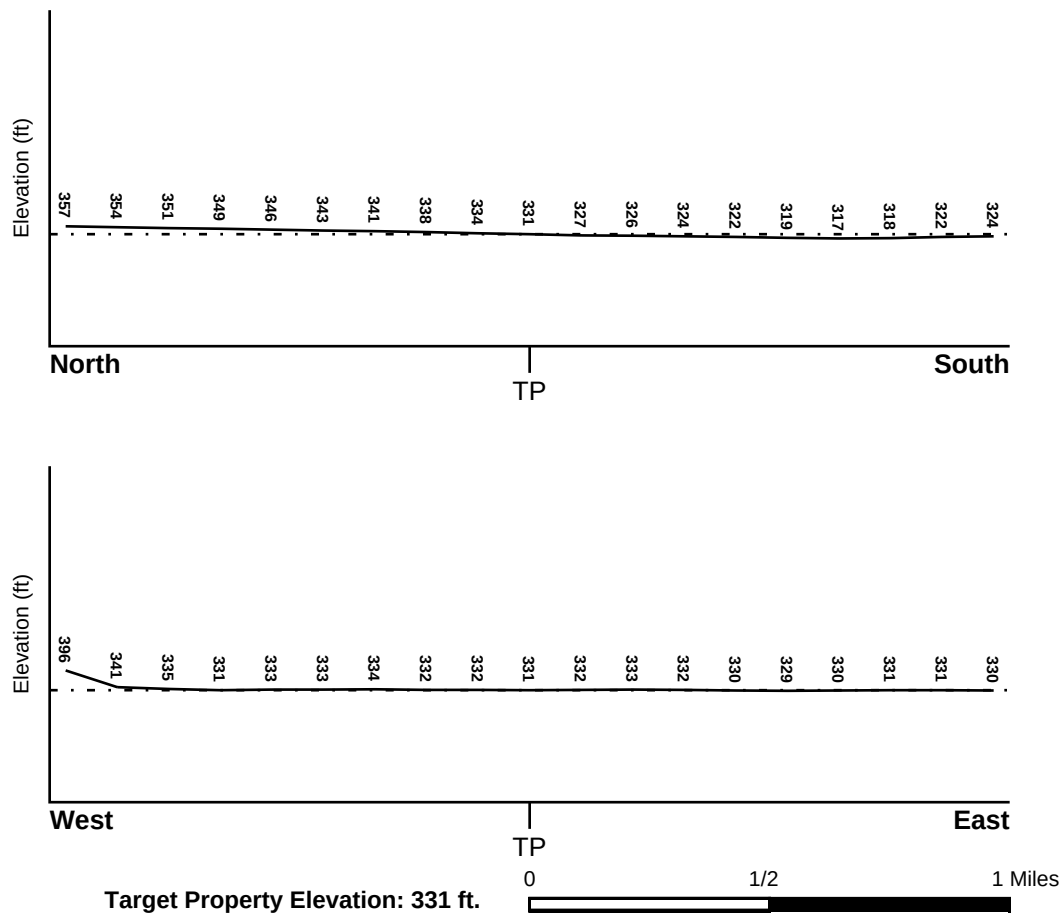
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06085C0607H	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06085C0444H	FEMA FIRM Flood data
06085C0463H	FEMA FIRM Flood data
06085C0626H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
MOUNT MADONNA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius:	1.25 miles
Location Relative to TP:	1/8 - 1/4 Mile SW
Site Name:	OLIN CORP MORGAN HILL PLT
Site EPA ID Number:	CAD009183831
Groundwater Flow Direction:	Southeast
Measured Depth to Water:	80 feet.
Hydraulic Connection:	The aquifer underlying the site is unconfined.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
---------------	-------------------------	---

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
4	1/2 - 1 Mile South	E, W
1G	1/2 - 1 Mile South	E, W

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

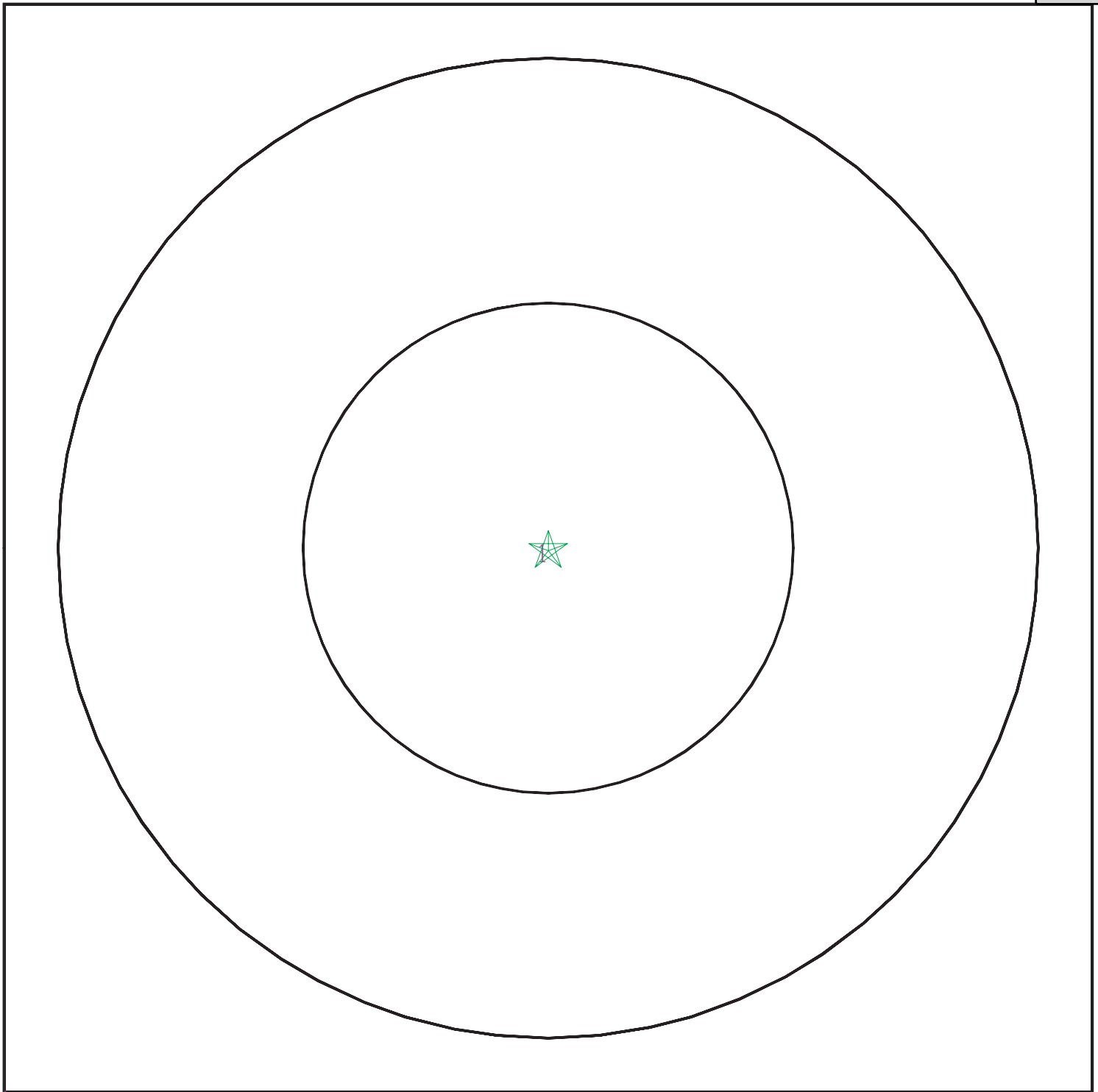
ROCK STRATIGRAPHIC UNIT

Era:	Mesozoic
System:	Cretaceous
Series:	Upper Mesozoic
Code:	uMze(<i>decoded above as Era, System & Series</i>)

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).



- ★ Target Property
- ∨ SSURGO Soil
- ∨ Water

0 1/16 1/8 1/4 Miles



Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

SITE NAME: Paul Sagayaraj
ADDRESS: 16015 CAPUTO DR
MORGAN HILL CA 95037
LAT/LONG: 37.116874 / 121.634183

CLIENT: Harris & Lee Env. Sciences
CONTACT: Cathy Neumann
INQUIRY #: 5052107.2s
DATE: September 18, 2017 12:52 pm

Packet Pg. 474

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: ARBUCKLE

Soil Surface Texture: gravelly loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	20 inches	40 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
3	40 inches	59 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 6.2

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

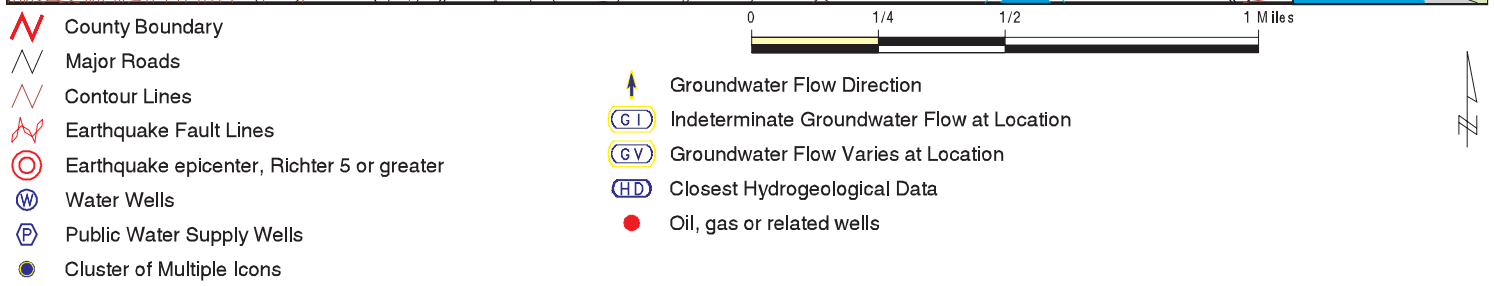
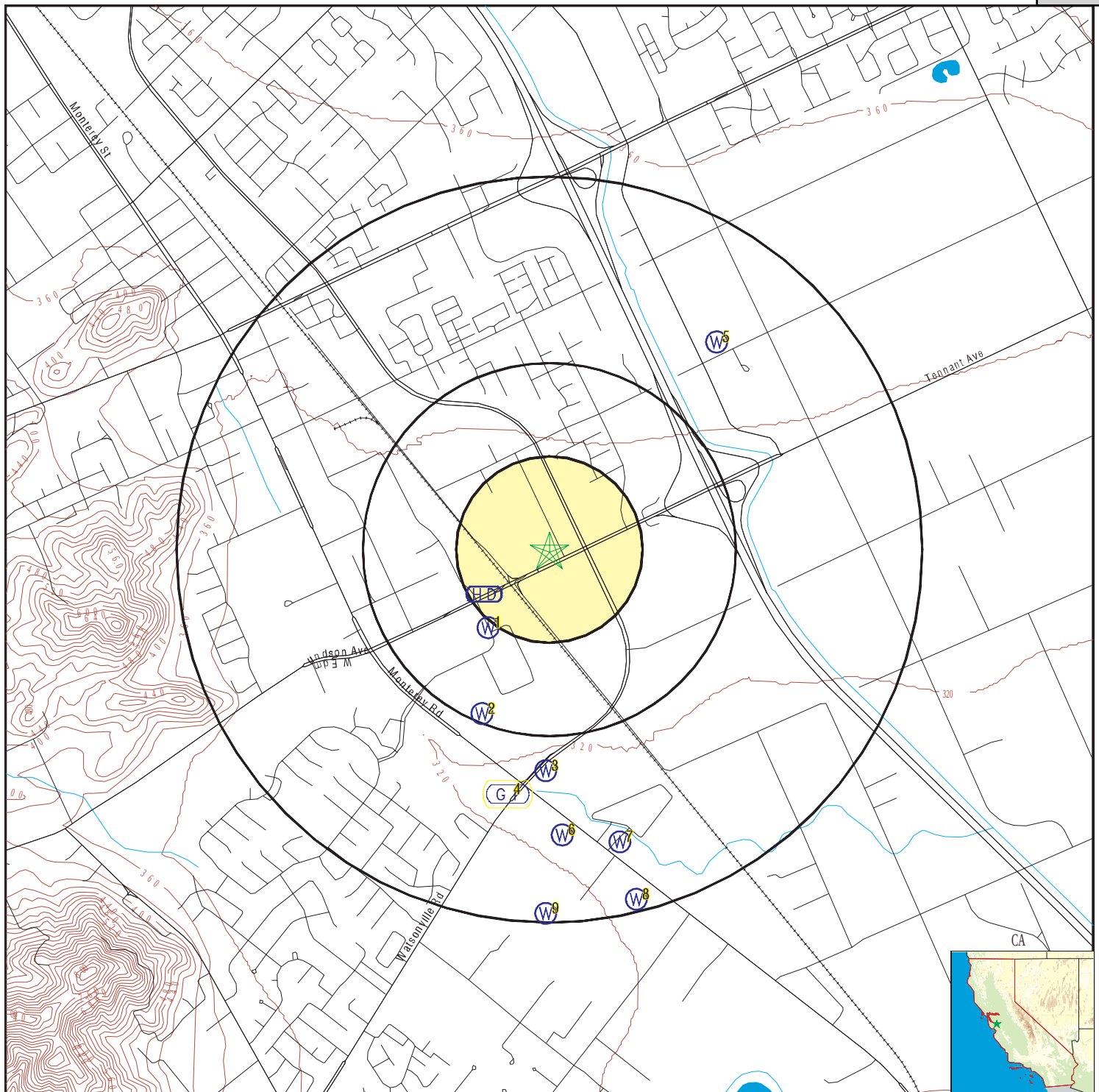
FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	9404	1/4 - 1/2 Mile SW
2	9405	1/4 - 1/2 Mile SSW
3	19832	1/2 - 1 Mile South
5	9396	1/2 - 1 Mile NE
6	9406	1/2 - 1 Mile South
7	9407	1/2 - 1 Mile SSE
8	9408	1/2 - 1 Mile SSE
9	19843	1/2 - 1 Mile South



Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

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 ADDRESS: 16015 CAPUTO DR
 MORGAN HILL CA 95037
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CLIENT: Harris & Lee Env. Sciences
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 INQUIRY #: 5052107.2s
 DATE: September 18, 2017 12:52 pm

Packet Pg. 477

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
SW
1/4 - 1/2 Mile
Lower

CA WELLS 9404

Water System Information:

Prime Station Code:	09S/03E-34D06 M	User ID:	HEN
FRDS Number:	4310006014	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370650.0 1213810.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	TENNANT WELL		
System Number:	4310006		
System Name:	City of Morgan Hill		
Organization That Operates System:	17555 Peak Avenue Morgan Hill, CA 95037		
Pop Served:	27948	Connections:	9290
Area Served:	CITY OF MORGAN HILL	Findings:	29. MG/L
Sample Collected:	04-JAN-11		
Chemical:	SULFATE	Findings:	27. MG/L
Sample Collected:	04-JAN-11		
Chemical:	NITRATE (AS NO3)	Findings:	510. US
Sample Collected:	04-JAN-11		
Chemical:	SPECIFIC CONDUCTANCE	Findings:	6.4 UG/L
Sample Collected:	04-JAN-11		
Chemical:	PERCHLORATE	Findings:	470. US
Sample Collected:	11-JAN-11		
Chemical:	SPECIFIC CONDUCTANCE	Findings:	28. MG/L
Sample Collected:	11-JAN-11		
Chemical:	NITRATE (AS NO3)	Findings:	5.9 UG/L
Sample Collected:	11-JAN-11		
Chemical:	PERCHLORATE	Findings:	480. US
Sample Collected:	18-JAN-11		
Chemical:	SPECIFIC CONDUCTANCE	Findings:	28. MG/L
Sample Collected:	18-JAN-11		
Chemical:	NITRATE (AS NO3)	Findings:	5.5 UG/L
Sample Collected:	18-JAN-11		
Chemical:	PERCHLORATE	Findings:	510. US
Sample Collected:	01-FEB-11		
Chemical:	SPECIFIC CONDUCTANCE	Findings:	29. MG/L
Sample Collected:	01-FEB-11		
Chemical:	SULFATE	Findings:	28. MG/L
Sample Collected:	01-FEB-11		
Chemical:	NITRATE (AS NO3)		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	01-FEB-11	Findings:	6. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08-FEB-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-FEB-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-11	Findings:	6.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	15-FEB-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	15-FEB-11	Findings:	4.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-FEB-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-FEB-11	Findings:	460. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	22-FEB-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-FEB-11	Findings:	5.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	01-MAR-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01-MAR-11	Findings:	29. MG/L
Chemical:	SULFATE		
Sample Collected:	01-MAR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-MAR-11	Findings:	460. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-MAR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-MAR-11	Findings:	5.7 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	15-MAR-11	Findings:	460. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	15-MAR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-MAR-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	22-MAR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAR-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	29-MAR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	29-MAR-11	Findings:	4.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	05-APR-11	Findings:	480. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-APR-11	Findings:	29. MG/L
Chemical:	SULFATE		
Sample Collected:	05-APR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-APR-11	Findings:	5.9 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	12-APR-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12-APR-11	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-APR-11	Findings:	5.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	19-APR-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	19-APR-11	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-APR-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	26-APR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-MAY-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-MAY-11	Findings:	29. MG/L
Chemical:	SULFATE		
Sample Collected:	03-MAY-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-MAY-11	Findings:	4.5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	10-MAY-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10-MAY-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-MAY-11	Findings:	4.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	17-MAY-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-MAY-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-MAY-11	Findings:	6.1 UG/L
Chemical:	PERCHLORATE		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	24-MAY-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	24-MAY-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-MAY-11	Findings:	6. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	31-MAY-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	31-MAY-11	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	31-MAY-11	Findings:	5. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	07-JUN-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-JUN-11	Findings:	28. MG/L
Chemical:	SULFATE		
Sample Collected:	07-JUN-11	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-JUN-11	Findings:	5.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	14-JUN-11	Findings:	460. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	14-JUN-11	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JUN-11	Findings:	480. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	21-JUN-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JUN-11	Findings:	4.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	28-JUN-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	28-JUN-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-JUN-11	Findings:	4.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	05-JUL-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-JUL-11	Findings:	29. MG/L
Chemical:	SULFATE		
Sample Collected:	05-JUL-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-JUL-11	Findings:	5.6 UG/L
Chemical:	PERCHLORATE		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12-JUL-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-JUL-11	Findings:	510. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12-JUL-11	Findings:	4.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	19-JUL-11	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-JUL-11	Findings:	510. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	19-JUL-11	Findings:	4.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	26-JUL-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-JUL-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	26-JUL-11	Findings:	5. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02-AUG-11	Findings:	490. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02-AUG-11	Findings:	29. MG/L
Chemical:	SULFATE		
Sample Collected:	02-AUG-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-AUG-11	Findings:	4.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-AUG-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09-AUG-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-AUG-11	Findings:	5.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-AUG-11	Findings:	320. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	16-AUG-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-AUG-11	Findings:	8.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	23-AUG-11	Findings:	490. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	23-AUG-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-AUG-11	Findings:	4.4 UG/L
Chemical:	PERCHLORATE		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	30-AUG-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-AUG-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-AUG-11	Findings:	5.5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	07-SEP-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-SEP-11	Findings:	29. MG/L
Chemical:	SULFATE		
Sample Collected:	07-SEP-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-SEP-11	Findings:	500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-SEP-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-SEP-11	Findings:	5.5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	20-SEP-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	20-SEP-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-SEP-11	Findings:	4.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-SEP-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	27-SEP-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-SEP-11	Findings:	7.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	30-SEP-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-SEP-11	Findings:	6.6 UG/L
Chemical:	PERCHLORATE		

2
SSW
1/4 - 1/2 Mile
Lower

CA WELLS 9405

Water System Information:

Prime Station Code:	09S/03E-34E02 M	User ID:	43C
FRDS Number:	4300628001	County:	Santa Clara
District Number:	73	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370638.0 1213811.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number:	4300628		
System Name:	CALIF DIV OF FORESTRY		
Organization That Operates System:	Not Reported		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		

3
South
1/2 - 1 Mile
Lower

CA WELLS 19832

Water System Information:

Prime Station Code:	4300917-001	User ID:	HEN
FRDS Number:	4300917001	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370630.0 1213800.0	Precision:	0.5 Mile (30 Seconds)
Source Name:	WELL 01		
System Number:	4300917		
System Name:	California Div of Forestry		
Organization That Operates System:	15670 MONTEREY		
	MORGAN HILL, CA 95037		
Pop Served:	25	Connections:	5
Area Served:	Not Reported		

4
South
1/2 - 1 Mile
Lower

Site ID:	38-0610			
Groundwater Flow:	E, W		AQUIFLOW	69983
Shallow Water Depth:	7.3			
Deep Water Depth:	8.0			
Average Water Depth:	Not Reported			
Date:	04/07/1994			

5
NE
1/2 - 1 Mile
Higher

CA WELLS 9396

Water System Information:

Prime Station Code:	09S/03E-27G04 M	User ID:	HEN
FRDS Number:	4310006006	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370730.0 1213730.0	Precision:	100 Feet (one Second)
Source Name:	CONDIT WELL		
System Number:	4310006		
System Name:	City of Morgan Hill		
Organization That Operates System:	17555 Peak Avenue		
	Morgan Hill, CA 95037		
Pop Served:	27948	Connections:	9290
Area Served:	CITY OF MORGAN HILL		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	01-FEB-11	Findings:	530. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09-MAR-11	Findings:	520. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09-MAR-11	Findings:	8.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	31-JAN-12	Findings:	560. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	31-JAN-12	Findings:	8.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-12	Findings:	560. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-MAY-12	Findings:	7.74
Chemical:	PH, LABORATORY		
Sample Collected:	30-MAY-12	Findings:	120. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	30-MAY-12	Findings:	150. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	30-MAY-12	Findings:	211. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	30-MAY-12	Findings:	48. MG/L
Chemical:	CALCIUM		
Sample Collected:	30-MAY-12	Findings:	22. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	30-MAY-12	Findings:	27. MG/L
Chemical:	SODIUM		
Sample Collected:	30-MAY-12	Findings:	1.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	30-MAY-12	Findings:	69. MG/L
Chemical:	CHLORIDE		
Sample Collected:	30-MAY-12	Findings:	41. MG/L
Chemical:	SULFATE		
Sample Collected:	30-MAY-12	Findings:	0.16 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	30-MAY-12	Findings:	260. UG/L
Chemical:	IRON		
Sample Collected:	30-MAY-12	Findings:	330. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	30-MAY-12	Findings:	8.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-12	Findings:	1.5 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	30-MAY-12	Findings:	11.91
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	30-MAY-12	Findings:	1900. MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	30-MAY-12	Findings:	1.7 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	30-MAY-12	Findings:	0.44 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	30-MAY-12	Findings:	2.8 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	30-MAY-12	Findings:	0.72 PCI/L
Chemical:	RADIUM 228 MDA95		

6
South
1/2 - 1 Mile
Lower

CA WELLS 9406

Water System Information:

Prime Station Code:	09S/03E-34L02 M	User ID:	43C
FRDS Number:	4300726001	County:	Santa Clara
District Number:	73	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	370621.0 1213757.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	4300726		
System Name:	MORGAN HILL OUTER LIMITS		
Organization That Operates System:	15355 MONTEREY HWY MORGAN HILL, CA 95037		
Pop Served:	25	Connections:	4
Area Served:	Not Reported		

7
SSE
1/2 - 1 Mile
Lower

CA WELLS 9407

Water System Information:

Prime Station Code:	09S/03E-34L08 M	User ID:	HEN
FRDS Number:	4300602001	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370620.0 1213747.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	4300602		
System Name:	Economy Inn		
Organization That Operates System:	15080 MONTEREY RD MORGAN HILL, CA 95037		
Pop Served:	25	Connections:	4
Area Served:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	23-FEB-11	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-MAY-11	Findings:	40. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-AUG-11	Findings:	44. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-11	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-FEB-12	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-MAY-12	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-AUG-12	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-NOV-12	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-FEB-13	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-MAY-13	Findings:	40. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-AUG-13	Findings:	47.09 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-NOV-13	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-FEB-14	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAY-14	Findings:	41. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-14	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-NOV-14	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-MAY-15	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-AUG-15	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-NOV-15	Findings:	7.6 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	17-FEB-16	Findings:	9.1 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	24-MAY-16	Findings:	9.6 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	24-AUG-16	Findings:	8.5 MG/L
Chemical:	NITRATE (AS N)		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

8
SSE
1/2 - 1 Mile
Lower

CA WELLS 9408

Water System Information:

Prime Station Code:	09S/03E-34P06 M	User ID:	43C
FRDS Number:	4300622001	County:	Santa Clara
District Number:	73	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370612.0 1213744.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	4300622		
System Name:	JUBILEE COMMUNITY CENTER		
Organization That Operates System:	15290-A SYCAMORE AVE MORGAN HILL, CA 95037		
Pop Served:	24	Connections:	3
Area Served:	Not Reported		

9
South
1/2 - 1 Mile
Lower

CA WELLS 19843

Water System Information:

Prime Station Code:	4300945-001	User ID:	HEN
FRDS Number:	4300945001	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	370610.0 1213800.0	Precision:	0.5 Mile (30 Seconds)
Source Name:	WELL 01		
System Number:	4300945		
System Name:	Royal Oaks Mushroom Enterprises, Inc.		
Organization That Operates System:	15480 WATSONVILLE RD MORGAN HILL, CA 95037		
Pop Served:	45	Connections:	1
Area Served:	Not Reported		
Sample Collected:	08-JUN-11	Findings:	27. MG/L
Chemical:	SODIUM		
Sample Collected:	08-JUN-11	Findings:	61. MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JUN-11	Findings:	400. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JUN-11	Findings:	24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-AUG-12	Findings:	710. US
Chemical:	SPECIFIC CONDUCTANCE		

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	23-AUG-12	Findings:	0.13 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	23-AUG-12	Findings:	0.156 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	23-AUG-12	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-AUG-12	Findings:	1.16 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	03-DEC-13	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		

**1G
South
1/2 - 1 Mile
Lower**

Site ID: 38-0610
 Groundwater Flow: E, W
 Shallow Water Depth: 7.3
 Deep Water Depth: 8.0
 Average Water Depth: Not Reported
 Date: 04/07/1994

AQUIFLOW 69983

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95037	21	0

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95037

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish & Game

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

RADON

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Paul Sagayaraj

16015 CAPUTO DR
MORGAN HILL, CA 95037

Inquiry Number: 5052107.5
September 20, 2017

The EDR-City Directory Abstract

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

infoUSA[®]

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2011	Haines Criss-Cross Directory	-	X	X	-
2005	Haines Criss-Cross Directory	-	X	X	-
2000	Haines Criss-Cross Directory	-	X	X	-
1996	Haines Criss-Cross Directory	-	X	X	-
1991	Haines Criss-Cross Directory	-	X	X	-
1986	Haines Criss-Cross Directory	-	X	X	-
1980	Haines Criss-Cross Directory	-	-	-	-
1975	Haines Criss-Cross Directory	-	-	-	-
1970	Haines Criss-Cross Directory	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

16015 CAPUTO DR
MORGAN HILL, CA 95037

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CAPUTO DR

CAPUTO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	No address listings prior to the Target Property	Haines Criss-Cross Directory
2005	No address listings prior to the Target Property	Haines Criss-Cross Directory
2000	No address listings prior to the Target Property	Haines Criss-Cross Directory
1996	No address listings prior to the Target Property	Haines Criss-Cross Directory
1991	No address listings prior to the Target Property	Haines Criss-Cross Directory
1986	No address listings prior to the Target Property	Haines Criss-Cross Directory

16020 CAPUTO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	Aglie Communication Systems	Haines Criss-Cross Directory
	Southside Flooring	Haines Criss-Cross Directory
2005	Southside Flooring	Haines Criss-Cross Directory

16035 CAPUTO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	Commercial Building (7 occupants)	Haines Criss-Cross Directory
2005	Advanced Instrument	Haines Criss-Cross Directory
	Bodyworks Of Morgan Hill	Haines Criss-Cross Directory
	Carmel Chemicals Inc	Haines Criss-Cross Directory
	Cellular Phone	Haines Criss-Cross Directory
2000	Commercial Building (6 occupants)	Haines Criss-Cross Directory
1996	Commercial Building (5 occupants)	Haines Criss-Cross Directory
1991	Commercial Building (6 occupants)	Haines Criss-Cross Directory

16040 CAPUTO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	J Barrios Inc	Haines Criss-Cross Directory
	Sling Systems Inc	Haines Criss-Cross Directory

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	No Return	Haines Criss-Cross Directory
2000	I I C O N Corp	Haines Criss-Cross Directory
1996	I I C O N Corp	Haines Criss-Cross Directory
1991	I I C O N Corporation	Haines Criss-Cross Directory

FINDINGS

STREET NOT IDENTIFIED IN RESEARCH SOURCE

The following Streets were researched for this report, and the Streets were not identified in the research source.

Street Researched

CAPUTO DR

Street Not Identified in Research Source

1980, 1975, 1970

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched

16015 CAPUTO DR

Address Not Identified in Research Source

2011, 2005, 2000, 1996, 1991, 1986

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched

CAPUTO DR

16020 CAPUTO DR

16035 CAPUTO DR

16040 CAPUTO DR

Address Not Identified in Research Source

No Years Found

2000, 1996, 1991, 1986

1986

1986

Paul Sagayaraj
16015 CAPUTO DR
MORGAN HILL, CA 95037

Inquiry Number: 5052107.3

September 18, 2017

Certified Sanborn® Map Report

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/18/17

Site Name:

Paul Sagayaraj
16015 CAPUTO DR
MORGAN HILL, CA 95037
EDR Inquiry # 5052107.3

Client Name:

Harris & Lee Env. Sciences
120 Ross Valley Drive
San Rafael, CA 94901-0000
Contact: Cathy Neumann



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Harris & Lee Env. Sciences were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

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Exhibit G – Regulatory Records Documentation

Cathy Neumann

From: Pech, Somira [Somira.Pech@cep.sccgov.org]
Sent: Friday, September 22, 2017 3:15 PM
To: CATHY@HLENV.COM
Subject: CPRA REQ092017C

Good afternoon Cathy,

Thank you for your recent record request received on 09/20/2017 for the following address in Morgan Hill:

16015 Caputo Dr

We have no records for this location. However, additional electronic documents may be found on the following websites:

[GEOTracker \(GT\)](#)
[Cal EPA Site Portal](#)

Spill Reports Website – California Office of Emergency Services (Cal OES):

[https://w3.calema.ca.gov/operational/malhaz.nsf/\\$defaultview](https://w3.calema.ca.gov/operational/malhaz.nsf/$defaultview)

Please be advised that in some cities, other participating agencies may be responsible for maintaining the type of files you requested. This link may be of assistance in determining who will have the documents you are looking for in the future:
[UNIDOCs](#) – Who regulates what in Santa Clara County

Best regards,

Somira Pech

Department of Environmental Health
 1555 Berger Drive, Building 2, Suite 300
 San Jose, CA 95112

www.ehinfo.org

408-918-3423 Direct Line

408-280-6479 Fax

Email: somira.pech@deh.sccgov.org

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“Learn from yesterday, live for today, hope for tomorrow.” By Albert Einstein

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Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)



Environmental Remediation Group

Olin Corporation

3855 North Ocoee Street, Suite 200,
Cleveland, TN. 37312
(423) 336-4540
FAX (423) 336-4166
DMShare@olin.com

SENT VIA GEOTRACKER

February 28, 2017

Mr. Dean Thomas, PG
Engineering Geologist
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

**RE: 2016 Annual Monitoring and Sampling Report and
2016 Second Semiannual Groundwater Monitoring Report
Olin Site – 425 Tennant Ave, Morgan Hill, California**

Dear Mr. Thomas:

The 2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report (2016 CPSR) for the Olin Site in Morgan Hill, California is attached. The 2016 CPSR is prepared pursuant to Monitoring and Reporting Program (MRP) R3-2008-0028 and Cleanup or Abatement Order (CAO) R3-2004-0101, as modified by the State Water Resources Control Board and other Central Coast Regional Water Quality Control Board letters.

With my signature below, as a duly authorized Olin representative, I certify under penalty of perjury that to the best of my knowledge the contents within this report are true, complete, and correct.

If you have any questions, please don't hesitate to contact me.

Sincerely,
OLIN CORPORATION

David M. Share
Director, Environmental Remediation Group

Attachments

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

cc: Thea Tryon – Water Board*
Karl Bjarke – City of Morgan Hill*
Andria Ventura – PCAG*
Vanessa De La Piedra – Santa Clara Valley Water District*
Curt Richards, Rick McClure, Dane Grimshaw – Olin*
Libby Bowen, Susan Panttaja, Neven Kresic – Amec Foster Wheeler*
Evan Cox, Jim Deitsch – Geosyntec*

* Sent via email



2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site
Morgan Hill, California

Prepared for:

Olin Corporation
Cleveland, Tennessee

Prepared by:

Amec Foster Wheeler Environment & Infrastructure, Inc.
1670 Corporate Circle, Suite 101
Petaluma, California 94954

February 28, 2017

Project No. 6107170012

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

**2016 Annual Cleanup Progress Status Report
and 2016 Second Semiannual Groundwater
Monitoring Report**

Olin Site
Morgan Hill, California

February 2017
Project 6107170012

This report was prepared by the staff of Amec Foster Wheeler Environment & Infrastructure, Inc., under the supervision of the Hydrogeologist and Geologist whose signatures appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.



Elizabeth T. Bowen
Project Manager



Neven Kresic
Principal Hydrogeologist

**2016 Annual Cleanup Progress Status Report
and 2016 Second Semiannual Groundwater
Monitoring Report**

Olin Site
Morgan Hill, California

February 2017
Project 6107170012

JURAT

I certify under penalty of perjury that information contained within this document (2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report) and all attachments, exclusive of work prepared by other consultants, is true and accurate to the best of my knowledge. The services described in this document have been provided in a manner consistent with current standards of the profession and to the best of my knowledge comply with all applicable federal, state, and local statutes, regulations, and ordinances.



Susan Panttaja

Susan Panttaja, PG
Associate Geologist
Amec Foster Wheeler
Environment & Infrastructure, Inc.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION.....	1
1.1 BACKGROUND	1
1.2 OBJECTIVES.....	3
1.3 REPORT ORGANIZATION	3
2.0 2016 SECOND SEMIANNUAL GROUNDWATER MONITORING RESULTS	4
2.1 GROUNDWATER FLOW DIRECTIONS AND GRADIENTS.....	4
2.2 PERCHLORATE DISTRIBUTION	6
2.3 NITRATE ANALYTICAL RESULTS.....	9
3.0 2016 SECOND SEMIANNUAL GWTS OPERATIONS AND PERFORMANCE	9
3.1 GWTS OPERATIONS AND PERFORMANCE.....	9
3.2 DOMESTIC IX SYSTEMS PERFORMANCE.....	11
4.0 DATA ACCURACY AND PRECISION.....	11
5.0 2016 CHARACTERIZATION ACTIVITIES.....	12
5.1 2016 ANNUAL DOMESTIC WELL SURVEY	12
5.2 REFINED GROUNDWATER MODEL	12
5.3 CONTINUOUS INTERMEDIATE AND DEEP AQUIFER GROUNDWATER ELEVATION MEASUREMENTS.....	13
5.4 ASSESSMENT OF QUARTERLY GROUNDWATER ELEVATION MONITORING	14
6.0 HYDRAULIC CONTROL PROGRESS EVALUATION.....	15
6.1 2016 GWTS HYDRAULIC CONTROL EVALUATION	15
6.1.1 Capture Zone Evaluation Approach	16
6.1.2 On-Site Recharge Evaluation.....	17
6.1.3 Intermediate Aquifer Hydraulic Capture Evaluation	17
6.1.4 Middle Deep Aquifer Hydraulic Capture Evaluation	18
6.2 GDR PILOT STUDY.....	18
6.3 HYDRAULIC CONTROL EVALUATION CONCLUSIONS.....	19
7.0 MONITORED ATTENUATION PROGRESS EVALUATION.....	20
7.1 MANN KENDALL TRENDS.....	20
7.2 CONTROL CHARTS	21
7.3 ATTENUATION FACTORS	23
7.4 MONITORED ATTENUATION EVALUATION CONCLUSIONS	24
8.0 MRP REVISIONS.....	25
9.0 CONCLUSIONS AND RECOMMENDATIONS.....	25
9.1 SEMIANNUAL GROUNDWATER MONITORING	25
9.2 HYDRAULIC CONTROL.....	26
9.3 MONITORED ATTENUATION	26
9.4 CHARACTERIZATION UPDATE – 2016	27
9.5 RECOMMENDATIONS – 2017	27
10.0 REFERENCES	28

TABLE OF CONTENTS

(Continued)

TABLES

Table 1	Groundwater Depths and Elevations
Table 2	Perchlorate Results – Monitoring and Extraction Wells
Table 3	Perchlorate Results – Domestic and Irrigation Wells
Table 4	Replacement Water Program Well Status
Table 5	Mann Kendall Trend Analysis – Domestic and Monitoring Wells
Table 6	Nitrate Results
Table 7	Quarterly Average Flow Rates and Volumes Extracted
Table 8	Groundwater Treatment System Analytical Results
Table 9	Perchlorate Mass Removed
Table 10	Perchlorate Results – Domestic Ion Exchange Systems
Table 11	Analytical Results – Gradient Driven Remediation Performance Monitoring Program
Table 12	Monitored Attenuation Rates and Mann Kendall Analysis for PMP Wells

FIGURES

Figure 1	Site Location Map
Figure 2	Shallow Aquifer Groundwater Elevation Contours, July 2016
Figure 3	Upper Intermediate Aquifer Zone Groundwater Elevation Contours, July 2016
Figure 4	Middle to Lower Intermediate Aquifer Zones Groundwater Elevation Contours, July 2016
Figure 5	Upper Deep Aquifer Zone Groundwater Elevation Contours, July 2016
Figure 6	Middle Deep Aquifer Zone Groundwater Elevation Contours, July 2016
Figure 7	Lower Deep Aquifer Zone Groundwater Elevation Contours, July 2016
Figure 8	Perchlorate Results – Shallow Aquifer
Figure 9	Perchlorate Results – Upper Intermediate Aquifer Zone
Figure 10	Perchlorate Results – Middle to Lower Intermediate Aquifer Zones
Figure 11	Perchlorate Results – Upper Deep Aquifer Zone
Figure 12	Perchlorate Results – Middle Deep Aquifer Zone
Figure 13	Perchlorate Results – Lower Deep Aquifer Zone
Figure 14	Groundwater Elevations and Simulated Groundwater Flowpaths - Shallow Aquifer Zone
Figure 15	Simulated Groundwater Capture, Upper Intermediate Aquifer Zone
Figure 16	Simulated Groundwater Capture, Middle Intermediate Aquifer Zone
Figure 17	Simulated Groundwater Capture, Middle Deep Aquifer Zone
Figure 18	Transducer Groundwater Elevations – Intermediate and Deep Aquifer Zones
Figure 19	Daily Groundwater Elevation Fluctuations, Middle Deep Aquifer Zone Wells
Figure 20	Daily Groundwater Elevation Fluctuations, Lower Deep Aquifer Zone Wells
Figure 21	Perchlorate Time Series: Intermediate Aquifer Screen Intervals
Figure 22	Perchlorate Time Series: Deep Aquifer Screen Intervals

TABLE OF CONTENTS

(Continued)

APPENDICES

Appendix A	Analytical Reports and Chain-of-Custody Records for Groundwater Samples (Provided Separately)
Appendix B	Field Sampling Data
Appendix C	Analytical Results, Microsoft Access Database (Provided Separately)
Appendix D	Perchlorate Time-Series Graphs
Appendix E	MAROS Output
Appendix F	Remediation Operations and Performance Monitoring Sampling Data
Appendix G	Data Validation and Precision Assessment Results
Appendix H	Monitored Attenuation Evaluation Charts
Appendix I	MRP Monitoring Frequency Changes

LIST OF ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
1SA16	2016 First Semiannual reporting period
1Q13	First Quarter 2013
1Q15	First Quarter 2015
1Q16	First Quarter 2016
2SA16	2016 Second Semiannual reporting period
3Q12	Third Quarter 2012
3Q15	Third Quarter 2015
3Q16	Third Quarter 2016
4Q12	Fourth Quarter 2012
4Q15	Fourth Quarter 2015
4Q16	Fourth Quarter 2016
AMEC	AMEC Environment & Infrastructure, Inc.
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
bgs	below ground surface
CAO	Cleanup and Abatement Order R3-2007-0077
City	City of Morgan Hill
Cleanup Work Plan	Llagas Subbasin Cleanup Work Plan
CPSR	Cleanup Progress Status Report
ft/ft	foot per foot
FS	feasibility study
GDR	gradient driven remediation
GDR MRP	Gradient Driven Remediation Monitoring and Reporting Program No. R3-2015-0039
GDR Work Plan	Gradient Driven Remediation Pilot Study Work Plan
Geosyntec	Geosyntec Consultants, Inc.
GES	groundwater extraction system
gpm	gallons per minute
GWTS	groundwater treatment system
IES	ion exchange system
IX	ion exchange
kg	kilogram
lb	Pound
MA	monitored attenuation
MACTEC	MACTEC Engineering and Consulting, Inc.
MAROS	Monitoring and Remediation Optimization System
MCL	maximum contaminant level
MRP	Monitoring and Reporting Program R3-2008-0028
Olin	Olin Corporation
OMMP	Operations, Maintenance, and Monitoring Plan
OSR	on-site recharge

LIST OF ABBREVIATIONS AND ACRONYMS

PMP	Performance Monitoring Program
PZA	Priority Zone A
PZB	Priority Zone B
PZC	Priority Zone C
QAPP	Quality Assurance Project Plan
RCP	Remedial Contingency Plan
SCVWD	Santa Clara Valley Water District
Site	Olin Site (425 Tennant Avenue, Morgan Hill, California)
State Board Order	State Water Resources Control Board Order WQ 2005-0007
Subbasin	Llagas Subbasin
SWRCB	State Water Resources Control Board
U.S. EPA	U.S. Environmental Protection Agency
Water Board	Regional Water Quality Control Board, Central Coast Region
WDR	Waste Discharge Requirements Order No. R3-2011-0209

2016 ANNUAL CLEANUP PROGRESS STATUS REPORT AND 2016 SECOND SEMIANNUAL GROUNDWATER MONITORING REPORT

Olin Site
Morgan Hill, California

EXECUTIVE SUMMARY

On behalf of Olin Corporation (“Olin”), Amec Foster Wheeler Environment & Infrastructure, Inc. (“Amec Foster Wheeler”), has prepared this *2016 Annual Cleanup Progress Status Report* (CPSR) for the Olin site in Morgan Hill, California (the “Site”). The report has been prepared pursuant to the following Central Coast Regional Water Quality Control Board (“Water Board”) documents for the Site:

- Ordering Paragraph H of Cleanup and Abatement Order No. R3-2007-0077 (CAO), and
- Monitoring and Reporting Program No. R3-2008-0028 (MRP).

This CPSR documents the progress made toward meeting groundwater cleanup objectives specified by the Water Board CAO using the hydraulic control and monitored attenuation remediation methods. As specified in the MRP, the annual CPSR is combined with the second semiannual groundwater monitoring report for each reporting year; therefore, this CPSR includes the *2016 Second Semiannual Groundwater Monitoring Report*, which covers the monitoring period from July 1, 2016, through December 31, 2016 (2SA16).

Groundwater monitoring and remediation activities performed throughout 2016 consisted of (1) measuring depths to groundwater, (2) collecting and analyzing groundwater samples, and (3) performing routine operation and monitoring of the on-site groundwater treatment system (GWTS) and off-site ion exchange (IX) treatment systems that were designed specifically to remove perchlorate from groundwater. Groundwater flow directions were generally consistent with previous monitoring events. Generally higher groundwater elevations, on the order of 20 or more feet in all aquifer zones compared to July 2015, reflect significant rainfall in the Spring of 2016. Transducer data collected in 2016 were used to provide an accurate interpretation of average daily groundwater flow directions and gradients in the middle and lower deep aquifer zones, as influenced by the operation of the City of Morgan Hill (City) wells. Taking these daily fluctuations into consideration, groundwater flow in the middle deep aquifer zone is eastward beneath the Site, with no indication of a groundwater divide as observed in 2015. Farther southeast of the Site, the groundwater flow direction is southeastward.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Groundwater sampling results for 2016 show overall stable to declining perchlorate concentrations in all aquifers throughout the Llagas Subbasin (the “Subbasin”). These changes in perchlorate distribution and concentration are consistent with previous observations made since basin-wide monitoring began in 2004. These long-term trends have resulted in a 99% decline in the number of domestic wells with perchlorate concentrations greater than the maximum contaminant level (MCL) of 6 micrograms per liter (µg/L).

Analytical results from groundwater samples collected during 2SA16 indicate that perchlorate exceeded the MCL in six domestic wells screened in the intermediate aquifer or middle deep aquifer zone plumes, all within approximately 1 mile of the Site. Replacement (bottled) water is provided to users of three domestic wells with perchlorate concentrations currently or recently above the MCL and IX treatment systems are active at five domestic wells where perchlorate concentrations have exceeded 7.9 µg/L during the past year, in compliance with the State Water Resources Control Board Order WQ 2005-0007.

The GWTS was operated continuously through 2016 pursuant to Waste Discharge Requirements Order No. R3-2011-0209 (adopted July 14, 2011), and the Treated Groundwater Recharge and Reinjection agreement approved by the Santa Clara Valley Water District. During 2SA16, approximately 93.4 million gallons of groundwater was extracted, treated by IX technology, and recharged. The total perchlorate mass removed during 2SA16 was 5.30 kilograms (11.69 pounds [lbs]); the total mass removed since operations began in 2004 is approximately 97.60 kilograms (215.16 lbs).

The CAO requires hydraulic control of perchlorate-impacted groundwater that contains Priority Zone A (PZA) and Priority Zone B (PZB) concentrations in the intermediate aquifer and PZA concentrations in the deep aquifer. Extraction wells EW-01B1, IEW-1R, and DEW-1 were therefore evaluated with respect to their ability to hydraulically control perchlorate in the intermediate and deep aquifers. EW-01B1 extracts groundwater from the upper intermediate aquifer zone on site. IEW-1R extracts groundwater from the upper and middle intermediate aquifer zones south of the Site. With the exception of areas east and south of the Site, the vast majority of the groundwater in the upper intermediate aquifer zone containing PZA and PZB concentrations is being captured by wells EW-01B1 and IEW-1R. The groundwater containing PZA and PZB in the middle intermediate aquifer zone is captured by IEW-1R.

In 2016, a Feasibility Study (FS) was conducted to assess options for additional capture of groundwater containing perchlorate in the intermediate aquifer. The FS was approved by the Water Board on December 2, 2016, and design of the Upper Intermediate Source Control System, which includes installation of up to five intermediate aquifer extraction wells, is under way.

DEW-1 extracts groundwater primarily from the middle deep aquifer zone, with a smaller proportion of extracted groundwater originating from the upper deep aquifer zone. PZA is no longer present in the upper deep aquifer zone, and a capture analysis is thus not applicable. For the middle deep aquifer zone, capture analysis indicates that groundwater with PZA concentrations is fully captured by extraction well DEW-1; therefore, implementation of the remedial contingencies described in the Remedial Contingency Plan for hydraulic control is unnecessary. Further analysis of the middle deep aquifer zone remedial strategy is not warranted at this time. Remedial effectiveness will be re-assessed at the end of 2017 and, if warranted, a FS of the middle deep aquifer zone will be conducted in conjunction with the lower deep aquifer zone FS to evaluate alternatives to the current cleanup remedy.

Data collection as part of a gradient-driven remediation (GDR) pilot study continued in 2016. GDR technology has the potential to provide hydraulic control and cleanup of perchlorate exceeding PZA in the lower deep aquifer zone by making use of the natural and induced downward vertical gradient in the Subbasin. Well GDR-1 was installed in January 2016 and monitoring was conducted throughout 2016, in accordance with the GDR MRP. Recommendations regarding next steps for the GDR pilot study will be submitted to the Water Board following completion of the First Quarter 2017 monitoring event. The lower deep aquifer zone FS is currently scheduled to be prepared during 2018.

In addition to assessment of hydraulic control, groundwater analytical data were collected to assess ongoing monitored attenuation in the Subbasin. Consistent with previous years, various data analyses (Mann Kendall tests for trends, control charts, and attenuation factors) indicate that perchlorate concentrations have continued to decline overall in response to attenuation processes in all three aquifers. These results are consistent with the stable-to-contracting spatial extent of the perchlorate plume core, as has been reported in previous groundwater monitoring reports for several years. Efforts are proceeding as anticipated in the 2007 *Llagas Subbasin Cleanup Work Plan*. Therefore, implementation of the remedial contingencies described in the Remedial Contingency Plan for monitored attenuation is unnecessary.

Monitoring will continue in 2017 to maintain compliance with the CAO, MRP, GDR MRP, and Operations, Maintenance, and Monitoring Plans related to the Site. Design and implementation of the Upper Intermediate Source Control System will continue in 2017 and 2018.

2016 ANNUAL CLEANUP PROGRESS STATUS REPORT AND 2016 SECOND SEMIANNUAL GROUNDWATER MONITORING REPORT

Olin Site
Morgan Hill, California

1.0 INTRODUCTION

This *2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report* (CPSR) was prepared for the Olin Corporation (“Olin”) site located at 425 Tennant Avenue, Morgan Hill, California (the “Site”). The report was prepared pursuant to the following Central Coast Regional Water Quality Control Board (“Water Board”) documents for the Site: (1) Ordering Paragraph H of *Cleanup and Abatement Order No. R3-2007-0077* (CAO; Water Board, 2007) and (2) *Monitoring and Reporting Program No. R3-2008-0028* (MRP; Water Board, 2015a). This CPSR presents the results of groundwater monitoring and documents remediation activities conducted for the Site in the Llagas Subbasin. As specified in the MRP, the second semiannual groundwater monitoring report covers the reporting period from July 1, 2016, through December 31, 2016 (“2SA16”), and is combined with the annual cleanup progress status report. Amec Foster Wheeler Environment & Infrastructure, Inc. (“Amec Foster Wheeler”), prepared this CPSR on behalf of Olin, with input from Geosyntec Consultants, Inc. (“Geosyntec”).

1.1 BACKGROUND

The Site is an approximately 13-acre parcel of land in Morgan Hill, California. The Site is located within the Llagas Subbasin (the “Subbasin”) of the Gilroy-Hollister Groundwater Basin in southern Santa Clara County (see Figure 1). The geologic and hydrogeologic features of the Subbasin are detailed in the *Llagas Subbasin Characterization – 2008* report (MACTEC Engineering and Consulting, Inc. [MACTEC], 2009a), with refined descriptions included in annual cleanup progress status reports for the years 2009 through 2015 (MACTEC, 2010 and 2011; AMEC Environment & Infrastructure, Inc. [AMEC], 2012a, 2013b, 2014b; Amec Foster Wheeler, 2015c and 2016a).

Groundwater flow in the vicinity occurs in three primary aquifers:

- Shallow aquifer – from ground surface to approximately 50 feet below ground surface (bgs),
- Intermediate aquifer – approximately 70–180 feet bgs, and
- Deep aquifer – approximately 200–450 feet bgs.

These depth intervals vary with distance from the Site. The intermediate and deep aquifers are each subdivided into three zones (upper, middle, and lower), based on a combination of geologic and hydrogeologic observations and hydraulic head profiles at depth-discrete monitoring wells. The primary aquifers are separated by two aquitards:

- The A/B aquitard between the shallow and intermediate aquifers; and
- The B/C aquitard between the intermediate and deep aquifers.

The aquitards consist of clay to silty material with occasional discontinuous sand stringers.

Most groundwater pumped by domestic and agricultural wells in the Subbasin originates from the intermediate aquifer, whereas groundwater pumped by municipal supply wells is produced predominantly from the deep aquifer zones. Recently, some domestic and agricultural wells have been installed in the upper and middle deep aquifer zones; some of these wells cross-screen the primary aquifers.

The perchlorate distribution in groundwater within the Subbasin is described in terms of three perchlorate concentration priority zones (MACTEC, 2007):

- Priority Zone A (PZA) – concentrations above 24.5 micrograms per liter ($\mu\text{g/L}$),
- Priority Zone B (PZB) – concentrations between 11.1 and 24.5 $\mu\text{g/L}$, and
- Priority Zone C (PZC) – concentrations between 6.1 and 11.0 $\mu\text{g/L}$.

California's maximum contaminant level (MCL) for perchlorate is 6 $\mu\text{g/L}$. The CAO defines the perchlorate plume core as consisting of PZA and PZB in the intermediate aquifer and PZA in the deep aquifer (Water Board, 2007). The priority zones were first described in the *Llagas Subbasin Cleanup Work Plan* ("Cleanup Work Plan"; MACTEC, 2007), modified in the *Revised MA [Monitored Attenuation] Performance Monitoring Program – Baseline Sampling* (MACTEC, 2009b), and approved by the Water Board on February 25, 2010 (Water Board, 2010).

An on-site groundwater treatment system (GWTS) operated from 2004 to February 2012. That system was replaced by an expanded GWTS constructed during 2012. The expanded GWTS began full-time operation on September 7, 2012, pursuant to Waste Discharge Requirements Order No. R3-2011-0209 (the "WDR"; Water Board, 2011), as discussed in Section 3.0. The GWTS consists of the following components:

- Groundwater extraction system (GES), which includes two extraction wells in the shallow aquifer (EW-01A and EW-02A) that are currently inactive, two extraction wells in the intermediate aquifer (EW-01B1 and IEW-1R), and one extraction well in the upper and middle deep aquifer zones (DEW-1);
- Ion exchange system (IES) to treat the extracted groundwater; and
- On-site recharge (OSR) system, which uses six injection wells screened in the shallow aquifer to re-inject treated groundwater.

- In 2016, the Water Board approved an expansion of the GWTS, to provide additional capture of the intermediate aquifer plume core (Geosyntec 2016a; Water Board, 2016). Design of the “Upper Intermediate Source Control System” is under way (Geosyntec, 2016b).

Beginning in 2012, a pilot study was initiated to evaluate the potential for gradient driven remediation (GDR) to be used to meet perchlorate cleanup objectives in the lower deep aquifer zone. The objective of the GDR pilot study is to evaluate whether taking advantage of a downward vertical gradient to induce groundwater flow from the intermediate aquifer (source water) into the lower deep aquifer zone (receiving water) can provide hydraulic control and enhance ongoing attenuation of perchlorate in the lower deep aquifer zone, pursuant to the CAO (Water Board, 2007). The GDR approach is more sustainable than other remedial alternatives. In January 2016, Well GDR-1 was installed and GDR performance monitoring was initiated, in accordance with the GDR Work Plan (AMEC, 2012b), amendment to the GDR Work Plan (Amec Foster Wheeler, 2015d), and the MRP associated with the GDR Pilot Study (“GDR MRP”; Water Board, 2015c).

1.2 OBJECTIVES

The objectives of this CPSR are to present the following information:

- Groundwater monitoring results for 2SA16 and a comparison of current groundwater monitoring results with previous results;
- A review of remediation activities and effectiveness, based on GWTS operations documented since the previous CPSR and the GDR MRP;
- An effectiveness assessment and status update for the hydraulic control and MA remedies;
- Recommendations, as needed, to implement the hydraulic control and MA Remedial Contingency Plan (RCP) if the criteria and benchmarks discussed in the Cleanup Work Plan (MACTEC, 2007, as revised by Olin, 2015a) are exceeded.

1.3 REPORT ORGANIZATION

The remainder of this report is organized as follows:

- Section 2.0 – 2016 Second Semiannual Groundwater Monitoring Results
- Section 3.0 – 2016 Second Semiannual GWTS Operations and Performance
- Section 4.0 – Data Accuracy and Precision
- Section 5.0 – 2016 Characterization
- Section 6.0 – Hydraulic Control Progress Evaluation
- Section 7.0 – Monitored Attenuation Progress Evaluation
- Section 8.0 – MRP Revisions
- Section 9.0 – Conclusions and Recommendations

- Section 10.0 – References

2.0 2016 SECOND SEMIANNUAL GROUNDWATER MONITORING RESULTS

Groundwater monitoring conducted during 2SA16 consisted of the following field activities:

- Measuring depths to water at 179 monitoring wells and piezometers;
- Collecting groundwater samples from 17 domestic wells, 5 extraction wells, and 122 monitoring wells for perchlorate analysis;
- Collecting groundwater samples from 4 domestic wells, 5 extraction wells, and 57 monitoring wells for nitrate analysis;
- Routinely operating and monitoring 5 domestic exchange (IX) systems, which included collecting groundwater samples quarterly, inspecting each system monthly, and performing routine repairs and maintenance as needed; and
- Routinely operating and monitoring the GWTS, including collecting monthly groundwater samples, inspecting the system monthly, and performing routine repairs and maintenance.

Sampling procedures, protocols, and purge methods for the monitoring wells are described in the *Quality Assurance Project Plan* (QAPP; Amec Foster Wheeler, 2015a) and *Sampling and Analysis Plan* (Amec Foster Wheeler, 2015b).

2.1 GROUNDWATER FLOW DIRECTIONS AND GRADIENTS

Groundwater elevations measured during 2SA16 (Table 1) were used to estimate groundwater flow directions and calculate horizontal and vertical groundwater gradients. Groundwater elevations at wells specified in the MRP were measured in July 2016 (Third Quarter 2016 or “3Q16”). Groundwater elevation contours for 3Q16 are shown on Figures 2 through 7 for the shallow aquifer, upper intermediate aquifer zone, middle/lower intermediate aquifer zones, and the upper, middle, and lower deep aquifer zones. Groundwater elevations were also measured at 18 wells in the intermediate aquifer zone and lower deep aquifer zone during November 2016 (Fourth Quarter 2016 or “4Q16”), pursuant to the GDR MRP (Water Board, 2015c). The 4Q16 groundwater elevations for wells in the GDR MRP are also provided in Table 1. When a groundwater level could not be measured (e.g., some shallow aquifer wells were dry), that exception is noted in Table 1. Results of the groundwater elevation measurements are described briefly below:

- Average groundwater elevations during 3Q16 increased by approximately 7.2 feet in the shallow aquifer, 14.9 feet in the upper intermediate aquifer zone, 13.7 feet in the middle/lower intermediate aquifer zone, 9.4 feet in the upper deep aquifer zone, 7.0 feet in the middle deep aquifer zone, and 6.5 feet in the lower deep aquifer zone compared to average groundwater elevations measured during First Quarter 2016 (1Q16). The increase in all aquifer zones reflects significant rainfall in early 2016, coupled with water use restrictions that had been in place in response to drought conditions.

- In 4Q16, water levels were measured in GDR MRP wells, which are screened in the upper and middle intermediate aquifer zones and the lower deep aquifer zone. These measurements indicate average groundwater elevations during 4Q16 increased by 5.0 feet in the intermediate aquifer (regardless of depth zone) and 15.5 feet in the lower deep aquifer zone compared to average groundwater elevations measured during 3Q16.
- A downward vertical gradient persists in the northern portion of the Subbasin (including beneath the Site) due to: (1) the natural downward gradient in this part of the Subbasin flow system, (2) extraction from Morgan Hill municipal wells, and (3) imported water recharging the Subbasin.
- The potentiometric surface maps on Figures 2 through 7 were created using the kriging contouring method, and then adjusted manually to represent the influence of extraction wells more realistically. The observed water level elevations in the monitoring wells in the middle deep and lower deep aquifer zones were adjusted taking into consideration data from transducers and daily fluctuations presumably caused by operation of City of Morgan Hill (City) wells. This is the first time transducer data were considered when creating potentiometric surface maps for these two zones. Water level elevations were adjusted to approximate levels that would be observed at 1:00 p.m. based on measured or estimated daily water level fluctuations and time of day of the manual measurements. This approach, which is discussed in more detail in Section 5.3, allows for a more accurate interpretation of likely representative, average daily groundwater flow directions and gradients as influenced by the operation of City wells. The resulting 3Q16 horizontal and vertical gradients are generally consistent with previous observations, allowing for seasonal variations and local effects of pumping from active extraction wells, except as noted below for the middle deep aquifer zone.
- In the shallow aquifer, the southeastern groundwater flow directions are consistent with previous observations, allowing for local influences from the on-site injection wells (Figure 2). The horizontal groundwater flow gradient was observed to be approximately 0.004 foot per foot (ft/ft) during 3Q16.
- In the upper intermediate aquifer zone, 3Q16 groundwater flow directions are to the southeast, consistent with previous observations (Figure 3), with local influences from extraction wells EW-01B1 and IEW-1R. In the combined middle and lower intermediate aquifer zones, the groundwater flow is generally to the southeast, although the cone of depression from IEW-1R is locally dominant (Figure 4). The horizontal groundwater flow gradients were observed to be approximately 0.002 ft/ft in the upper intermediate aquifer zone and 0.002 ft/ft in the combined middle and lower intermediate aquifer zones.
- In the upper deep aquifer zone, groundwater flow directions are generally consistent with previous observations, with flow primarily toward the southeast and local influence from DEW-1 (Figure 5). The horizontal groundwater flow gradients ranged from approximately 0.002 ft/ft beneath the Site to 0.008 ft/ft downgradient of the Site during 3Q16.
- In the middle deep aquifer zone, groundwater gradients in the general area of the Site are flat, without a notable northerly flow component (Figure 6). South of the Site, the groundwater flow direction is generally east to southeast at a gradient of approximately 0.003 ft/ft.

- In the lower deep aquifer zone, the groundwater flow directions are generally southeast and consistent with previous observations (Figure 7). The groundwater gradient in the vicinity of the Site is approximately 0.002 ft/ft. Due to the bedrock promontory and narrowing of the basin, the gradient increases south of approximately Middle Avenue.

2.2 PERCHLORATE DISTRIBUTION

Groundwater samples collected during 2SA16 were analyzed for perchlorate in accordance with the MRP (Water Board, 2015a). Samples were analyzed using U.S. Environmental Protection Agency (U.S. EPA) Test Method 314.0 (for monitoring wells and domestic wells with IX treatment systems) and Test Method 331.0 (for domestic wells without IX treatment systems), in accordance with the revised QAPP (Amec Foster Wheeler, 2015a). Perchlorate analytical results for samples collected during the past two years (First Quarter 2015 [1Q15] through 4Q16) are provided in Table 2 (monitoring and extraction wells) and Table 3 (domestic and irrigation wells); laboratory reports for 2SA16 are provided in Appendix A. Field measurements associated with the purging of each monitoring well during 2SA16 are provided in Appendix B, which also includes well location maps (Figures B1 through B5). An updated Microsoft Access database of analytical results is provided in Appendix C.

Figures 8 through 13 illustrate the perchlorate distribution in the shallow aquifer, the upper intermediate aquifer zone, the middle to lower intermediate aquifer zones, and the upper, middle, and lower deep aquifer zones during 2SA16. Perchlorate distributions and concentrations in each aquifer zone are generally consistent with the previously observed trends of a shrinking plume footprint and declining perchlorate concentrations observed throughout the Subbasin, and especially in the intermediate aquifer south of IEW-1R, since basin-wide monitoring began in 2004. These trends are discussed further in Section 7.

During 2SA16, perchlorate was detected at concentrations above the MCL in four domestic wells in the intermediate aquifer and two domestic wells screened primarily in the middle deep aquifer zone. Perchlorate concentrations in these wells ranged from 6.9 to 34 µg/L (Table 3). These wells are located in or adjacent to the plume core and within approximately 1 mile south of the Site (Figures 9 and 12). In accordance with State Water Resources Control Board Order WQ 2005-0007 ("State Board Order"; SWRCB, 2005), replacement water is provided for domestic wells with perchlorate concentrations above the MCL (Table 4). As required by the CAO (Water Board, 2007), IX treatment systems are required to be installed on domestic wells with perchlorate concentrations above 7.9 µg/L, which applied to five of the six domestic wells with perchlorate concentrations above 7.9 µg/L during the past year. The approved exception is well 09S03E34C002, whose owner preferred bottled water because of well maintenance issues. Bottled water is also provided to users of domestic well 09S03E34R007, with perchlorate concentrations between the MCL and 7.9 µg/L during the past year. Bottled water was provided to users of domestic well 09S03E35N008 until it was terminated in December

2016 with Water Board concurrence because perchlorate concentrations had been below the MCL for over a year.

Perchlorate concentration trends were calculated using the Mann Kendall nonparametric statistical trend test and procedures (Gilbert, 1987) for wells sampled during 2SA16. Mann Kendall trends were generated using analytical results over the most recent homogeneous period (as required in the 2017 MRP Revision; Water Board, 2017a), as determined using Pettitt's change point detection method.

The rationale for using homogeneous data set trends was discussed in the Proposed MRP Revisions letter (Amec Foster Wheeler, 2016e). The Pettitt's change point detection method was used to identify the most recent homogeneous segment of the historical data for trend analysis. If no change point was identified for a particular well, all historical data were used for trend analysis. The change points (i.e. starting points for the homogeneous data sets) are noted on time-series graphs in Appendix D (Figures D1 through D146).

Mann Kendall trends were calculated using the Monitoring and Remediation Optimization System (MAROS; Air Force Center for Environmental Excellence, 2006) software package; the output is provided in Appendix E. Mann Kendall trends were not calculated for wells where the majority of the perchlorate results during the period of analysis were less than the reporting limit or nondetect.

Results of the trend analysis for the 100 domestic, monitoring, and extraction wells sampled in 2SA16 that meet Mann Kendall analysis criteria are presented in Table 5. These results are also illustrated on Figures 8 through 13 and are summarized below:

- 71 wells exhibit a decreasing, probably decreasing, or stable trend;
- 18 wells exhibit no trend; and
- 11 wells exhibit increasing or probably increasing trends.

Additional details regarding the 11 wells with increasing or probably increasing trends is provided below:

- One on-site shallow aquifer well (PM-01A) has an increasing trend based on the homogeneous data set from early 2004 through 2016 (i.e., all historical results). Perchlorate concentrations at this well have been PZC or sub-PZC since mid-2004 and exhibit an apparent decreasing trend beginning in January 2013 (Figure D125).
- One well (EW-01B1) is an active on-site intermediate aquifer extraction well (Figure D19).
- Three on-site upper intermediate aquifer zone wells (MW-19, OW-01B1, and PM-01B1) have PZA concentrations and are within the capture area of extraction well EW-01B1 (Figures D64, D124, and D126).

- One middle intermediate aquifer zone well (MW-76-133) has PZC concentrations and is within the capture zone of extraction well IEW-1R (Figure D120).
- One upper intermediate aquifer zone well (MP-04-088) has PZA concentrations (Figure D28) and is at times either in or just outside the capture area of IEW-1R; perchlorate concentrations in the vicinity of this well will be addressed by the proposed Upper Intermediate Source Control System, which is further described in Section 6.1.
- One upper deep aquifer zone well (PMW-04-225) has PZC concentrations (Figure D131) and is adjacent to extraction well DEW-1.
- One middle deep aquifer zone well (MW-29-352) has PZC concentrations (Figure D68); this well is south of the contiguous perchlorate footprint and is co-located with well MP-29-292, which has a probably decreasing trend (Figure D40).
- Two lower deep aquifer zone wells (MW-56-433 and PZ-02-415) have increasing trends. Well MW-56-433 has PZC concentrations and is located at the southern end of the perchlorate footprint. Well PZ-02-415 has consistently sub-PZC concentrations and is located northwest of well GDR-1.

Analytical data from other 89 wells indicate either stable, decreasing, or no trend. The fact that only on-site/near-site intermediate aquifer zone wells have concentrations in the PZB/PZA range (requiring capture per the CAO) and all but one are either extraction wells or within capture zones, highlight that perchlorate concentrations in the Subbasin are stable to decreasing.

As summarized below, perchlorate distribution and concentrations are generally consistent with the first semiannual 2016 ("1SA16", January 1, 2016 through June 30, 2016) monitoring period (Amec Foster Wheeler, 2016c).

- The shallow aquifer perchlorate distribution is consistent with 1SA16 observations (Figure 8), although PZC concentrations at MW-65-027 have decreased to sub-PZC concentrations. In addition, fewer (4 of the 17) shallow MRP wells were dry than for the 2015 annual sampling event (Third Quarter 2015 [3Q15]).
- In the upper intermediate aquifer zone, perchlorate distribution is generally consistent with 1SA16 observations (Figure 9). Perchlorate decreases are illustrated at MP-17-110 and MW-60-082, and domestic well 09S03E35N008. Perchlorate increases were observed at MP-04-088, as discussed above, and MW-64-082. MW-64-082 is adjacent to extraction well IEW-1R; perchlorate concentrations detected in MW-64-082 have fluctuated since IEW-1R became operational. Despite the recent increase, the Mann Kendall trend for this well is potentially decreasing.
- In the middle and lower intermediate aquifer zones, perchlorate distribution is also generally consistent with 1SA16 observations (Figure 10). The perchlorate concentrations increased at domestic well 09S03E34C003 to PZA, which is typical for this well. The perchlorate concentration at well MW-71-115 decreased to sub-PZC levels.

- Perchlorate distributions in the upper, middle, and lower deep aquifer zones (Figures 11, 12, and 13, respectively) are generally consistent with 1SA16 observations, with the following exceptions: the perchlorate concentration at MP-16-229 fell from PZB to sub-PZC levels and the perchlorate concentration at lower deep aquifer zone well PMW-06-445 decreased from PZC to sub-PZC levels in 2SA16.

As requested by the Water Board (2014; and modified by e-mail dated September 25, 2014), perchlorate data from Morgan Hill municipal well samples are reviewed each year. In 2016, perchlorate results were provided for one municipal well (Boys Ranch Well #3A); perchlorate was not detected in samples from this well. Annual data from municipal wells will continue to be reviewed to monitor perchlorate concentrations and trends.

2.3 NITRATE ANALYTICAL RESULTS

Groundwater samples were collected for nitrate analysis in accordance with the MRP (Water Board, 2015a) and analyzed using U.S. EPA Test Method 300.0 for nitrate as nitrate. The nitrate analytical results for 2015 and 2016 samples are provided in Table 6. During 2SA16, nitrate concentrations in the shallow aquifer in the vicinity of the Site were stable and similar to concentrations in effluent water from the GWTS. Consistent with past results, nitrate concentrations were above the MCL of 45 milligrams per liter in shallow aquifer wells MW-64-027 and MW-75-085. Nitrate impacts to groundwater in the Llagas Subbasin are not associated with the Site and are believed to be an artifact of agricultural practices.

3.0 2016 SECOND SEMIANNUAL GWTS OPERATIONS AND PERFORMANCE

Groundwater treatment activities conducted during 2SA16 included routine operation and monitoring of the on-site GWTS and domestic IX systems. The GWTS is operated pursuant to the WDR (Water Board, 2011) and the Treated Groundwater Recharge and Reinjection agreement approved by the Santa Clara Valley Water District (SCVWD). Standard operations comply with the *Update to Operations, Maintenance, and Monitoring Plan for the Groundwater Treatment System* ("OMMP"; Geosyntec, 2014).

In accordance with the CAO, hydraulic control of groundwater is required where perchlorate concentrations exceed the PZB threshold in the intermediate aquifer and the PZA threshold in the deep aquifer (Water Board, 2007).

3.1 GWTS OPERATIONS AND PERFORMANCE

The GWTS is operating as designed and perchlorate was not detected in IES effluent samples collected in 2SA16, in compliance with the WDR (Water Board, 2011). All treated groundwater is recharged to the Subbasin. Table 7 presents monthly and quarterly flow rates and flow volumes recorded by the flowmeters for the GES and OSR system. Field forms and measurements are provided in Appendix F. Field parameters for the groundwater extraction wells are summarized in Table F1 of Appendix F.

Three extraction wells were operated throughout 2SA16: off-site extraction wells IEW-1R and DEW-1 and on-site extraction well EW-01B1. Shallow extraction well EW-02A also operated during July 2016, as described below. Perchlorate concentration results for samples collected from these extraction wells are presented in Table 2. A hydraulic capture evaluation for these extraction wells throughout 2016 is presented in Section 6.1.

Off-site extraction well IEW-1R was operated at a calculated average flow rate of approximately 238 gallons per minute (gpm) during 2SA16 (Table 7); to account for the current pump setting and groundwater conditions, 30 percent of this flow is estimated to originate from the upper intermediate aquifer zone screen, with the remaining flow originating from the middle intermediate aquifer zone screen. The average influent perchlorate concentration was 8.2 µg/L (Table 2). This concentration reflects a continued decline in perchlorate concentrations since operation of the GWTS began in September 2012, when the influent concentration was 15 µg/L. As shown on Figures 9 and 10, perchlorate concentrations for intermediate aquifer wells downgradient of IEW-1R generally exhibited stable to decreasing trends or no trend during 2SA16.

Off-site extraction well DEW-1 operated at a calculated average flow rate of approximately 128 gpm during 2SA16 (Table 7); five percent of this flow is associated with the upper deep aquifer zone with the remaining flow originating from the middle deep aquifer zone, as determined by spinner logs completed after well installation (Geosyntec, 2009). The average influent perchlorate concentration was 13.5 µg/L (Table 2).

On-site extraction well EW-01B1 (screened entirely in the upper intermediate aquifer zone) operated at an average flow rate of 12.2 gpm during 2SA16 (Table 7), and the average perchlorate concentration in the extracted groundwater was 138 µg/L (Table 2).

On-site shallow aquifer extraction wells EW-01A and EW-02A were shut off in 2011, with Water Board approval, because perchlorate concentrations remain below threshold restart levels set forth in the OMMP (Geosyntec, 2014). On May 20, 2016, groundwater extraction was initiated at on-site shallow aquifer extraction well EW-02A, as required by the OMMP, because the April and May 2016 perchlorate concentrations at this well exceeded the PZA threshold. The criteria to terminate operation of EW-02A, i.e., the next two consecutive monthly perchlorate concentrations below the PZA threshold (24.5 µg/L) at EW-02A and perchlorate concentrations consistently below the PZB threshold (11 µg/L) in nearby monitoring wells PM-01A and PM-02A, were met in July 2016. Subsequently, operation of EW-02A was terminated on August 2, 2016.

Monthly samples were collected from the IES at three sampling ports (influent [SV-100], midpoint [SV-200], and effluent [SV-300]). The samples were analyzed for perchlorate, major anions, and field parameters (Table 8). Perchlorate was not detected in the IES effluent

samples, in compliance with the WDR (Water Board, 2011). Performance of the on-site injection wells in 2SA16 was consistent with their design capacity.

Based on the treated volume of groundwater (approximately 99.58 million gallons¹) and the measured perchlorate concentrations in samples from influent sampling port SV-100, approximately 5.30 kilograms (kg), or approximately 11.69 pounds, of perchlorate was removed during 2SA16 (Table 9). The cumulative perchlorate mass removed by system operations since 2004 is 97.60 kg, or approximately 215.16 lbs.

During GWTS operation, inline analyzers at the IES effluent discharge port continuously monitor nitrate concentrations in groundwater. As shown in Table E2 of Appendix E, the monthly and quarterly average nitrate concentrations measured at this analyzer during 2016 met the WDR discharge requirements (Water Board, 2011).

3.2 DOMESTIC IX SYSTEMS PERFORMANCE

Five domestic IX systems are operated, maintained, and monitored in accordance with the *Operation, Maintenance, and Monitoring Plan for Residential Ion Exchange Systems* (Evoqua, 2015). The five IX systems include one domestic IX system that was installed on well 09S03E34J012 in July 2016.

Performance monitoring results during 2SA16 indicate that the domestic IX systems are operating as designed. Perchlorate analytical results for samples collected from the IX systems are provided in Appendix A and summarized in Table 10. Field forms related to operation, maintenance, and monitoring of the IX systems are provided in Appendix F.

4.0 DATA ACCURACY AND PRECISION

Data validation and precision assessments were performed in accordance with the procedures specified in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Methods Data Review* (U.S. EPA, 2014), the QAPP (Amec Foster Wheeler, 2015a), and quality control criteria specified in the analytical methods and the MRP (Water Board, 2015a; Water Board, 2017a). The results of the data validation and precision assessment are provided in Appendix G.

Based on the data review, the 2SA16 results are considered valid and usable to support project decisions. Data completeness (the number of successful analyses relative to the number of requested analyses) was 100% for samples collected during 2SA16.

¹ The SCVWD Water Production Statement for the Site references a separate in-line flow meter that reported 93,520,080 gallons of water produced during 2SA15. This SCVWD statement total represents a 0.1% difference from the automated, summed total flow from the extraction wells presented on Tables 7 and 9.

5.0 2016 CHARACTERIZATION ACTIVITIES

During 2016, several site characterization activities were conducted that contributed to continual refinements of the site conceptual model and understanding of hydrogeologic conditions at the site. These site characterization activities include:

- Review of available location and construction data for domestic wells installed south of the Site from March 2015 through March 2016 (Section 5.1);
- Review and refinement of the numerical groundwater flow model (Section 5.2);
- Evaluation of continuously measured groundwater elevations at select intermediate and deep aquifer wells (Section 5.3); and
- Assessment of quarterly groundwater elevation measurements (Section 5.4).

A summary of these site characterization activities is provided below.

5.1 2016 ANNUAL DOMESTIC WELL SURVEY

Research conducted pursuant to the Water Board's request to conduct an annual domestic well survey identified domestic well 10S04E07L009 as a potential candidate for the State Board's Replacement Water Program. As stated in the 2016 Semiannual Groundwater Monitoring Report (Amec Foster Wheeler, 2016c), based on construction details for this well and perchlorate analytical results from nearby wells, the Water Board agreed that perchlorate sampling of this well was unnecessary. Subsurface geology described in the well construction log for this well and perchlorate analytical results are generally consistent with previous findings and no change to the site conceptual model is needed based on these data.

5.2 REFINED GROUNDWATER MODEL

During preparation of the A/B Aquitard and Intermediate Aquifer FS (the "FS"; Geosyntec, 2016a), the groundwater flow model for the shallow and intermediate aquifers was updated. This updated groundwater flow model was used to support analyses presented in this report. The model update is described in detail in Appendix C of the FS, and important changes are summarized here. To differentiate it from the existing, steady-state model ("existing model") that was used to produce the capture zones for the 2015 CPSR (Amec Foster Wheeler, 2015a and earlier reports), the modified model used for the FS is herein referred to as the FS model.

Several important changes were made to the existing model for the FS model. The deep aquifer zone and B/C aquitard were removed, meaning that the FS model simulates groundwater flow specifically in the shallow and intermediate aquifer zones and the A/B aquitard. The resolution of the model grid was also increased. Unlike the existing model, the FS model simulates transient conditions, with quarterly (i.e., three-month) stress periods representing seasonal conditions. Boundary conditions, including head boundaries and extraction and injection wells, were updated accordingly. Within the FS model, parameter

values were updated to reflect published data and the site conceptual model. The most important changes were to vertical hydraulic conductivity of the A/B aquitard (reduced by an order of magnitude) and changes to the horizontal hydraulic conductivity distribution in the upper intermediate aquifer zone to reflect the known area of lower hydraulic conductivity covering the southern half of the site and areas to the south. As described in the FS, the calibration of the FS model is approximately equivalent to that of the existing model.

For this report, the FS model was used to produce the simulated flow paths in the shallow aquifer (Figure 14) and capture zones in the intermediate aquifer zones (Figures 15 and 16), using updated (2016) groundwater treatment system well flowrates. However, the FS model does not include the deep aquifer zone. Therefore, the DEW-1 capture zone (Figure 17) was produced using the existing model, which was not modified from the version used to produce the capture zones for the 2015 CPSR, other than updating the pumping rates in the groundwater treatment system wells to reflect 2016 rates. During 2017, the existing model will be the focus of further groundwater model refinements similar to those implemented in the shallow and intermediate aquifer zones for the FS model.

5.3 CONTINUOUS INTERMEDIATE AND DEEP AQUIFER GROUNDWATER ELEVATION MEASUREMENTS

Groundwater levels at the Site are subject to short-term (i.e., daily and hourly) fluctuations associated with municipal pumping wells in the Subbasin and seasonal trends. To better define these short- and long-term fluctuations and trends, submersible pressure transducers were deployed to measure water levels at multiple monitoring wells.

Submersible pressure transducers are used to provide simultaneous water level measurements and to continuously monitor the short-term water level fluctuations and seasonal trends in groundwater levels. A network of 25 pressure transducers was used from January to December 2016 to collect continuous water level data in the intermediate and deep aquifer zones. Transducers were deployed for the entire year in some wells and for a period of approximately six months in others. Transducers automatically collect water levels in the wells every half hour. The data from the transducers are downloaded periodically throughout the year; at the time of collection, hand measurements of water level are also collected to ensure that transducers continue to accurately measure water levels. This section describes transducer data wells in the GDR monitoring program; data from other transducers will be analyzed at a later date as part of ongoing site characterization efforts.

The transducer data corroborate the downward vertical gradient between the intermediate and deep aquifer zones, as observed through manual water level measurements (see Section 2.1). The transducer data also show the seasonal pattern in water levels, with an overall increase in 2016 (Figure 18).

The transducer data also provide a means to investigate how water levels in wells fluctuate daily, something that cannot be quantified based on hand measurements alone. Figure 18 shows an example of the daily water level fluctuations that are measured in individual wells in the middle and lower deep aquifer zones. All wells follow the same general pattern, with daily maximum water levels in the late evening and daily minimum water levels in the mid-morning. This pattern is somewhat different over the weekend, with a single minimum around mid-day on Saturdays and a single maximum in the early morning of Sundays.

Daily fluctuations are strongest in the middle deep aquifer zone. Figure 19 shows the average daily water level fluctuation at monitoring wells in the middle deep aquifer zone. Average daily water level fluctuations (calculated as difference between the maximum recorded water level and the minimum recorded water level, averaged over the entire period of record) vary from 8.5 feet at PZ-03-325 to 0.9 feet at MW-73-315 with larger daily water level fluctuations in the northern part of the study area than in the southern part. Figure 20 shows the average daily water level fluctuation at monitoring wells in the lower deep aquifer zone. Water levels in the lower deep aquifer zone are affected less than those in the middle deep aquifer zone by municipal well pumping.

As noted in Section 2.1, the average daily water level fluctuations were used to modify the 3Q16 water level contour maps in the middle and lower deep aquifer zones (Figures 6 and 7). For wells with transducers deployed during the 3Q16 water level measurement event (PMW-06-416, PZ-02-415, and PZ-05-390 in the lower deep aquifer zone), the water level measurements recorded at 1:00 p.m. on the day of the manual measurements was substituted for the hand measurement (with 1:00 p.m. representing the approximate mid-point between the daily water level minimum and maximum). For wells in the middle and lower deep aquifer zones with transducers that were removed before or deployed after the date of the manual measurements, the average daily water level fluctuation was used along with the manual water level measurement and the time of day of the manual measurement to estimate the water level at 1:00 p.m. Finally, for wells with no transducer deployed, an average daily water level fluctuation was estimated based on nearby wells, and was combined with the manual water level measurement and the time of day of the manual measurement to estimate the water level at 1:00 p.m.

5.4 ASSESSMENT OF QUARTERLY GROUNDWATER ELEVATION MONITORING

Groundwater elevations in the Llagas Subbasin were monitored quarterly from 2003 through 2015. During that time, the groundwater gradients and flow directions were consistent from quarter to quarter, allowing for seasonal variations, drought conditions, and the effects of pumping from production wells in the area. Major variations in overall groundwater elevations within the Subbasin are observed, but these changes tend to be bimodal, occurring on a

semiannual basis coincident with the wet and dry seasons of the region. Recognizing the long-term stability of the flow regime in the Subbasin and reliability of observing contoured groundwater elevation data on a semiannual basis, the Water Board incorporated a reduction to semiannual groundwater elevation monitoring in the 2015 MRP Revision.

More frequent depth-to-water measurements have been made as needed to support specific projects, including GDR (Water Board, 2015c) and the Feasibility Study of the A/B aquitard and the intermediate and middle deep aquifers (Geosyntec, 2016a). In addition, to monitor the transient effects of the prolonged drought and mandated water conservation measures, Olin opted to monitor groundwater elevations quarterly for one year, from Fourth Quarter 2015 (4Q15) through 3Q16, and to consider the merit of recommending an additional year of quarterly groundwater elevation monitoring in the 2016 CPSR (Olin, 2015b).

The extensive record of water level measurements, as well as the shape of the existing plume in the intermediate and deep aquifers, indicate that seasonal water level fluctuations do not have a major effect on the distribution of perchlorate in the aquifer zones. The narrow, elongated shape of the plume indicates that groundwater flow dominantly occurs in a single direction, and that off-axis flow is relatively minor. In addition, the existing treatment system and planned Upper Intermediate Source Control System are designed to remediate the entire existing plume footprint in the intermediate aquifer, and thus account for off-axis flow. Therefore, semiannual water level measurements are considered sufficient to characterize the groundwater flow system on site, and it is not necessary to continue the quarterly water level measurements that were collected from 4Q15 to 3Q16.

6.0 HYDRAULIC CONTROL PROGRESS EVALUATION

Hydraulic control of perchlorate in the intermediate and deep aquifers is required by CAO Ordering Paragraph D (Water Board, 2007). Hydraulic control within the intermediate aquifer and the upper and middle deep aquifer zones occurs via the GWTS, including extraction wells EW-01B1, IEW-1R, and DEW-1. A GDR pilot test is currently being conducted to evaluate whether GDR is an effective or necessary hydraulic control measure to augment ongoing MA in the lower deep aquifer zone (AMEC, 2012b; Amec Foster Wheeler, 2015d). GDR pilot study efforts to evaluate the feasibility of GDR continued in 2016 and are described in Section 6.2.

6.1 2016 GWTS HYDRAULIC CONTROL EVALUATION

This section presents a performance evaluation for the hydraulic control element of the expanded GWTS for 2016. The *100% Engineering Design Report for the Aquifer Containment & Cleanup System* (Geosyntec, 2011) documented several data evaluation tools pertinent to performance monitoring of the hydraulic control system:

- compare treatment system data with operations criteria described in the OMMP (Geosyntec, 2014) and the WDR (Water Board, 2011);

- evaluate extraction well capture zones; and
- assess trends in perchlorate concentration upgradient and downgradient of the extraction wells and injection wells.

GWTS operations and performance in 1SA16 were reported in the *2016 Semiannual Groundwater Monitoring Report* (Amec Foster Wheeler, 2016c). Operations and performance in 2SA16 are discussed here and in Section 3.1. The remainder of this section primarily discusses operations and performance with respect to hydraulic capture analyses of on-site and off-site extraction wells.

6.1.1 Capture Zone Evaluation Approach

Numerical groundwater flow models were used to simulate groundwater flow based on the actual extraction rates for EW-01B1, IEW-1R, and DEW-1. Specifically, groundwater flow simulations were used to evaluate the following processes, as discussed in Section 3.1 and Appendix G:

- on-site recharge into the shallow aquifer zone via injection wells INJ-001 through INJ-006;
- EW-01B1 capture in the upper intermediate aquifer zone;
- IEW-1R capture in the upper and middle intermediate aquifer zones; and
- DEW-1 capture in the middle deep aquifer zone.

Recharge and capture zones were visualized using particle tracking, in which the movement of hypothetical particles is tracked within the three-dimensional groundwater flow field simulated by the model. Capture zones are created for an extraction well by introducing particles at the location of the well screen and tracking their path backward in time for a specified period or until they reach a boundary through which they were introduced to the model domain (e.g., the edge of the model or an injection well). Particle tracks for injection wells represent their movement through the groundwater flow system over time for a specified period or until they reach a boundary through which they can be removed from the model domain (e.g., an extraction well or the edge of the model).

Because of the refinements to the shallow and intermediate aquifer zone model described in Section 5.2, two different groundwater models were used to prepare the capture zone figures for this report (see Section 5.2 and Figures 14 through 17). The intermediate aquifer particle tracking (recharge via the on-site injection wells and extraction via wells EW-01B1 and IEW-1R) was accomplished using the FS (transient) model. The middle deep aquifer zone particle tracking (extraction via well DEW-1) was created using the existing, steady-state model, as in previous years.

6.1.2 On-Site Recharge Evaluation

Up to 1.5 feet of mounding was observed at each on-site injection well, depending upon the rate of recharge at the well. Figure 14 shows estimated forward-tracking particle pathlines representing the migration of treated groundwater from the six on-site injection wells screened in the shallow aquifer. Figure 14 shows the particle tracks moving off-site to the southeast, in the general groundwater flow direction shown on Figure 2.

6.1.3 Intermediate Aquifer Hydraulic Capture Evaluation

Figure 15 presents simulated capture in the upper intermediate aquifer zone, based on backward-tracking particle pathlines leading to extraction wells EW-01B1 and IEW-1R. The simulated capture zone includes most of the PZA footprint, as in previous years, excluding the area of PZA around MW-75-085, east of the site. Particle tracks are discontinuous in places where they enter or leave the upper intermediate aquifer zone (i.e., through the fines layer between the upper and middle intermediate aquifer zones)

Figure 16 illustrates the simulated capture zone of IEW-1R in the middle intermediate aquifer zone, based on 2016 quarterly flow rates. The IEW-1R capture zone in the middle intermediate aquifer zone includes the entire perchlorate plume core in this aquifer zone and covers approximately the same area as the upper intermediate aquifer zone capture zone. Therefore, particles potentially moving through fine material between the upper and middle-intermediate aquifer zones are captured by IEW-1R.

Perchlorate trends for selected monitoring wells in the vicinity of and within the intermediate aquifer capture area are shown on Figure 21. Decreasing perchlorate concentrations are observed in all illustrated intermediate aquifer monitoring wells, except MP-04-088 located north of Tennant Avenue and east of the Site.

As required by the Water Board in a letter dated May 29, 2015 (Water Board, 2015b), an FS was prepared to evaluate potential modifications to the CAO-approved remedial approach for the intermediate aquifer zone (Geosyntec, 2016a). The FS identified, evaluated, and recommended a source control remedy for the intermediate aquifer, including the area near MW-75-085. The proposed source control system was accepted by the Water Board in 2016 (Water Board, 2016). Design of the chosen remedial alternative, the Upper Intermediate Source Control System, is ongoing. The *Remedial Design / Remedial Action Work Plan and 30% Design Report for Groundwater Treatment System Expansion* was submitted to the Water Board on December 30, 2016 (Geosyntec, 2016b) and approved by the Water Board on February 8, 2017 (Water Board, 2017b). Construction is anticipated to occur during 2017 and 2018.

6.1.4 Middle Deep Aquifer Hydraulic Capture Evaluation

Figure 17 illustrates the simulated capture zone of DEW-1 in the middle deep aquifer zone, based on DEW-1 pumping rates from 2016 (95 percent of which is estimated to originate from the middle deep aquifer zone based on previous spinner logs performed on this well). The estimated capture zone for the upper deep aquifer zone is not presented because PZA concentrations are not currently present in the upper deep aquifer zone (Figure 11), and thus hydraulic capture is not required in this aquifer zone.

As shown on Figure 17, the perchlorate plume core (i.e., PZA concentrations) in the middle deep aquifer zone is captured by pumping from DEW-1, consistent with previous capture analyses. Based on this evaluation, implementation of the remedial contingencies described in the RCP for hydraulic control is not necessary for the middle deep aquifer zone.

Perchlorate trends for selected upper and middle deep aquifer zone monitoring wells in the vicinity of and within the capture area of DEW-1 are shown on Figure 22. The majority of these monitoring wells exhibit decreasing or stable perchlorate concentrations after mid-2012, when DEW-1 pumping began. These data support the conclusion that DEW-1 is effectively capturing the perchlorate plume core in the middle deep aquifer. Consistent with the CAO, performance of this hydraulic control system will continue to be evaluated annually. As requested by the Water Board, if performance monitoring data through 2017 indicate that perchlorate is not sufficiently attenuating in the middle deep aquifer zone, a feasibility study will be conducted to evaluate alternatives to the current cleanup remedy. If required, this would be conducted in conjunction with the lower deep aquifer zone FS, which is scheduled to be prepared during 2018.

6.2 GDR PILOT STUDY

The *Final Gradient Driven Remediation Pilot Study Work Plan* (“GDR Work Plan”; AMEC, 2012b) was submitted to the Water Board in May 2012 and approved on July 16, 2012 (Water Board, 2012). The GDR Pilot Study is being implemented to evaluate the potential viability of this sustainable remediation concept. To date, the following pilot study activities have been conducted:

- Baseline groundwater quality monitoring was conducted for samples representative of both aquifer zones (source water and receiving water) to confirm GDR in this area complies with State Resolution 68-16 (the “Anti-degradation Policy”; SWRCB, 1968). Three baseline sampling events were conducted with Water Board concurrence in 2012 and 2013 (AMEC, 2013a, 2013c, 2014a).
- New performance monitoring well couplet (PMW-06) was installed and tested in the lower deep aquifer zone to confirm the depths of anticipated geologic units in the vicinity of the proposed GDR well locations, expand the lower deep aquifer zone monitoring network in this area, and evaluate future GDR well performance. Installation and testing activities were conducted in May 2014 (AMEC, 2014d).

- Well couplet MW-75 was installed and tested in the intermediate aquifer near the influent screen zones for proposed well GDR-2 (AMEC, 2014c) to address perceived data gaps east of the Site and evaluate increasing perchlorate concentration trends observed at well MP-04-88. Additional wells were installed at MW-75 in the lower intermediate and upper deep aquifer zones in 2015 (Amec Foster Wheeler, 2015e).
- An amendment to the GDR Work Plan, including a recommendation to install GDR-1, was submitted to the Water Board on October 23, 2015 (“GDR Work Plan Amendment”; Amec Foster Wheeler, 2015d). The Water Board approved the GDR Work Plan Amendment and the installation of GDR-1, and issued the GDR MRP (Water Board, 2015c).
- Well GDR-1 was installed in January 2016 and the well was brought online on January 29, 2016. Installation and testing were conducted in accordance with the GDR MRP and were reported in the Initial GDR Summary Report, which included the results of the first quarterly sampling event following GDR-1 startup (Amec Foster Wheeler, 2016b).
- Additional quarterly monitoring was conducted throughout 2016, in accordance with the GDR MRP. Analytical results for samples collected during 2016 are presented in Table 11. The 2SA16 results are generally consistent with 1SA16 results and baseline monitoring results.
- The *Preliminary GDR Findings* report, which documented findings through July 2016, was submitted to the Water Board on September 30, 2016 (Amec Foster Wheeler, 2016d).

As stated in the *Preliminary GDR Findings Report*, a separate report will be prepared that describes analysis of GDR monitoring results through First Quarter 2017. This report will also provide a path forward for the next steps to be undertaken as part of the GDR Pilot Study.

6.3 HYDRAULIC CONTROL EVALUATION CONCLUSIONS

Capture analysis indicates that the perchlorate plume core in the middle intermediate aquifer zone upgradient of IEW-1R is captured by this extraction well. Most of the perchlorate plume core in the upper intermediate aquifer zone is captured by extraction wells EW-01B1 and IEW-1R; groundwater outside the current capture zone will be addressed by the Upper Intermediate Source Control System, to be constructed in 2017 and 2018 (Geosyntec, 2016b).

Capture analysis indicates that DEW-1 is effectively capturing the perchlorate plume core in the middle deep aquifer zone; therefore, implementation of the remedial contingencies described in the RCP for hydraulic control is unnecessary. PZA concentrations are no longer present in the upper deep aquifer zone and therefore hydraulic control is unnecessary. The lower deep aquifer zone GDR Pilot Study was conducted throughout 2016, and a path forward will be developed after the First Quarter 2017 water level and sampling event has been completed.

7.0 MONITORED ATTENUATION PROGRESS EVALUATION

The MA Performance Monitoring Program (PMP) is being implemented in accordance with the Cleanup Work Plan (MACTEC, 2007) to quantitatively evaluate perchlorate attenuation rates and illustrate changes in spatial distribution of perchlorate in the Subbasin, pursuant to Ordering Paragraph D of the CAO (Water Board, 2007). The MA performance evaluation presented in this CPSR is based on data for the MA PMP wells shown in Table 12; this well list was described in the *Llagas Subbasin Cleanup Work Plan, Revised Performance Monitoring Program* (MACTEC, 2008b). Perchlorate results for wells sampled in 2015 and 2016 are presented in Tables 2 and 3. Historical perchlorate concentrations at each MA PMP well are presented graphically in Appendix D.

The methods used in this CPSR to assess MA performance are described in the Cleanup Work Plan (MACTEC, 2007) and clarified in the response to Water Board comments (MACTEC, 2008a). These methods include statistical tools (i.e., Mann Kendall trends analysis, aquifer-specific control charts, and attenuation factors) and spatial analysis.

7.1 MANN KENDALL TRENDS

Mann Kendall trend analysis was performed for each MA PMP well sampled during 2016, using the method described in Section 2.2. Mann Kendall trends for each MA PMP well in the A/B aquitard, intermediate aquifer, and deep aquifer are summarized in the table below, with values for individual wells provided in Table 12. Mann Kendall trends for a subset of shallow aquifer monitoring wells are included in the table below because no shallow wells are designated as MA PMP wells.

SUMMARY OF MANN KENDALL TRENDS FOR MA PMP WELLS

Mann Kendall Trend	Wells in Each Hydrogeologic Zone						
			Intermediate		Deep		
	Shallow	A/B Aquitard	Upper	Middle/Lower	Upper	Middle	Lower
Increasing	–	–	1	–	1	–	1
Probably Increasing	–	–	–	–	–	–	1
Stable	2	–	2	3	3	4	1
No Trend	–	–	1	–	1	4	1
Probably Decreasing	1	–	1	1	1	1	–
Decreasing	3	4	5	2	3	10	3

A total of 55 MA PMP wells plus 6 shallow aquifer monitoring wells sampled in 2016 met the criteria for Mann Kendall trend analysis. Of these 61 wells,

- 82 percent (50 wells) exhibit a decreasing, probably decreasing, or stable trend;
- 11 percent (7 wells) exhibit no trend; and
- 7 percent (4 wells) exhibit increasing or probably increasing trends.

Of the four wells with increasing or probably increasing trends through 2016:

- One well (MP-04-088) in the upper intermediate aquifer zone is located adjacent to the capture zone of extraction well IEW-1R and will be addressed more consistently by additional extraction wells that will be installed in the Upper Intermediate Source Control System.
- One well (PMW-04-225) in the upper deep aquifer zone is isolated from source areas by the operation of DEW-1.
- Two wells (MW-56-433 and PZ-02-415) are within the lower deep aquifer zone. In 2016, PZC perchlorate concentrations were observed in MW-56-433 and sub-PZC perchlorate concentrations were observed in PZ-02-415.

The preponderance of stable to decreasing trends in PMP wells, especially in deep aquifer wells, indicate that attenuation of perchlorate is occurring within the Llagas Subbasin.

7.2 CONTROL CHARTS

A control chart is a graphical tool used to illustrate mean concentrations over time with respect to a pair of upper and lower control limits; data that plot between these limits are considered to be “in control” (i.e., within expected limits based on historic data). Declining mean concentrations indicate that the combined effects of attenuation and hydraulic control are effectively remediating perchlorate; however, if mean concentrations rise consistently to above the upper control limit, the MA RCP will need to be implemented (MACTEC, 2007).

Control charts (Appendix I) were constructed using the methodology provided in the Cleanup Work Plan (MACTEC, 2007 and 2008a). PMP wells were grouped according to aquifer and priority zone; group assignments for wells sampled in 2016 are shown in Table 12. The sample analytical results within these groups are used to calculate a single mean concentration for each monitoring period (blue dots on Figures H1 through H8 in Appendix H). The upper and lower control limits are updated for each monitoring period based on concentration data from the entire baseline period and the number of well samples during in the monitoring period; control limits are shown as green and red dashed lines on the control charts.

Throughout the baseline period (through Third Quarter 2012 [3Q12]), the mean perchlorate concentration (heavy black line on Figures H1 through H8 in Appendix H) was allowed to change as new results were incorporated into the mean. At the end of the baseline period (3Q12), the mean baseline concentration for each well group was fixed; however, more recent changes in aquifer designations at individual wells (e.g., MW-53-195 was reassigned from the upper deep aquifer zone to the lower intermediate aquifer zone in 2014) are reflected in the updated control charts shown in Appendix H.

Beginning with the samples collected in Fourth Quarter 2012 (4Q12), the control limits for each monitoring period have been compared with the quarterly mean baseline concentration for that well group to evaluate the success of the MA remedy.

In the shallow aquifer zone, average perchlorate concentrations have been at sub-PZC levels and below the baseline mean concentration since 3Q12. Mean concentrations in this population of shallow aquifer wells remain within the control limits.

In the A/B aquitard, average concentrations during the past year remained below the baseline mean concentration and within the control limits (Figure H2 in Appendix H). While perchlorate concentrations in the A/B aquitard are consistently above the MCL, the control chart and associated Mann Kendall trends indicate that perchlorate concentrations are attenuating (Table 12).

Intermediate aquifer control charts are constructed for wells grouped PZA, PZB, or PZC according to their baseline perchlorate concentrations (Appendix H; Figures H3, H4, and H5, respectively). Quarterly mean concentrations have declined in all three priority zones over the period of record.

- Average concentrations for intermediate PZA wells have remained below the baseline mean since 2010, and have remained near or below the 2-sigma lower control limit since First Quarter 2013 (1Q13).
- Intermediate aquifer PZB wells have also exhibited a declining overall trend, and have remained near or below the baseline mean since 4Q12.
- Intermediate aquifer PZC wells have remained below the baseline mean and at or below the 3-sigma lower control limit since Third Quarter 2011.

These trends demonstrate the overall continuing success of the MA remedy within the intermediate aquifer, and are supported by the number of decreasing Mann Kendall trends in this aquifer group. The declines in perchlorate concentration to below the baseline mean concentration—and, in some cases, the lower control limits—are also reflected in the substantial decline in the occurrences of above-MCL concentrations in domestic wells and the associated improvements in drinking water quality throughout the Subbasin.

Deep aquifer control charts are also grouped according to PZA, PZB, and PZC well categories (Appendix H, Figures H6, H7, and H8, respectively). Attenuation has proceeded more slowly in the deep aquifer than in the intermediate aquifer, in part due to lower groundwater flow rates, particularly in the lower deep aquifer zone.

- Average concentrations in the deep PZA monitoring group exhibit an overall declining trend since 2005 and have remained below the baseline mean since 2009, reflecting the continued shrinking to stable distribution of the highest concentration perchlorate areas within the deep aquifer plumes. In 3Q16, the average concentration in the deep PZA monitoring group fell below the 2-sigma lower control limit for the first time.
- In the deep PZB monitoring group, concentrations were above the baseline mean from 3Q12 through 1Q15 before falling below the baseline mean in 3Q15. Recent perchlorate results for wells in this group demonstrate an overall decline in the mean perchlorate concentration since First Quarter 2014, to near the 2-sigma lower control limit in 3Q16. Perchlorate concentrations in this well group have fluctuated around the baseline mean over the course of the entire period of record, indicating a relatively stable trend.
- Average concentrations in the deep PZC group have also fluctuated around the baseline mean over the course of the period of record, indicating an overall stable concentration trend for this group. Other than a temporary increase in average concentration in 1Q16 (to slightly above the 3-sigma upper control limit), concentrations have remained within the control limits since 1Q13.

These trends demonstrate the overall continuing success of the MA remedy within the deep aquifer, especially with regard to the plume core (i.e., PZA concentrations). This observation is supported by the number of wells with decreasing Mann Kendall trends in this aquifer group.

7.3 ATTENUATION FACTORS

Attenuation factors refer to the first-order exponential decrease of constituent concentrations over time in response to various physical, chemical, or biological processes (U.S. EPA, 2002). The method for calculating attenuation factors is discussed in the 2009 CPSR (MACTEC, 2010). The priority groupings are the same as those used for the control charts, with the wells in each priority grouping fixed as of the end of the baseline period in 3Q12. Mean attenuation factors were developed for each aquifer/priority zone, using the same homogeneous data set used for Mann Kendall trend analysis. These mean attenuation factors are summarized in the table below; attenuation factors for individual wells are provided in Table 12.

Aquifer/Priority Zone Group	Mean Attenuation Factor
Shallow Aquifer	1.8×10^{-4}
A/B Aquitard	4.2×10^{-4}
Intermediate Aquifer/All	2.1×10^{-4}

Aquifer/Priority Zone Group	Mean Attenuation Factor
Intermediate Aquifer/PZA	1.6×10^{-4}
Intermediate Aquifer/PZB	2.6×10^{-4}
Intermediate Aquifer/PZC	2.2×10^{-4}
Deep Aquifer/All	1.8×10^{-4}
Deep Aquifer/PZA	3.8×10^{-4}
Deep Aquifer/PZB	1.3×10^{-4}
Deep Aquifer/PZC	5.6×10^{-5}

Histogram plots of attenuation factors were developed according to the methodology outlined in the Cleanup Work Plan (MACTEC, 2007); they are presented in Appendix H (Figures H9 through H18). These histograms graphically represent the frequency of calculated attenuation factors for each well group listed in the table above, as well as the range and distribution of those attenuation factors. For each well grouping, the histograms show that the calculated attenuation factors exist over a relatively limited range of values, and that the highest frequencies of attenuation factors tend to be at or near the mean value for that group. These observations indicate that the attenuation factors are normally distributed, without large numbers of strongly attenuating or increasing concentration trends within each group.

Positive mean attenuation factors in all aquifer and aquitard units indicate that perchlorate is attenuating over time. This is consistent with evidence of perchlorate attenuation demonstrated by the Mann Kendall trends and concentration data plotted on control charts. The positive mean attenuation factors calculated for data through 2016 are similar to the results presented in the 2015 CPSR when attenuation factors for all aquifer zones were also positive. Positive attenuation factors in the shallow, intermediate, and deep aquifer well groups demonstrate favorable MA performance in all zones.

7.4 MONITORED ATTENUATION EVALUATION CONCLUSIONS

Mann Kendall trends, control charts, and attenuation factors support the conclusion that perchlorate concentrations throughout the monitored Subbasin in the shallow, intermediate, and deep aquifers are attenuating over time, and the remedial efforts to date (successful on-site bioremediation and ongoing groundwater treatment) are remediating perchlorate within the Subbasin. This conclusion is supported by a 99% reduction in the number of well owners receiving replacement water since 2006 and significantly reduced perchlorate distributions in all aquifers since 2007 (Amec Foster Wheeler, 2015d). The conclusion is also supported by spatial analysis of the contracting perchlorate distribution in the Subbasin, as discussed in Section 2.2. The preponderance of stable to decreasing Mann Kendall trends in both the intermediate and deep aquifer, indicates that the MA remedy, in conjunction with existing

remedial efforts, continues to be successful and that implementation of a MA remedial contingency action is not necessary at this time.

Remaining areas of elevated perchlorate concentrations are being addressed by ongoing remediation activities or are the subject of recently completed or planned feasibility studies.

8.0 MRP REVISIONS

Groundwater monitoring and reporting activities during 2SA16 were conducted in accordance with the MRP dated February 20, 2015 (Water Board, 2015a). Proposed MRP revisions were submitted to the Water Board on December 5, 2016 (Amec Foster Wheeler, 2016e), including modifications to three aspects of the MRP:

- Reduced perchlorate monitoring in response to overall perchlorate distribution and concentration trends;
- Reduced nitrate monitoring based on concentrations observed during the past four years of GWTS operation; and
- Revised approach for evaluation of perchlorate data to provide more accurate assessment of plume attenuation capacity and perchlorate concentration trends.

On January 20, 2017, the Water Board issued a revised MRP that incorporated the majority of requested modifications. The revised approach for evaluation of perchlorate data using homogeneous data sets for assessment of attenuation and concentration trends is incorporated into this CPSR (see sections 7.1 and 7.3). The monitoring frequency revisions will be implemented beginning in the second quarter of 2017. The approved monitoring frequencies are provided in the revised monitoring frequency table (Appendix I; Table I1).

9.0 CONCLUSIONS AND RECOMMENDATIONS

Pursuant to CAO Ordering Paragraph H (Water Board, 2007), and the MRP (Water Board, 2015a), this annual CPSR presents the results of 2SA16 groundwater monitoring activities and the progress of ongoing perchlorate hydraulic control and monitored attenuation components of groundwater remediation, as described in the Cleanup Work Plan (MACTEC, 2007). Activities conducted during 2SA16 included groundwater elevation measurements, sampling, ongoing GWTS operations, and characterization activities designed to support hydraulic control efforts. This section presents our conclusions regarding groundwater flow direction, perchlorate distribution, statistical trends, and effectiveness of ongoing hydraulic control and monitored attenuation remedies.

9.1 SEMIANNUAL GROUNDWATER MONITORING

The results of quarterly and semiannual monitoring were consistent with those of previous periods and indicate that aggregate perchlorate concentrations continue to decline. While water levels were generally higher during the 2SA16, flow directions, and gradients were generally consistent with previous observations.

9.2 HYDRAULIC CONTROL

Operation of the GWTS continued through 2016 with on-site extraction well EW-01B1 and off-site extraction wells IEW-1R and DEW-1, at an average flow rate of 379 gpm. During 2SA16, the GWTS removed 5.30 kg (11.69 lbs) of perchlorate, for a total mass removed to date of approximately 97.60 kg (215.16 lbs). The GWTS will continue to be operated as designed with modifications to the system planned for 2017 and 2018.

Simulated capture zones were analyzed based on average annual pumping rates and steady-state and transient groundwater flow conditions via the numerical groundwater flow models. The vast majority of groundwater with PZA and PZB concentrations in the upper and middle intermediate aquifer zones is being captured by IEW-1R; additional hydraulic control will be provided by the Upper Intermediate Source Control System.

In the middle deep aquifer zone, PZA perchlorate concentrations are within the DEW-1 capture zone. Careful analysis of transducer data in middle deep aquifer zone wells indicates that a groundwater divide is not present east and south of the Site, as had been reported previously. PZA is not present in the upper deep aquifer, and therefore hydraulic capture of the upper deep aquifer is not required.

The hydraulic capture component of groundwater remediation is proceeding as anticipated in the Cleanup Work Plan and at this time there is no need to implement a remedial contingency for the intermediate or middle deep aquifers.

Perchlorate distribution within the lower deep aquifer zone remained stable through 2016, with decreasing trends observed in several wells, indicating that attenuation is ongoing in this aquifer zone. Future response actions proposed for the lower deep aquifer zone are subject to the ongoing GDR Pilot Study. Results of performance monitoring and recommendations regarding next steps associated with the GDR pilot study will be reported separately pursuant to the GDR MRP (Water Board, 2015c).

9.3 MONITORED ATTENUATION

The Cleanup Work Plan (MACTEC, 2007) is being implemented to evaluate perchlorate attenuation rates and to illustrate the spatial distribution of perchlorate attenuation in the Subbasin, pursuant to the CAO, Ordering Paragraph D (Water Board, 2007). As discussed in the response to comments on the Cleanup Work Plan (MACTEC, 2008a), data evaluation tools pertinent to the MA PMP include Mann Kendall trend analysis, control charts, and attenuation factor histograms.

Control charts and attenuation factor histograms were prepared for wells grouped by aquifer and priority zone. The results are generally consistent with Mann Kendall results. The overall

decreasing trends illustrated in most control charts indicate that the MA remedy is effective, and attenuation is proceeding in all aquifer zones, particularly in the PZA areas.

Mean attenuation factors were similar to those calculated in 2015 and reinforce that attenuation is continuing in all three major aquifer zones. These results are consistent with the contracting perchlorate distribution, as has been reported in quarterly and semiannual groundwater monitoring reports for several years.

MA is proceeding as anticipated in the Cleanup Work Plan, and at this time there is no need to implement a remedial contingency.

9.4 CHARACTERIZATION UPDATE – 2016

Data generated in 2016 from installation and testing of GDR-1 and from transducers deployed in intermediate and deep aquifer wells generally supported the Subbasin conceptual model. These results were used to inform interpretation of groundwater elevations.

9.5 RECOMMENDATIONS – 2017

To address the perchlorate distribution and enhance hydraulic control in the upper intermediate aquifer zone, design and installation of the Upper Intermediate Source Control System will continue. Recommendations regarding the next steps regarding the GDR Pilot Study will be provided after completion of the First Quarter 2017 GDR MRP sampling event.

Monitoring will continue in 2017 in compliance with the CAO (Water Board, 2007), MRP (Water Board, 2015a), GDR MRP (Water Board, 2015c), GWTS OMMP (Geosyntec, 2014), WDR (Water Board, 2011), and domestic IX OMMP (Evoqua, 2015). A Five-Year Status Report and Effectiveness Evaluation will be prepared in accordance with the CAO and, as approved by the Water Board in an email dated January 11, 2017, will be included in the 2017 Annual CPSR.

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———, 2017b. Site Cleanup Program: Olin Corporation, 425 Tennant Avenue, Morgan Hill, Santa Clara County – Concurrence with Remedial Design/Remedial Action Work Plan and 30% Design Report for Groundwater Treatment System Expansion. February 8.

SWRCB, see California State Water Resources Control Board

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———, 2014. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Methods Data Review. August.

Water Board, see Regional Water Quality Control Board, Central Coast Region



TABLES

TABLE 1

GROUNDWATER DEPTHS AND ELEVATIONS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Screen or BARCAD Interval (feet) ¹	Top of Casing Elevation (feet) ²	Sample Date	Sample Time	Depth to Water (feet) ³	Groundwater Surface Elevation (feet) ²	Aquifer	Comments
EW-01A	11.7-51.7	326.24	07/11/2016	16:06	23.02	303.22	Shallow	
EW-02A	17.5-57.5	325.64	07/11/2016	16:10	24.72	300.92	Shallow	
GDR-1	--	331.36	07/11/2016	15:50	37.45	293.91	Intermediate	
	--	331.36	11/10/2016	8:00	32.05	299.31	Intermediate	
MP-01-050	47-53	334.84	07/11/2016	13:52	29.91	304.93	Shallow	
MP-01-090	87-93	334.84	07/11/2016	13:55	35.22	299.62	Intermediate-Upper	
MP-01-090	87-93	334.84	11/9/2016	8:36	31.15	303.69	Intermediate-Upper	
MP-01-210	204-216	334.84	07/11/2016	13:57	40.91	293.93	Deep-Upper	
MP-02-035	29-41	333.14	07/11/2016	10:01	26.70	306.44	Shallow	
MP-02-095	92-98	333.14	07/11/2016	11:57	37.14	296.00	Intermediate-Upper	
MP-02-095	92-98	333.14	11/9/2016	14:00	31.74	301.40	Intermediate-Upper	
MP-02-150	144-156	333.14	07/11/2016	10:03	37.31	295.83	Intermediate-Middle	
MP-02-150	144-156	333.14	11/9/2016	14:02	32.23	300.91	Intermediate-Middle	
MP-02-255	252-258	333.14	07/11/2016	10:07	59.90	273.24	Deep-Upper	
MP-02-285	285.3-285.5	333.14	07/11/2016	10:09	59.82	273.32	Deep-Upper	
MP-03-086	85-88	342.78	07/11/2016	10:20	39.91	302.87	Intermediate-Upper	
MP-03-120	117-123	342.78	07/11/2016	11:57	43.05	299.73	Intermediate-Middle	
MP-03-120	117-123	342.78	11/10/2016	11:33	39.42	303.36	Intermediate-Middle	
MP-03-255	252-258	342.78	07/11/2016	10:24	52.79	289.99	Deep-Upper	
MP-04-038	32-44	327.83	07/11/2016	10:42	24.08	303.75	Shallow	
MP-04-088	85-91	327.83	07/11/2016	10:44	32.69	295.14	Intermediate-Upper	
MP-04-251	248-254	327.83	07/11/2016	10:46	54.12	273.71	Deep-Upper	
MP-04-291	291.3-291.5	327.83	07/11/2016	10:48	74.72	253.11	Deep-Middle	Co-located well PZ-04-335 used for contouring
MP-05-039	32-46	329.86	07/11/2016	09:16	26.72	303.14	Shallow	
MP-05-090	88-91	329.86	07/11/2016	09:14	35.80	294.06	Intermediate-Upper	
MP-05-090	88-91	329.86	11/9/2016	13:15	30.60	299.26	Intermediate-Upper	
MP-05-136	132-139	329.86	07/11/2016	09:20	35.92	293.94	Intermediate-Middle	
MP-05-136	132-139	329.86	11/9/2016	13:17	30.55	299.31	Intermediate-Middle	
MP-05-260	257-263	329.86	07/11/2016	09:22	59.05	270.81	Deep-Upper	
MP-05-300	299.8-300	329.86	07/11/2016	09:24	66.58	263.28	Deep-Middle	Non-MRP measurement; co-located well PZ-05-339 used for contouring
MP-16-138	142.3-148.3	329.27	07/11/2016	09:13	38.28	290.99	Intermediate-Middle	
MP-16-229	233.3-239.3	329.27	07/11/2016	09:16	61.74	267.53	Deep-Upper	
MP-16-261	265.3-271.3	329.27	07/11/2016	09:17	66.84	262.43	Deep-Middle	Shallow screen interval with inconsistent elevation compared to average of neighboring well clusters
MP-16-285	292.1-292.3	329.27	07/11/2016	09:24	69.53	259.74	Deep-Middle	Non-MRP measurement; co-located well MW-16-328 used for contouring
MP-17-110	105-114	319.66	07/14/2016	10:11	26.97	292.69	Intermediate-Upper	
MP-21-089	86-92	307.91	07/11/2016	14:20	28.68	279.23	Intermediate-Upper	
MP-21-230	222-238	307.91	07/11/2016	14:30	48.27	259.64	Deep-Upper	

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Olin Site

Morgan Hill, California

Well ID	Screen or BARCAD Interval (feet) ¹	Top of Casing Elevation (feet) ²	Sample Date	Sample Time	Depth to Water (feet) ³	Groundwater Surface Elevation (feet) ²	Aquifer	Comments
MP-21-278	275-281	307.91	07/11/2016	14:32	47.24	260.67	Deep-Middle	Shallow screen interval with inconsistent elevation compared to average of neighboring well clusters; screen partially in aquitard; co-located well MP-21-295 used for contouring
MP-21-295	294.3-294.5	307.91	07/11/2016	14:34	48.98	258.93	Deep-Middle	
MP-26-140	132-148	275.38	07/11/2016	10:28	44.88	230.50	Intermediate	
MP-26-242	239-245	275.38	07/11/2016	10:30	64.29	211.09	Deep-Upper	Not representative of upper deep aquifer zone
MP-29-169	166-172	271.32	07/11/2016	10:48	63.36	207.96	Intermediate	
MP-29-242	236-248	271.32	07/11/2016	10:49	69.72	201.60	Deep-Upper	
MP-29-292	291.9-292	271.32	07/11/2016	10:51	75.56	195.76	Deep-Middle	
MP-35-162	159-165	240.29	07/11/2016	11:28	58.55	181.74	Intermediate	
MP-35-273	272.3-272.5	240.29	07/11/2016	11:30	60.48	179.81	Deep-Middle	
MP-40-185	179-191	202.49	07/11/2016	11:43	48.50	153.99	Intermediate	
MP-44-141	138-144	190.79	07/11/2016	11:55	50.20	140.59	Intermediate	
MP-51-164	159-168	244.87	07/11/2016	11:08	47.29	197.58	Intermediate	
MP-51-213	208-217	244.87	07/11/2016	11:10	47.98	196.89	Deep-Upper	
MP-51-272	271.8-272	244.87	07/11/2016	11:11	55.56	189.31	Deep-Middle	
MP-52-032	24-40	321.32	07/11/2016	14:50	24.15	297.17	Shallow	
MP-52-095	88-102	321.32	07/11/2016	14:52	29.38	291.94	Intermediate-Upper	
MP-52-273	267-278	321.32	07/11/2016	14:54	50.01	271.31	Deep-Upper	
MP-52-295	294.8-295	321.32	07/11/2016	14:56	59.77	261.55	Deep-Middle	Non-MRP measurement; co-located well MW-52-347 used for contouring
MP-57-260	257-262	277.08	07/11/2016	12:26	68.57	208.51	Deep-Middle	
MP-OS-59-052	--	328.31	07/11/2016	16:48	25.60	302.71	Shallow	
MP-OS-59-057.5	--	328.31	07/11/2016	16:50	26.22	302.09	A/B Aquitard	
MP-OS-59-063	--	328.31	07/11/2016	16:52	34.77	293.54	A/B Aquitard	
MP-OS-59-070	--	328.31	07/11/2016	16:54	34.84	293.47	A/B Aquitard	
MP-OS-59-075	--	328.31	07/11/2016	16:56	35.21	293.10	A/B Aquitard	
MP-OS-59-080	--	328.31	07/11/2016	16:58	35.03	293.28	Intermediate-Upper	
MP-OS-59-084	--	328.31	07/11/2016	17:00	35.11	293.20	Intermediate-Upper	
MW-01	20.5-35	328.20	07/11/2016	16:22	24.64	303.56	Shallow	
MW-02	20-34.5	328.25	07/11/2016	16:12	25.85	302.40	Shallow	
MW-04B	257-260	328.01	07/11/2016	15:59	57.67	270.34	Deep-Upper	Barcad well; measurement not representative
MW-04C	335-338	327.59	07/11/2016	16:01	67.59	260.00	Deep-Middle	Barcad well; measurement not representative
MW-05B	243-246	327.94	07/11/2016	16:21	19.07	308.87	Deep-Upper	Barcad well; measurement not representative
MW-05C	322.5-325.5	327.31	07/11/2016	16:23	64.37	262.94	Deep-Middle	Barcad well; measurement not representative
MW-06C	338-341	329.06	07/11/2016	16:31	68.48	260.58	Deep-Middle	Barcad well; measurement not representative
MW-07SA2	89-92	327.78	07/11/2016	15:53	34.74	293.04	Intermediate-Upper	
MW-12A	31.5-56.5	328.37	07/11/2016	16:33	24.35	304.02	Shallow	
MW-12B1	79.5-99.5	328.32	07/11/2016	16:35	31.74	296.58	Intermediate-Upper	
MW-13A	27-52	330.76	07/11/2016	15:15	24.05	306.71	Shallow	
MW-13B1	85-105	330.20	07/11/2016	15:18	33.74	296.46	Intermediate-Upper	

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MW-14A	28-53	330.22	07/11/2016	15:23	24.98	305.24	Shallow	
MW-14B1	83-103	329.68	07/11/2016	15:15	33.35	296.33	Intermediate-Upper	
MW-15	10-25	329.54	07/11/2016	16:27	23.80	305.74	Shallow	
MW-16	25-40	329.42	07/11/2016	16:26	25.52	303.90	Shallow	
MW-16-027	23.7-43.7	328.82	07/11/2016	09:35	31.75	297.07	Shallow	
MW-16-082	83.6-93.6	328.85	07/11/2016	09:35	37.48	291.37	Intermediate-Upper	
MW-16-328	325.1-345.1	328.84	07/11/2016	09:27	71.12	257.72	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
MW-16-363	364.7-374.7	328.75	07/11/2016	12:42	70.58	258.17	Deep-Middle	Deepest screen interval in cluster; co-located well MW-16-328 used for contouring
MW-17	10-25	327.63	07/11/2016	15:43	24.40	303.23	Shallow	
MW-17-025	15-35	319.28	07/14/2016	10:06	21.81	297.47	Shallow	
MW-17-085	80-90	319.28	07/14/2016	10:07	26.52	292.76	Intermediate-Upper	
MW-19	79-89	329.28	07/11/2016	16:37	33.45	295.83	Intermediate-Upper	
MW-26-342	332-352	275.51	07/11/2016	10:20	76.52	198.99	Deep-Middle	
MW-26-415	405-425	275.53	07/11/2016	10:24	76.47	199.06	Deep-Lower	
MW-26-415	405-425	275.53	11/9/2016	10:00	64.57	210.96	Deep-Lower	
MW-29-352	342-362	271.30	07/11/2016	10:42	76.85	194.45	Deep-Middle	
MW-29-428	418-438	271.33	07/11/2016	10:45	75.85	195.48	Deep-Lower	
MW-29-428	418-438	271.33	11/9/2016	10:41	68.84	204.49	Deep-Lower	
MW-52-347	341.5-351.5	321.04	07/11/2016	14:58	63.55	257.49	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
MW-52-403	398-408	321.06	07/11/2016	15:00	--	--	Deep-Lower	Well obstructed by transducer at approximately 45 ft
MW-52-403	398-408	321.06	11/10/2016	12:07	57.35	263.71	Deep-Lower	
MW-53-044	42-47	320.96	07/11/2016	11:16	23.59	297.37	Shallow	
MW-53-078	73-83	320.91	07/11/2016	11:18	24.56	296.35	Intermediate-Upper	
MW-53-195	185-205	320.93	07/11/2016	11:20	52.40	268.53	Intermediate-Lower	Inconsistent elevation compared to neighboring well clusters
MW-53-264	254-274	320.93	07/11/2016	11:22	57.94	262.99	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
MW-54-260	250-270	287.31	07/11/2016	10:05	65.88	221.43	Deep-Middle	Shallow screen interval with inconsistent elevation compared to neighboring wells
MW-54-400	395-405	287.35	07/11/2016	10:09	83.43	203.92	Deep-Lower	
MW-55-275	270-280	324.37	07/11/2016	11:57	59.80	264.57	Deep-Upper	
MW-55-339	330-348	324.72	07/11/2016	09:04	68.24	256.48	Deep-Middle	Non-MRP measurement; water level adjusted on groundwater level contour maps based on data collected from transducers
MW-55-410	407-413	324.68	07/11/2016	09:06	81.18	243.50	Deep-Lower	Water level adjusted on groundwater level contour maps based on data collected from transducers
MW-55-410	407-413	324.68	11/10/2016	12:28	82.83	241.85	Deep-Lower	
MW-56-220	215-225	286.23	07/11/2016	12:40	74.63	211.60	Deep-Upper	
MW-56-335	330-340	286.10	07/11/2016	12:43	86.29	199.81	Deep-Middle	

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MW-56-433	428-438	286.24	07/11/2016	12:45	84.82	201.42	Deep-Lower	
MW-59-090	80-100	300.59	07/11/2016	13:04	25.09	275.50	Intermediate-Upper	
MW-59-250	240-260	300.63	07/11/2016	13:05	50.88	249.75	Deep-Middle	
MW-59-386	376-396	300.32	07/11/2016	13:07	66.29	234.03	Deep-Lower	
MW-60-082	72-92	312.39	07/11/2016	13:55	24.14	288.25	Intermediate-Upper	
MW-60-180	172-187	312.38	07/11/2016	13:57	26.41	285.97	Intermediate-Lower	
MW-60-220	215-225	312.51	07/11/2016	14:00	50.53	261.98	Deep-Upper	
MW-60-270	265-275	312.54	07/11/2016	14:02	51.26	261.28	Deep-Upper	
MW-60-300	295-305	312.22	07/11/2016	14:04	54.25	257.97	Deep-Middle	Used for contouring with co-located well MW-60-345; water level adjusted on groundwater level contour maps based on data collected from transducers
MW-60-345	340-350	312.21	07/11/2016	14:05	57.67	254.54	Deep-Middle	Used for contouring with co-located well MW-60-300; water level adjusted on groundwater level contour maps based on data collected from transducers
MW-61-047	45-50	325.13	07/11/2016	12:16	23.78	301.35	Shallow	
MW-61-056	54-59	325.13	07/11/2016	12:18	23.88	301.25	A/B Aquitard	
MW-62-041	39-44	321.47	07/11/2016	12:44	23.09	298.38	Shallow	
MW-62-055	53-58	321.48	07/11/2016	12:46	29.18	292.30	A/B Aquitard	
MW-63-035	30-40	316.81	07/11/2016	13:04	22.72	294.09	Shallow	
MW-63-057	52-62	316.84	07/11/2016	13:06	22.73	294.11	A/B Aquitard	
MW-63-080	75-85	316.73	07/11/2016	13:08	25.50	291.23	Intermediate-Upper	
MW-64-027	22-32	313.53	07/11/2016	13:27	22.74	290.79	Shallow	
MW-64-060	55-65	313.76	07/11/2016	13:29	25.02	288.74	A/B Aquitard	
MW-64-082	77-87	313.89	07/11/2016	13:31	25.52	288.37	Intermediate-Upper	
MW-65-027	22-32	307.78	07/11/2016	13:57	22.46	285.32	Shallow	
MW-65-052	47-57	307.86	07/11/2016	13:59	23.46	284.40	A/B Aquitard	
MW-65-087	82-92	307.72	07/11/2016	14:01	24.48	283.24	Intermediate-Upper	
MW-65-114	109-119	307.89	07/11/2016	14:03	24.98	282.91	Intermediate-Middle	
MW-65-153	148-158	307.93	07/11/2016	14:05	24.46	283.47	Intermediate-Middle	
MW-66-245	240-250	288.63	07/11/2016	09:53	54.64	233.99	Deep-Middle	
MW-66-390	395-395	288.57	07/11/2016	09:57	78.90	209.67	Deep-Lower	
MW-67-248	240-255	306.64	07/11/2016	09:30	43.62	263.02	Deep-Upper	
MW-67-485	480-490	306.64	07/11/2016	09:33	68.95	237.69	Deep-Lower	
MW-68-382	377-387	304.97	07/11/2016	09:43	89.38	215.59	Deep-Lower	
MW-69-360	335-365	291.89	07/11/2016	12:52	85.67	206.22	Deep-Lower	
MW-70-240	235-245	320.20	07/11/2016	09:14	57.24	262.96	Deep-Upper	
MW-70-317	312-322	320.21	07/11/2016	09:15	64.64	255.57	Deep-Middle	Used for contouring with co-located well MW-70-355; water level adjusted on groundwater level contour maps based on data collected from transducers
MW-70-355	350-360	320.26	07/11/2016	09:16	69.46	250.80	Deep-Middle	Used for contouring with co-located well MW-70-317; water level adjusted on groundwater level contour maps based on data collected from transducers

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MW-70-433	428-438	320.30	07/11/2016	09:17	77.85	242.45	Deep-Lower	
MW-71-075	70-80	307.94	07/11/2016	14:21	25.02	282.92	Intermediate-Upper	
MW-71-115	105-125	307.94	07/11/2016	14:23	25.61	282.33	Intermediate-Middle	
MW-72-070	60-80	314.39	07/11/2016	13:21	23.61	290.78	Intermediate-Upper	
MW-72-145	135-155	314.43	07/11/2016	13:23	26.86	287.57	Intermediate-Middle	
MW-73-270	265-275	305.69	07/11/2016	13:17	48.82	256.87	Deep-Middle	Co-located well MW-73-315 used for contouring
MW-73-315	310-320	305.68	07/11/2016	13:18	52.83	252.85	Deep-Middle	
MW-73-395	390-400	305.69	07/11/2016	13:20	68.12	237.57	Deep-Lower	
MW-73-395	390-400	305.69	11/9/2016	9:38	39.19	266.50	Deep-Lower	
MW-74-084	78.3-88.3	328.04	07/11/2016	16:39	32.12	295.92	Intermediate-Upper	
MW-74-142	136.9-146.9	328.03	07/11/2016	16:36	33.03	295.00	Intermediate-Middle	
MW-75-085	80-90	330.79	07/11/2016	11:38	35.98	294.81	Intermediate-Upper	
MW-75-120	114.9-124.9	330.77	07/11/2016	11:40	36.05	294.72	Intermediate-Middle	
MW-75-120	114.9-124.9	330.77	11/10/2016	11:42	30.93	299.84	Intermediate-Middle	
MW-75-180	175-185	330.84	07/11/2016	11:42	36.10	294.74	Intermediate-Lower	
MW-75-225	220-230	330.85	07/11/2016	11:44	58.47	272.38	Deep-Upper	
MW-76-085	80-90	328.19	07/11/2016	12:04	30.60	297.59	Intermediate-Upper	
MW-76-133	128-138	328.17	07/11/2016	12:06	31.58	296.59	Intermediate-Middle	
MW-77-299	293.5-303	323.05	07/11/2016	12:10	63.92	259.13	Deep-Middle	Co-located well MW-77-343 used for contouring
MW-77-343	340.4-345	323.02	07/11/2016	12:12	64.53	258.49	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
OW-01A	10.3-50.3	327.69	07/11/2016	15:38	24.40	303.29	Shallow	
OW-01B1	77.5-102.5	328.13	07/11/2016	15:48	36.83	291.30	Intermediate-Upper	
OW-01B3	179-199	327.82	07/11/2016	15:40	35.65	292.17	Intermediate-Lower	
PM-01A	25-50	327.75	07/11/2016	16:08	24.77	302.98	Shallow	
PM-01B1	80-100	327.49	07/11/2016	16:10	33.18	294.31	Intermediate-Upper	
PM-02A	24.5-49.5	329.77	07/11/2016	15:59	27.63	302.14	Shallow	
PM-03A	25.7-50.7	326.62	07/11/2016	15:31	23.22	303.40	Shallow	
PM-03B1	80-100	326.77	07/11/2016	15:33	31.66	295.11	Intermediate-Upper	
PMW-04-090	80-100	316.12	07/11/2016	13:30	27.97	288.15	Intermediate-Upper	
PMW-04-125	115-135	316.13	07/11/2016	13:32	27.98	288.15	Intermediate-Middle	
PMW-04-225	215-235	315.99	07/11/2016	13:35	52.81	263.18	Deep-Upper	
PMW-04-255	245-265	315.97	07/11/2016	13:36	53.09	262.88	Deep-Upper	
PMW-04-282	277-287	315.77	07/11/2016	13:39	53.93	261.84	Deep-Upper	
PMW-04-312	307-317	315.73	07/11/2016	13:40	57.74	257.99	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
PMW-05-090	80-100	309.97	07/11/2016	13:53	23.76	286.21	Intermediate-Upper	
PMW-05-305	295-315	310.03	07/11/2016	13:55	53.02	257.01	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
PMW-06-416	411-421	331.54	07/11/2016	15:42	82.97	248.57	Deep-Lower	Water level adjusted on groundwater level contour maps based on data collected from transducers
PMW-06-416	411-421	331.54	11/10/2016	9:50	64.52	267.02	Deep-Lower	

TABLE 1

GROUNDWATER DEPTHS AND ELEVATIONS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Screen or BARCAD Interval (feet) ¹	Top of Casing Elevation (feet) ²	Sample Date	Sample Time	Depth to Water (feet) ³	Groundwater Surface Elevation (feet) ²	Aquifer	Comments
PMW-06-445	440-450	331.64	07/11/2016	15:44	83.35	248.29	Deep-Lower	Water level adjusted on groundwater level contour maps based on data collected from transducers
PMW-06-445	440-450	331.64	11/10/2016	10:55	66.33	265.31	Deep-Lower	
PZ-01-333	328-338	334.66	07/11/2016	13:59	75.06	259.60	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-02-315	310-320	333.17	07/11/2016	09:55	71.90	261.27	Deep-Middle	Inconsistent elevation compared to neighboring well clusters
PZ-02-415	410-420	333.17	07/11/2016	09:57	86.63	246.54	Deep-Lower	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-02-415	410-420	333.17	11/9/2016	13:56	69.50	263.67	Deep-Lower	
PZ-03-325	320-330	342.31	07/11/2016	10:26	87.64	254.67	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-03-427	422-432	342.32	07/11/2016	10:28	95.95	246.37	Deep-Lower	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-03-427	422-432	342.32	11/10/2016	11:28	76.26	266.06	Deep-Lower	
PZ-04-335	330-340	327.93	07/11/2016	10:50	70.75	257.18	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-05-339	334-344	330.43	07/11/2016	09:26	74.00	256.43	Deep-Middle	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-05-390	386-393	330.51	07/11/2016	09:28	83.90	246.61	Deep-Lower	Water level adjusted on groundwater level contour maps based on data collected from transducers
PZ-05-390	386-393	330.51	11/10/2016	12:56	64.91	265.60	Deep-Lower	

Notes

- Depths measured in feet below ground surface.
- Elevations are given in feet relative to the National Geodetic Vertical Datum of 1929 (NGVD 29).
- Depth to water is measured from top of well casing.

Abbreviation

-- = not applicable

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
EW-01A	Primary	01/07/2015	EPA314.0M	1.5	0.75	J	--	Shallow
EW-01A	Primary	04/03/2015	EPA314.0M	1.8	0.75	J	--	Shallow
EW-01A	Duplicate	04/03/2015	EPA314.0M	1.6	0.75	J	--	Shallow
EW-01A	Primary	07/15/2015	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
EW-01A	Primary	10/06/2015	EPA314.0	ND < 4.0	2	--	--	Shallow
EW-01A	Primary	01/08/2016	EPA314.0M	2.0	0.75	J	--	Shallow
EW-01A	Duplicate	01/08/2016	EPA314.0M	0.89	0.75	J	--	Shallow
EW-01A	Primary	04/13/2016	EPA314.0M	23	0.75	--	--	Shallow
EW-01A	Primary	05/13/2016	EPA314.0M	12	0.75	--	--	Shallow
EW-01A	Duplicate	05/13/2016	EPA314.0M	12	0.75	--	--	Shallow
EW-01A	Primary	06/08/2016	EPA314.0	12	0.75	--	--	Shallow
EW-01A	Primary	07/14/2016	EPA314.0M	1.9	0.75	J	--	Shallow
EW-01A	Primary	10/13/2016	EPA314.0M	1.5	0.75	J	--	Shallow
EW-01A	Duplicate	10/13/2016	EPA314.0M	1.4	0.75	J	--	Shallow
EW-02A	Primary	01/07/2015	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
EW-02A	Duplicate	01/07/2015	EPA314.0M	0.80	0.75	J	--	Shallow
EW-02A	Primary	04/03/2015	EPA314.0M	1.3	0.75	J	--	Shallow
EW-02A	Primary	07/15/2015	EPA314.0M	1.4	0.75	J	--	Shallow
EW-02A	Primary	10/06/2015	EPA314.0	ND < 4.0	2	--	--	Shallow
EW-02A	Duplicate	10/06/2015	EPA314.0	ND < 4.0	2	--	--	Shallow
EW-02A	Primary	01/08/2016	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
EW-02A	Primary	04/13/2016	EPA314.0M	29	3.8	--	--	Shallow
EW-02A	Primary	05/13/2016	EPA314.0M	27	3.8	--	--	Shallow
EW-02A	Primary	06/02/2016	EPA314.0M	7.6	0.75	--	--	Shallow
EW-02A	Duplicate	06/02/2016	EPA314.0M	7.5	0.75	--	--	Shallow
EW-02A	Primary	07/14/2016	EPA314.0M	5.6	0.75	--	--	Shallow
EW-02A	Primary	10/13/2016	EPA314.0M	6.5	0.75	--	--	Shallow
MP-04-038	Primary	07/28/2015	EPA314.0M	ND < 4.0	2	--	--	Shallow
MP-04-038	Primary	07/29/2016	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
MP-OS-59-052	Primary	09/10/2015	EPA314.0M	ND < 400	75	--	--	Shallow
MP-OS-59-052	Primary	11/12/2015	EPA314.0M	ND < 20	3.8	--	--	Shallow
MP-OS-59-052	Primary	02/22/2016	EPA314.0M	ND < 40	7.5	--	--	Shallow
MP-OS-59-052	Primary	02/22/2016	EPA331.0	0.22	0.082	J	--	Shallow
MP-OS-59-052	Primary	04/26/2016	EPA331.0	3.5	0.082	--	--	Shallow
MP-OS-59-052	NS (3Q16 - insufficient sample)			--	--	--	--	Shallow
MP-OS-59-052	NS (4Q16 - insufficient sample)			--	--	--	--	Shallow
MW-01	Primary	01/27/2016	EPA314.0M	5.9	0.75	--	--	Shallow
MW-01	Primary	07/29/2016	EPA314.0M	4.3	0.75	--	--	Shallow
MW-02	Primary	07/29/2016	EPA314.0M	6.4	0.75	--	--	Shallow
MW-02	Duplicate	07/29/2016	EPA314.0M	6.1	0.75	--	--	Shallow
MW-13A	Primary	01/27/2015	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
MW-13A	Primary	08/21/2015	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
MW-13A	Primary	07/29/2016	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
MW-15	NS (3Q16 - insufficient sample)			--	--	--	--	Shallow
MW-16	NS (3Q16 - insufficient sample)			--	--	--	--	Shallow
MW-17	NS (3Q16 - insufficient sample)			--	--	--	--	Shallow
MW-17-025	Primary	07/20/2016	EPA314.0M	2.9	0.75	J	--	Shallow
MW-61-047	Primary	01/20/2015	EPA314.0M	5.1	0.75	--	--	Shallow
MW-61-047	Primary	07/22/2015	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
MW-61-047	Primary	07/19/2016	EPA314.0M	7.2	0.75	--	--	Shallow
MW-62-041	Primary	01/15/2015	EPA314.0M	ND < 4.0	0.75	J,B	U	Shallow
MW-62-041	Primary	07/19/2016	EPA314.0M	3.6	0.75	J	--	Shallow
MW-63-035	Primary	07/20/2016	EPA314.0M	4.7	0.75	--	--	Shallow
MW-64-027	Primary	07/14/2016	EPA314.0M	6.0	0.75	--	--	Shallow
MW-65-027	Primary	07/12/2016	EPA314.0M	4.3	0.75	--	--	Shallow
OW-01A	Primary	07/29/2016	EPA314.0M	0.90	0.75	J	--	Shallow
PM-01A	Primary	01/27/2015	EPA314.0M	2.8	0.75	J	--	Shallow
PM-01A	Primary	08/24/2015	EPA314.0M	1.7	0.75	J	--	Shallow
PM-01A	Primary	01/27/2016	EPA314.0M	1.5	0.75	J	--	Shallow

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
PM-01A	Primary	06/08/2016	EPA314.0M	ND < 4.0	0.75	--	--	Shallow
PM-01A	Duplicate	06/08/2016	EPA314.0M	1.7	0.75	J	--	Shallow
PM-01A	Primary	07/20/2016	EPA314.0M	2.0	0.75	J	--	Shallow
PM-02A	Primary	06/08/2016	EPA314.0M	2.7	0.75	J	--	Shallow
PM-02A	Primary	07/20/2016	EPA314.0M	2.1	0.75	J	--	Shallow
MP-OS-59-057.5	Primary	09/10/2015	EPA314.0M	ND < 400	75	--	--	A/B Aquitard
MP-OS-59-057.5	Primary	11/12/2015	EPA314.0M	ND < 40	7.5	F1	UJ	A/B Aquitard
MP-OS-59-057.5	Primary	02/22/2016	EPA314.0M	ND < 40	7.5	--	--	A/B Aquitard
MP-OS-59-057.5	Primary	02/22/2016	EPA331.0	0.13	0.082	J	--	A/B Aquitard
MP-OS-59-057.5	Primary	04/26/2016	EPA331.0	ND < 0.5	0.082	--	--	A/B Aquitard
MP-OS-59-057.5	NS (3Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-057.5	NS (4Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-063	Primary	09/10/2015	EPA314.0M	ND < 400	75	--	--	A/B Aquitard
MP-OS-59-063	Primary	11/12/2015	EPA314.0M	ND < 40	7.5	--	--	A/B Aquitard
MP-OS-59-063	Primary	02/22/2016	EPA314.0M	ND < 800	150	--	--	A/B Aquitard
MP-OS-59-063	Primary	02/22/2016	EPA331.0	0.34	0.082	J	--	A/B Aquitard
MP-OS-59-063	Primary	04/27/2016	EPA331.0	14	0.082	--	--	A/B Aquitard
MP-OS-59-063	NS (3Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-063	NS (4Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-070	Primary	09/10/2015	EPA314.0M	ND < 400	75	--	--	A/B Aquitard
MP-OS-59-070	Primary	11/12/2015	EPA314.0M	ND < 40	7.5	--	--	A/B Aquitard
MP-OS-59-070	Primary	02/22/2016	EPA314.0M	28	7.5	J	--	A/B Aquitard
MP-OS-59-070	Primary	04/27/2016	EPA331.0	0.16	0.082	J	--	A/B Aquitard
MP-OS-59-070	NS (3Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-070	NS (4Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-075	Primary	09/10/2015	EPA314.0M	5.6	0.75	--	--	A/B Aquitard
MP-OS-59-075	Primary	02/22/2016	EPA314.0M	ND < 40	7.5	--	--	A/B Aquitard
MP-OS-59-075	Primary	02/22/2016	EPA331.0	0.25	0.082	J	--	A/B Aquitard
MP-OS-59-075	Primary	04/27/2016	EPA331.0	ND < 0.5	0.082	--	--	A/B Aquitard
MP-OS-59-075	NS (3Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MP-OS-59-075	NS (4Q16 - insufficient sample)			--	--	--	--	A/B Aquitard
MW-61-056	Primary	01/15/2015	EPA314.0M	8.6	0.75	B	--	A/B Aquitard
MW-61-056	Primary	07/22/2015	EPA314.0M	5.5	0.75	--	--	A/B Aquitard
MW-61-056	Primary	07/19/2016	EPA314.0M	8.8	0.75	--	--	A/B Aquitard
MW-61-056	Duplicate	07/19/2016	EPA314.0M	8.6	0.75	--	--	A/B Aquitard
MW-62-055	Primary	07/19/2016	EPA314.0M	170	7.5	--	--	A/B Aquitard
MW-63-057	Primary	07/23/2015	EPA314.0M	92	7.5	--	--	A/B Aquitard
MW-63-057	Primary	07/20/2016	EPA314.0M	36	1.5	--	--	A/B Aquitard
MW-64-060	Primary	07/23/2015	EPA314.0M	6.8	0.75	--	--	A/B Aquitard
MW-64-060	Primary	07/14/2016	EPA314.0M	10	0.75	--	--	A/B Aquitard
MW-64-060	Duplicate	07/14/2016	EPA314.0M	10	0.75	--	--	A/B Aquitard
GDR-1	Primary	1/29/2016	EPA314.0M	ND < 200	38	--	--	Intermediate
GDR-1	Primary	1/29/2016	EPA331.0	4.2	0.082	--	--	Intermediate
GDR-1	Primary	2/23/2016	EPA314.0M	ND < 20	3.8	--	--	Intermediate
GDR-1	Primary	2/23/2016	EPA331.0	0.16	0.082	J,H	J	Intermediate
GDR-1	Primary	6/2/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate
GDR-1	Primary	7/15/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate
GDR-1	Primary	11/10/2016	EPA314.0M	0.75	0.75	J	--	Intermediate
IEW-1R	Primary	01/07/2015	EPA314.0M	8.8	0.75	--	--	Intermediate
IEW-1R	Primary	02/06/2015	EPA314.0M	8.5	0.75	--	--	Intermediate
IEW-1R	Primary	03/03/2015	EPA314.0M	8.0	0.75	--	--	Intermediate
IEW-1R	Primary	04/03/2015	EPA314.0M	8.6	0.75	--	--	Intermediate
IEW-1R	Primary	05/11/2015	EPA314.0M	7.8	0.75	--	--	Intermediate
IEW-1R	Primary	06/02/2015	EPA314.0M	9.3	0.75	--	--	Intermediate
IEW-1R	Primary	07/15/2015	EPA314.0M	9.2	0.75	--	--	Intermediate
IEW-1R	Primary	08/14/2015	EPA314.0M	9.1	0.75	--	--	Intermediate
IEW-1R	Primary	09/11/2015	EPA314.0M	8.4	0.75	--	--	Intermediate
IEW-1R	Primary	10/06/2015	EPA314.0	7.0	2	--	--	Intermediate
IEW-1R	Primary	11/06/2015	EPA314.0M	7.4	0.75	--	--	Intermediate

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
IEW-1R	Primary	12/01/2015	EPA314.0M	8.3	0.75	--	--	Intermediate
IEW-1R	Primary	01/08/2016	EPA314.0M	8.4	0.75	--	--	Intermediate
IEW-1R	Primary	02/03/2016	EPA314.0M	8.5	0.75	--	--	Intermediate
IEW-1R	Primary	03/10/2016	EPA314.0M	9.3	0.75	--	--	Intermediate
IEW-1R	Duplicate	03/10/2016	EPA314.0M	9.1	0.75	--	--	Intermediate
IEW-1R	Primary	04/13/2016	EPA314.0M	8.4	0.75	--	--	Intermediate
IEW-1R	Primary	05/13/2016	EPA314.0M	8.8	0.75	--	--	Intermediate
IEW-1R	Primary	06/02/2016	EPA314.0M	8.3	0.75	--	--	Intermediate
IEW-1R	Primary	07/14/2016	EPA314.0M	7.9	0.75	--	--	Intermediate
IEW-1R	Duplicate	07/14/2016	EPA314.0M	7.9	0.75	--	--	Intermediate
IEW-1R	Primary	08/03/2016	EPA314.0M	8.3	0.75	--	--	Intermediate
IEW-1R	Primary	09/09/2016	EPA314.0M	7.7	0.75	--	--	Intermediate
IEW-1R	Primary	10/13/2016	EPA314.0M	8.1	0.75	--	--	Intermediate
IEW-1R	Primary	11/04/2016	EPA314.0M	8.8	0.75	--	--	Intermediate
IEW-1R	Primary	12/07/2016	EPA314.0M	8.6	0.75	--	--	Intermediate
MP-26-140	Primary	01/27/2015	EPA314.0M	3.0	0.75	J	--	Intermediate
MP-26-140	Duplicate	01/27/2015	EPA314.0M	3.0	0.75	J	--	Intermediate
MP-26-140	Primary	07/15/2015	EPA314.0M	2.2	0.75	J	--	Intermediate
MP-26-140	Primary	07/29/2016	EPA314.0M	1.5	0.75	J	--	Intermediate
MP-29-169	Primary	01/28/2015	EPA314.0M	3.8	0.75	J	--	Intermediate
MP-29-169	Primary	07/15/2015	EPA314.0M	4.2	0.75	--	--	Intermediate
MP-29-169	Primary	07/28/2016	EPA314.0M	3.1	0.75	J	--	Intermediate
MP-35-162	Primary	01/29/2015	EPA314.0M	3.2	0.75	J	--	Intermediate
MP-35-162	Primary	07/16/2015	EPA314.0M	3.3	0.75	J	--	Intermediate
MP-35-162	Duplicate	07/16/2015	EPA314.0M	3.5	0.75	J	--	Intermediate
MP-35-162	Primary	08/02/2016	EPA314.0M	3.0	0.75	J	--	Intermediate
MP-40-185	Primary	01/30/2015	EPA314.0M	3.4	0.75	J	--	Intermediate
MP-40-185	Primary	07/16/2015	EPA314.0M	3.9	0.75	J	--	Intermediate
MP-40-185	Primary	08/02/2016	EPA314.0M	2.9	0.75	J	--	Intermediate
MP-40-185	Duplicate	08/02/2016	EPA314.0M	2.9	0.75	J	--	Intermediate
MP-44-141	Primary	01/29/2015	EPA314.0M	3.6	0.75	J	--	Intermediate
MP-44-141	Primary	07/16/2015	EPA314.0M	3.6	0.75	J	--	Intermediate
MP-44-141	Primary	08/02/2016	EPA314.0M	3.2	0.75	J	--	Intermediate
MP-51-164	Primary	01/29/2015	EPA314.0M	2.8	0.75	J	--	Intermediate
MP-51-164	Primary	07/17/2015	EPA314.0M	3.0	0.75	J	--	Intermediate
MP-51-164	Primary	08/01/2016	EPA314.0M	2.5	0.75	J	--	Intermediate
EW-01B1	Primary	01/07/2015	EPA314.0M	100	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	02/06/2015	EPA314.0M	100	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	03/03/2015	EPA314.0M	110	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	04/03/2015	EPA314.0M	120	7.5	F1	--	Intermediate-Upper
EW-01B1	Primary	05/11/2015	EPA314.0M	110	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	06/02/2015	EPA314.0M	130	7.5	--	--	Intermediate-Upper
EW-01B1	Duplicate	06/02/2015	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	07/15/2015	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	08/14/2015	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	09/11/2015	EPA314.0M	130	7.5	--	--	Intermediate-Upper
EW-01B1	Duplicate	09/11/2015	EPA314.0M	130	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	10/06/2015	EPA314.0	130	4	--	--	Intermediate-Upper
EW-01B1	Primary	11/06/2015	EPA314.0M	130	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	12/01/2015	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	01/08/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	02/03/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	03/10/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	04/13/2016	EPA314.0M	130	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	05/13/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	06/02/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	07/14/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	08/03/2016	EPA314.0M	150	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	9/9/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
EW-01B1	Duplicate	09/09/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	10/13/2016	EPA314.0M	130	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	11/04/2016	EPA314.0M	140	7.5	--	--	Intermediate-Upper
EW-01B1	Primary	12/07/2016	EPA314.0M	130	7.5	--	--	Intermediate-Upper
MP-01-090	Primary	7/11/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-02-095	Primary	2/22/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-02-095	Primary	5/20/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-02-095	Primary	7/27/2016	EPA314.0M	1.5	0.75	J	--	Intermediate-Upper
MP-02-095	Primary	11/16/2016	EPA314.0M	1.0	0.75	J	--	Intermediate-Upper
MP-04-088	Primary	01/27/2015	EPA314.0M	30	1.5	--	--	Intermediate-Upper
MP-04-088	Duplicate	01/27/2015	EPA314.0M	29	1.5	--	--	Intermediate-Upper
MP-04-088	Primary	07/28/2015	EPA314.0M	29	2	--	--	Intermediate-Upper
MP-04-088	Primary	01/27/2016	EPA314.0M	15	0.75	--	--	Intermediate-Upper
MP-04-088	Primary	07/29/2016	EPA314.0M	33	1.5	--	--	Intermediate-Upper
MP-05-090	Primary	9/22/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-05-090	Primary	2/23/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-05-090	Primary	5/25/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-05-090	Primary	7/26/2016	EPA314.0M	1.2	0.75	J	--	Intermediate-Upper
MP-05-090	Primary	11/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-05-090	Duplicate	11/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
MP-17-110	Primary	07/23/2015	EPA314.0M	25	0.75	--	--	Intermediate-Upper
MP-17-110	Primary	07/29/2016	EPA314.0M	21	0.75	--	--	Intermediate-Upper
MP-21-089	Primary	01/28/2015	EPA314.0M	9.5	0.75	--	--	Intermediate-Upper
MP-21-089	Primary	07/15/2015	EPA314.0M	10	0.75	--	--	Intermediate-Upper
MP-21-089	Primary	08/01/2016	EPA314.0M	8.5	0.75	--	--	Intermediate-Upper
MP-52-095	Primary	01/27/2015	EPA314.0M	7.2	0.75	--	--	Intermediate-Upper
MP-52-095	Primary	07/21/2015	EPA314.0M	1.9	0.75	J	--	Intermediate-Upper
MP-52-095	Primary	07/28/2016	EPA314.0M	0.88	0.75	J	--	Intermediate-Upper
MP-OS-59-080	Primary	09/10/2015	EPA314.0M	16	0.75	--	--	Intermediate-Upper
MP-OS-59-080	Primary	11/12/2015	EPA314.0M	ND < 40	7.5	--	--	Intermediate-Upper
MP-OS-59-080	Primary	02/22/2016	EPA314.0M	ND < 400	75	--	--	Intermediate-Upper
MP-OS-59-080	Primary	02/22/2016	EPA331.0	87	0.82	--	--	Intermediate-Upper
MP-OS-59-080	NS (3Q16 - insufficient sample)			--	--	--	--	Intermediate-Upper
MP-OS-59-080	NS (4Q16 - insufficient sample)			--	--	--	--	Intermediate-Upper
MP-OS-59-084	Primary	09/10/2015	EPA314.0M	ND < 40	7.5	--	--	Intermediate-Upper
MP-OS-59-084	Primary	11/12/2015	EPA314.0M	ND < 40	7.5	--	--	Intermediate-Upper
MP-OS-59-084	Primary	02/22/2016	EPA314.0M	120	15	--	--	Intermediate-Upper
MP-OS-59-084	NS (3Q16 - insufficient sample)			--	--	--	--	Intermediate-Upper
MP-OS-59-084	NS (4Q16 - insufficient sample)			--	--	--	--	Intermediate-Upper
MW-16-082	Primary	01/06/2015	EPA314.0M	33	3.8	--	--	Intermediate-Upper
MW-16-082	Primary	07/01/2015	EPA314.0M	28	3.8	B	--	Intermediate-Upper
MW-16-082	Primary	01/14/2016	EPA314.0M	23	1.5	--	--	Intermediate-Upper
MW-16-082	Primary	07/11/2016	EPA314.0M	25	0.75	--	--	Intermediate-Upper
MW-17-085	Primary	02/03/2015	EPA314.0M	9.4	0.75	--	--	Intermediate-Upper
MW-17-085	Duplicate	02/03/2015	EPA314.0M	9.2	0.75	--	--	Intermediate-Upper
MW-17-085	Primary	07/21/2015	EPA314.0M	7.0	0.75	--	--	Intermediate-Upper
MW-17-085	Primary	01/15/2016	EPA314.0M	5.1	0.75	--	--	Intermediate-Upper
MW-17-085	Primary	07/20/2016	EPA314.0M	5.9	0.75	--	--	Intermediate-Upper
MW-19	Primary	07/29/2015	EPA314.0M	26	2	--	--	Intermediate-Upper
MW-19	Duplicate	07/29/2015	EPA314.0M	26	2	--	--	Intermediate-Upper
MW-19	Primary	01/26/2016	EPA314.0M	68	3.8	--	--	Intermediate-Upper
MW-19	Primary	07/29/2016	EPA314.0M	47	3.8	--	--	Intermediate-Upper
MW-60-082	Primary	01/20/2015	EPA314.0M	22	0.75	--	--	Intermediate-Upper
MW-60-082	Primary	05/21/2015	EPA314.0M	15	1.5	--	--	Intermediate-Upper
MW-60-082	Primary	07/22/2015	EPA314.0M	11	0.75	--	--	Intermediate-Upper
MW-60-082	Primary	10/15/2015	EPA314.0	4.4	2	--	--	Intermediate-Upper
MW-60-082	Primary	01/14/2016	EPA314.0M	11	0.75	--	--	Intermediate-Upper
MW-60-082	Primary	05/18/2016	EPA314.0M	14	0.75	--	--	Intermediate-Upper
MW-60-082	Primary	07/13/2016	EPA314.0M	10	0.75	--	--	Intermediate-Upper

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-60-082	Primary	11/17/2016	EPA314.0M	5.6	0.75	--	--	Intermediate-Upper
MW-63-080	Primary	01/13/2015	EPA314.0M	19	0.75	B	--	Intermediate-Upper
MW-63-080	Primary	07/23/2015	EPA314.0M	17	0.75	--	--	Intermediate-Upper
MW-63-080	Primary	01/15/2016	EPA314.0M	17	0.75	--	--	Intermediate-Upper
MW-63-080	Primary	07/20/2016	EPA314.0M	17	0.75	--	--	Intermediate-Upper
MW-63-080	Duplicate	07/20/2016	EPA314.0M	17	0.75	--	--	Intermediate-Upper
MW-64-082	Primary	01/13/2015	EPA314.0M	9.5	0.75	--	--	Intermediate-Upper
MW-64-082	Duplicate	01/13/2015	EPA314.0M	9.4	0.75	--	--	Intermediate-Upper
MW-64-082	Primary	07/23/2015	EPA314.0M	12	0.75	--	--	Intermediate-Upper
MW-64-082	Primary	01/15/2016	EPA314.0M	9.0	0.75	--	--	Intermediate-Upper
MW-64-082	Primary	07/14/2016	EPA314.0M	13	0.75	--	--	Intermediate-Upper
MW-65-087	Primary	01/15/2015	EPA314.0M	14	0.75	B	--	Intermediate-Upper
MW-65-087	Primary	07/21/2015	EPA314.0M	12	0.75	--	--	Intermediate-Upper
MW-65-087	Duplicate	07/21/2015	EPA314.0M	12	0.75	--	--	Intermediate-Upper
MW-65-087	Primary	01/19/2016	EPA314.0M	12	0.75	--	--	Intermediate-Upper
MW-65-087	Primary	07/12/2016	EPA314.0M	12	0.75	--	--	Intermediate-Upper
MW-71-075	Primary	01/21/2015	EPA314.0M	18	0.75	--	--	Intermediate-Upper
MW-71-075	Primary	07/21/2015	EPA314.0M	17	0.75	--	--	Intermediate-Upper
MW-71-075	Primary	01/19/2016	EPA314.0M	16	0.75	--	--	Intermediate-Upper
MW-71-075	Primary	07/12/2016	EPA314.0M	16	0.75	--	--	Intermediate-Upper
MW-72-070	Primary	01/20/2015	EPA314.0M	9.0	0.75	--	--	Intermediate-Upper
MW-72-070	Primary	07/24/2015	EPA314.0M	9.2	0.75	--	--	Intermediate-Upper
MW-72-070	Primary	01/15/2016	EPA314.0M	7.1	0.75	--	--	Intermediate-Upper
MW-72-070	Duplicate	01/15/2016	EPA314.0M	7.1	0.75	--	--	Intermediate-Upper
MW-72-070	Primary	07/14/2016	EPA314.0M	7.7	0.75	--	--	Intermediate-Upper
MW-74-084	Primary	01/19/2015	EPA314.0M	3.9	0.75	J	--	Intermediate-Upper
MW-74-084	Primary	05/20/2015	EPA314.0M	4.4	0.75	--	--	Intermediate-Upper
MW-74-084	Duplicate	05/20/2015	EPA314.0M	4.4	0.75	--	--	Intermediate-Upper
MW-74-084	Primary	07/27/2015	EPA314.0M	4.4	2	--	--	Intermediate-Upper
MW-74-084	Primary	10/14/2015	EPA314.0	5.4	2	--	--	Intermediate-Upper
MW-74-084	Duplicate	10/14/2015	EPA314.0	4.5	2	--	--	Intermediate-Upper
MW-74-084	Primary	01/21/2016	EPA314.0M	7.3	0.75	--	--	Intermediate-Upper
MW-74-084	Primary	04/26/2016	EPA314.0M	5.6	0.75	--	--	Intermediate-Upper
MW-74-084	Primary	07/18/2016	EPA314.0M	5.3	0.75	--	--	Intermediate-Upper
MW-74-084	Primary	10/24/2016	EPA314.0M	6.5	0.75	--	--	Intermediate-Upper
MW-75-085	Primary	01/19/2015	EPA314.0M	54	3.8	--	--	Intermediate-Upper
MW-75-085	Primary	05/21/2015	EPA314.0M	51	3.8	--	--	Intermediate-Upper
MW-75-085	Primary	07/27/2015	EPA314.0M	50	2	--	--	Intermediate-Upper
MW-75-085	Primary	10/14/2015	EPA314.0	49	2	--	--	Intermediate-Upper
MW-75-085	Primary	01/20/2016	EPA314.0M	48	3.8	--	--	Intermediate-Upper
MW-75-085	Primary	05/11/2016	EPA314.0M	52	3.8	--	--	Intermediate-Upper
MW-75-085	Primary	07/18/2016	EPA314.0M	50	3.8	--	--	Intermediate-Upper
MW-75-085	Primary	11/15/2016	EPA314.0M	58	3.8	--	--	Intermediate-Upper
MW-76-085	Primary	07/20/2015	EPA314.0M	53	3.8	--	--	Intermediate-Upper
MW-76-085	Primary	09/08/2015	EPA314.0M	41	3.8	--	--	Intermediate-Upper
MW-76-085	Primary	10/28/2015	EPA314.0M	88	7.5	--	--	Intermediate-Upper
MW-76-085	Primary	01/26/2016	EPA314.0M	72	3.8	--	--	Intermediate-Upper
MW-76-085	Primary	05/12/2016	EPA314.0M	41	3.8	--	--	Intermediate-Upper
MW-76-085	Primary	07/19/2016	EPA314.0M	24	0.75	--	--	Intermediate-Upper
MW-76-085	Primary	11/15/2016	EPA314.0M	58	3.8	--	--	Intermediate-Upper
OW-01B1	Primary	08/21/2015	EPA314.0M	440	15	--	--	Intermediate-Upper
OW-01B1	Primary	01/27/2016	EPA314.0M	590	38	--	--	Intermediate-Upper
OW-01B1	Primary	07/29/2016	EPA314.0M	530	38	--	--	Intermediate-Upper
PM-01B1	Primary	01/27/2015	EPA314.0M	130	7.5	--	--	Intermediate-Upper
PM-01B1	Primary	05/19/2015	EPA314.0M	93	7.5	--	--	Intermediate-Upper
PM-01B1	Primary	08/24/2015	EPA314.0M	75	3.8	--	--	Intermediate-Upper
PM-01B1	Primary	10/14/2015	EPA314.0	51	2	--	--	Intermediate-Upper
PM-01B1	Primary	01/27/2016	EPA314.0M	110	7.5	--	--	Intermediate-Upper
PM-01B1	Primary	05/18/2016	EPA314.0M	59	3.8	--	--	Intermediate-Upper

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
PM-01B1	Duplicate	05/18/2016	EPA314.0M	59	3.8	--	--	Intermediate-Upper
PM-01B1	Primary	07/29/2016	EPA314.0M	35	3.8	--	--	Intermediate-Upper
PM-01B1	Primary	10/26/2016	EPA314.0M	26	3.8	--	--	Intermediate-Upper
PM-03B1	Primary	01/29/2015	EPA314.0M	7.2	0.75	--	--	Intermediate-Upper
PM-03B1	Duplicate	01/29/2015	EPA314.0M	7.5	0.75	--	--	Intermediate-Upper
PM-03B1	Primary	08/31/2015	EPA314.0M	2.1	0.75	J	--	Intermediate-Upper
PM-03B1	Duplicate	08/31/2015	EPA314.0M	7.4	0.75	--	J	Intermediate-Upper
PM-03B1	Primary	07/29/2016	EPA314.0M	12	0.75	--	--	Intermediate-Upper
PMW-04-090	Primary	01/20/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
PMW-04-090	Primary	07/22/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
PMW-04-090	Primary	01/14/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Upper
PMW-04-090	Primary	07/13/2016	EPA314.0M	1.1	0.75	J	--	Intermediate-Upper
PMW-05-090	Primary	01/13/2015	EPA314.0M	13	0.75	B	--	Intermediate-Upper
PMW-05-090	Primary	05/21/2015	EPA314.0M	13	0.75	--	--	Intermediate-Upper
PMW-05-090	Primary	07/27/2015	EPA314.0M	5.7	2	--	--	Intermediate-Upper
PMW-05-090	Primary	10/15/2015	EPA314.0	2.6	2	J	--	Intermediate-Upper
PMW-05-090	Primary	01/20/2016	EPA314.0M	5.1	0.75	--	--	Intermediate-Upper
PMW-05-090	Primary	05/18/2016	EPA314.0M	11	0.75	--	--	Intermediate-Upper
PMW-05-090	Primary	07/12/2016	EPA314.0M	8.1	0.75	--	--	Intermediate-Upper
PMW-05-090	Primary	11/17/2016	EPA314.0M	3.9	0.75	J	--	Intermediate-Upper
MP-02-150	Primary	2/22/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-02-150	Primary	5/20/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-02-150	Primary	7/27/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-02-150	Primary	11/16/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-03-120	Primary	8/1/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-05-136	Primary	9/22/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-05-136	Primary	2/23/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MP-05-136	Primary	5/25/2016	EPA314.0M	0.90	0.75	J	--	Intermediate-Middle
MP-05-136	Duplicate	5/25/2016	EPA314.0M	0.78	0.75	J	--	Intermediate-Middle
MP-05-136	Primary	7/27/2016	EPA314.0M	1.3	0.75	J	--	Intermediate-Middle
MP-05-136	Primary	11/17/2016	EPA314.0M	0.93	0.75	J	--	Intermediate-Middle
MP-16-138	Primary	07/01/2015	EPA314.0M	6.8	0.75	B	--	Intermediate-Middle
MP-16-138	Primary	07/11/2016	EPA314.0M	3.0	0.75	J	--	Intermediate-Middle
MW-65-114	Primary	02/02/2015	EPA314.0M	7.0	0.75	--	--	Intermediate-Middle
MW-65-114	Primary	07/29/2015	EPA314.0M	8.8	2	--	--	Intermediate-Middle
MW-65-114	Primary	01/26/2016	EPA314.0M	8.9	0.75	--	--	Intermediate-Middle
MW-65-114	Primary	07/25/2016	EPA314.0M	7.8	0.75	--	--	Intermediate-Middle
MW-65-153	Primary	07/29/2015	EPA314.0M	2.3	2	J	--	Intermediate-Middle
MW-65-153	Primary	07/25/2016	EPA314.0M	2.5	0.75	J	--	Intermediate-Middle
MW-71-115	Primary	01/21/2015	EPA314.0M	4.7	0.75	--	--	Intermediate-Middle
MW-71-115	Primary	07/21/2015	EPA314.0M	5.5	0.75	--	--	Intermediate-Middle
MW-71-115	Primary	01/19/2016	EPA314.0M	8.2	0.75	--	--	Intermediate-Middle
MW-71-115	Primary	07/13/2016	EPA314.0M	5.9	0.75	--	--	Intermediate-Middle
MW-72-145	Primary	01/12/2015	EPA314.0M	1.6	0.75	J	--	Intermediate-Middle
MW-72-145	Primary	07/24/2015	EPA314.0M	2.8	0.75	J	--	Intermediate-Middle
MW-72-145	Primary	01/15/2016	EPA314.0M	2.2	0.75	J	--	Intermediate-Middle
MW-72-145	Primary	07/14/2016	EPA314.0M	1.6	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	01/19/2015	EPA314.0M	2.3	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	05/20/2015	EPA314.0M	2.2	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	07/27/2015	EPA314.0M	ND < 4.0	2	--	--	Intermediate-Middle
MW-74-142	Primary	11/05/2015	EPA314.0M	1.9	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	01/21/2016	EPA314.0M	2.3	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	04/26/2016	EPA314.0M	2.4	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	07/18/2016	EPA314.0M	1.8	0.75	J	--	Intermediate-Middle
MW-74-142	Primary	10/24/2016	EPA314.0M	2.3	0.75	J	--	Intermediate-Middle
MW-74-142	Duplicate	10/24/2016	EPA314.0M	2.3	0.75	J	--	Intermediate-Middle
MW-75-120	Primary	01/19/2015	EPA314.0M	19	0.75	--	--	Intermediate-Middle
MW-75-120	Duplicate	01/19/2015	EPA314.0M	18	0.75	--	--	Intermediate-Middle
MW-75-120	Primary	05/21/2015	EPA314.0M	4.4	0.75	--	--	Intermediate-Middle

TABLE 2

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2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-75-120	Primary	07/27/2015	EPA314.0M	3.8	2	J	--	Intermediate-Middle
MW-75-120	Primary	10/14/2015	EPA314.0	ND < 4.0	2	--	--	Intermediate-Middle
MW-75-120	Primary	01/20/2016	EPA314.0M	2.0	0.75	J	--	Intermediate-Middle
MW-75-120	Primary	05/11/2016	EPA314.0M	1.8	0.75	J	--	Intermediate-Middle
MW-75-120	Primary	07/18/2016	EPA314.0M	1.5	0.75	J	--	Intermediate-Middle
MW-75-120	Primary	11/15/2016	EPA314.0M	2.1	0.75	J	--	Intermediate-Middle
MW-76-133	Primary	07/20/2015	EPA314.0M	1.8	0.75	J	--	Intermediate-Middle
MW-76-133	Primary	09/08/2015	EPA314.0M	9.7	0.75	--	--	Intermediate-Middle
MW-76-133	Primary	10/28/2015	EPA314.0M	8.1	0.75	--	--	Intermediate-Middle
MW-76-133	Primary	01/26/2016	EPA314.0M	10	0.75	--	--	Intermediate-Middle
MW-76-133	Primary	05/12/2016	EPA314.0M	8.8	0.75	--	--	Intermediate-Middle
MW-76-133	Duplicate	05/12/2016	EPA314.0M	9.2	0.75	--	--	Intermediate-Middle
MW-76-133	Primary	07/19/2016	EPA314.0M	10	0.75	--	--	Intermediate-Middle
MW-76-133	Primary	11/15/2016	EPA314.0M	11	0.75	--	--	Intermediate-Middle
PMW-04-125	Primary	01/12/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
PMW-04-125	Duplicate	01/12/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
PMW-04-125	Primary	07/22/2015	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
PMW-04-125	Primary	07/13/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Middle
MW-53-195	Primary	01/14/2015	EPA314.0M	2.9	0.75	J	--	Intermediate-Lower
MW-53-195	Primary	07/29/2015	EPA314.0M	ND < 4.0	2	--	--	Intermediate-Lower
MW-53-195	Primary	07/19/2016	EPA314.0M	2.5	0.75	J	--	Intermediate-Lower
MW-60-180	Primary	01/12/2015	EPA314.0M	4.3	0.75	--	--	Intermediate-Lower
MW-60-180	Primary	07/22/2015	EPA314.0M	2.6	0.75	J	--	Intermediate-Lower
MW-60-180	Primary	07/13/2016	EPA314.0M	4.2	0.75	--	--	Intermediate-Lower
MW-75-180	Primary	07/20/2015	EPA314.0M	1.1	0.75	J	--	Intermediate-Lower
MW-75-180	Duplicate	07/20/2015	EPA314.0M	1.5	0.75	J	--	Intermediate-Lower
MW-75-180	Primary	09/08/2015	EPA314.0M	1.2	0.75	J	--	Intermediate-Lower
MW-75-180	Primary	10/28/2015	EPA314.0M	1.4	0.75	J	--	Intermediate-Lower
MW-75-180	Primary	01/20/2016	EPA314.0M	0.92	0.75	J	--	Intermediate-Lower
MW-75-180	Primary	05/11/2016	EPA314.0M	1.1	0.75	J	--	Intermediate-Lower
MW-75-180	Primary	07/18/2016	EPA314.0M	1.1	0.75	J	--	Intermediate-Lower
MW-75-180	Primary	11/15/2016	EPA314.0M	1.7	0.75	J	--	Intermediate-Lower
MW-75-180	Duplicate	11/15/2016	EPA314.0M	1.7	0.75	J	--	Intermediate-Lower
MP-16-229	Primary	01/06/2015	EPA314.0M	12	0.75	--	--	Deep-Upper
MP-16-229	Primary	07/11/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Upper
MP-51-213	Primary	01/29/2015	EPA314.0M	4.1	0.75	--	--	Deep-Upper
MP-51-213	Primary	07/17/2015	EPA314.0M	4.4	0.75	--	--	Deep-Upper
MP-51-213	Primary	08/01/2016	EPA314.0M	3.4	0.75	J	--	Deep-Upper
MP-52-273	Primary	01/27/2015	EPA314.0M	8.2	0.75	--	--	Deep-Upper
MP-52-273	Primary	07/21/2015	EPA314.0M	7.8	0.75	--	--	Deep-Upper
MP-52-273	Primary	07/28/2016	EPA314.0M	6.0	0.75	--	--	Deep-Upper
MW-04B	Primary	09/03/2015	EPA314.0M	4.4	0.75	--	--	Deep-Upper
MW-04B	Primary	08/19/2016	EPA314.0M	8.0	0.75	--	--	Deep-Upper
MW-56-220	Primary	01/21/2015	EPA314.0M	4.6	0.75	--	--	Deep-Upper
MW-56-220	Primary	07/30/2015	EPA314.0M	8.1	0.75	--	--	Deep-Upper
MW-56-220	Primary	07/14/2016	EPA314.0M	6.5	0.75	--	--	Deep-Upper
MW-60-220	Primary	01/13/2015	EPA314.0M	11	0.75	--	--	Deep-Upper
MW-60-220	Primary	07/22/2015	EPA314.0M	9.2	0.75	--	--	Deep-Upper
MW-60-220	Primary	01/14/2016	EPA314.0M	9.2	0.75	--	--	Deep-Upper
MW-60-220	Primary	07/13/2016	EPA314.0M	9.4	0.75	--	--	Deep-Upper
MW-60-220	Duplicate	07/13/2016	EPA314.0M	9.2	0.75	--	--	Deep-Upper
MW-60-270	Primary	01/13/2015	EPA314.0M	23	1.5	--	--	Deep-Upper
MW-60-270	Primary	07/24/2015	EPA314.0M	22	0.75	--	--	Deep-Upper
MW-60-270	Primary	01/26/2016	EPA314.0M	21	1.5	--	--	Deep-Upper
MW-60-270	Duplicate	01/26/2016	EPA314.0M	21	1.5	--	--	Deep-Upper
MW-60-270	Primary	07/21/2016	EPA314.0M	21	0.75	--	--	Deep-Upper
MW-75-225	Primary	07/20/2015	EPA314.0M	4.9	0.75	--	--	Deep-Upper
MW-75-225	Primary	09/08/2015	EPA314.0M	1.3	0.75	J	--	Deep-Upper
MW-75-225	Duplicate	09/08/2015	EPA314.0M	1.4	0.75	J	--	Deep-Upper

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Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-75-225	Primary	10/28/2015	EPA314.0M	1.4	0.75	J	--	Deep-Upper
MW-75-225	Primary	01/20/2016	EPA314.0M	0.88	0.75	J	--	Deep-Upper
MW-75-225	Primary	05/11/2016	EPA314.0M	1.2	0.75	J	--	Deep-Upper
MW-75-225	Primary	07/18/2016	EPA314.0M	1.2	0.75	J	--	Deep-Upper
MW-75-225	Duplicate	07/18/2016	EPA314.0M	1.3	0.75	J	--	Deep-Upper
MW-75-225	Primary	11/15/2016	EPA314.0M	1.8	0.75	J	--	Deep-Upper
PMW-04-225	Primary	01/14/2015	EPA314.0M	11	0.75	B	--	Deep-Upper
PMW-04-225	Primary	07/23/2015	EPA314.0M	11	0.75	--	--	Deep-Upper
PMW-04-225	Primary	01/14/2016	EPA314.0M	12	0.75	--	--	Deep-Upper
PMW-04-225	Primary	07/14/2016	EPA314.0M	11	0.75	--	--	Deep-Upper
PMW-04-255	Primary	01/12/2015	EPA314.0M	5.5	0.75	--	--	Deep-Upper
PMW-04-255	Primary	07/22/2015	EPA314.0M	4.8	0.75	--	--	Deep-Upper
PMW-04-255	Primary	01/14/2016	EPA314.0M	4.9	0.75	--	--	Deep-Upper
PMW-04-255	Primary	07/13/2016	EPA314.0M	4.8	0.75	--	--	Deep-Upper
PMW-04-282	Primary	07/28/2015	EPA314.0M	2.3	2	J	--	Deep-Upper
PMW-04-282	Primary	07/22/2016	EPA314.0M	2.2	0.75	J	--	Deep-Upper
DEW-01	Primary	01/07/2015	EPA314.0M	17	1.5	--	--	Deep-Upper-Middle
DEW-01	Primary	02/06/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	03/03/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Duplicate	03/03/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	04/03/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	05/11/2015	EPA314.0M	13	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	06/02/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	07/15/2015	EPA314.0M	16	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	08/14/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	09/11/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	10/06/2015	EPA314.0	13	2	--	--	Deep-Upper-Middle
DEW-01	Primary	11/06/2015	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Duplicate	11/06/2015	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	12/01/2015	EPA314.0M	15	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	01/08/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	02/03/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	03/10/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	04/13/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Duplicate	04/13/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	05/13/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	06/02/2016	EPA314.0M	13	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	07/14/2016	EPA314.0M	13	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	08/03/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	09/09/2016	EPA314.0M	13	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	10/13/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	11/04/2016	EPA314.0M	14	0.75	--	--	Deep-Upper-Middle
DEW-01	Primary	12/07/2016	EPA314.0M	13	0.75	--	--	Deep-Upper-Middle
MP-16-261	Primary	01/06/2015	EPA314.0M	14	0.75	--	--	Deep-Middle
MP-16-261	Primary	07/11/2016	EPA314.0M	6.9	0.75	--	--	Deep-Middle
MP-21-278	Primary	01/28/2015	EPA314.0M	4.3	0.75	--	--	Deep-Middle
MP-21-278	Primary	07/15/2015	EPA314.0M	3.0	0.75	J	--	Deep-Middle
MP-21-278	Primary	08/02/2016	EPA314.0M	2.5	0.75	J	--	Deep-Middle
MP-21-278	Duplicate	08/02/2016	EPA314.0M	2.7	0.75	J	--	Deep-Middle
MP-21-295	Primary	07/16/2015	EPA314.0M	3.7	0.75	J	--	Deep-Middle
MP-21-295	Primary	08/01/2016	EPA314.0M	2.8	0.75	J	--	Deep-Middle
MP-29-292	Primary	01/29/2015	EPA314.0M	6.0	0.75	--	--	Deep-Middle
MP-29-292	Primary	07/15/2015	EPA314.0M	5.9	0.75	--	--	Deep-Middle
MP-29-292	Primary	08/03/2016	EPA314.0M	4.6	0.75	--	--	Deep-Middle
MP-51-272	Primary	07/17/2015	EPA314.0M	4.2	0.75	--	--	Deep-Middle
MP-51-272	Primary	08/02/2016	EPA314.0M	3.5	0.75	J	--	Deep-Middle
MW-04C	Primary	02/04/2015	EPA314.0M	16	0.75	--	--	Deep-Middle
MW-04C	Duplicate	02/04/2015	EPA314.0M	16	0.75	--	--	Deep-Middle
MW-04C	Primary	09/03/2015	EPA314.0M	15	0.75	--	--	Deep-Middle

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Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-04C	Primary	01/27/2016	EPA314.0M	16	0.75	--	--	Deep-Middle
MW-04C	Primary	08/19/2016	EPA314.0M	14	0.75	--	--	Deep-Middle
MW-05C	Primary	02/24/2015	EPA314.0M	3.0	0.75	J	--	Deep-Middle
MW-05C	Primary	09/03/2015	EPA314.0M	3.2	0.75	J	--	Deep-Middle
MW-05C	Duplicate	09/03/2015	EPA314.0M	3.2	0.75	J	--	Deep-Middle
MW-05C	Primary	01/27/2016	EPA314.0M	2.5	0.75	J	--	Deep-Middle
MW-05C	Primary	08/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
MW-06C	Primary	02/04/2015	EPA314.0M	2.9	0.75	J	--	Deep-Middle
MW-06C	Primary	01/27/2016	EPA314.0M	3.0	0.75	J	--	Deep-Middle
MW-06C	Primary	08/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
MW-16-328	Primary	01/06/2015	EPA314.0M	44	3.8	--	--	Deep-Middle
MW-16-328	Primary	07/01/2015	EPA314.0M	42	3.8	B	--	Deep-Middle
MW-16-328	Primary	01/14/2016	EPA314.0M	40	3.8	--	--	Deep-Middle
MW-16-328	Primary	07/11/2016	EPA314.0M	40	3.8	--	--	Deep-Middle
MW-16-363	Primary	01/06/2015	EPA314.0M	34	3.8	--	--	Deep-Middle
MW-16-363	Primary	07/01/2015	EPA314.0M	35	3.8	B	--	Deep-Middle
MW-16-363	Primary	01/14/2016	EPA314.0M	27	1.5	--	--	Deep-Middle
MW-16-363	Primary	07/11/2016	EPA314.0M	25	0.75	--	--	Deep-Middle
MW-21-332	Primary	02/02/2015	EPA314.0M	4.0	0.75	--	--	Deep-Middle
MW-21-332	Primary	07/29/2015	EPA314.0M	3.7	2	J	--	Deep-Middle
MW-21-332	Primary	07/25/2016	EPA314.0M	3.0	0.75	J	--	Deep-Middle
MW-26-342	Primary	01/26/2015	EPA314.0M	5.0	0.75	--	--	Deep-Middle
MW-26-342	Primary	07/29/2015	EPA314.0M	4.8	0.75	--	--	Deep-Middle
MW-26-342	Primary	07/19/2016	EPA314.0M	4.5	0.75	--	--	Deep-Middle
MW-29-352	Primary	01/26/2015	EPA314.0M	8.0	0.75	--	--	Deep-Middle
MW-29-352	Primary	07/29/2015	EPA314.0M	7.8	0.75	--	--	Deep-Middle
MW-29-352	Primary	01/21/2016	EPA314.0M	9.3	0.75	--	--	Deep-Middle
MW-29-352	Primary	07/19/2016	EPA314.0M	8.8	0.75	--	--	Deep-Middle
MW-52-347	Primary	01/15/2015	EPA314.0M	2.9	0.75	J	--	Deep-Middle
MW-52-347	Primary	07/30/2015	EPA314.0M	2.1	0.75	J	--	Deep-Middle
MW-52-347	Duplicate	07/30/2015	EPA314.0M	2.1	0.75	J	--	Deep-Middle
MW-52-347	Primary	07/22/2016	EPA314.0M	2.1	0.75	J	--	Deep-Middle
MW-53-264	Primary	01/14/2015	EPA314.0M	12	0.75	--	--	Deep-Middle
MW-53-264	Primary	07/29/2015	EPA314.0M	11	2	--	--	Deep-Middle
MW-53-264	Primary	01/21/2016	EPA314.0M	10	0.75	--	--	Deep-Middle
MW-53-264	Primary	07/21/2016	EPA314.0M	8.5	0.75	--	--	Deep-Middle
MW-54-260	Primary	07/30/2015	EPA314.0M	7.4	0.75	--	--	Deep-Middle
MW-54-260	Primary	07/18/2016	EPA314.0M	6.3	0.75	--	--	Deep-Middle
MW-54-333	Primary	01/22/2015	EPA314.0M	3.8	0.75	J	--	Deep-Middle
MW-54-333	Primary	07/30/2015	EPA314.0M	4.6	0.75	--	--	Deep-Middle
MW-54-333	Primary	07/18/2016	EPA314.0M	4.5	0.75	--	--	Deep-Middle
MW-56-335	Primary	01/22/2015	EPA314.0M	8.6	0.75	--	--	Deep-Middle
MW-56-335	Primary	07/30/2015	EPA314.0M	9.1	0.75	--	--	Deep-Middle
MW-56-335	Primary	07/27/2016	EPA314.0M	8.4	0.75	--	--	Deep-Middle
MW-59-250	Primary	01/19/2015	EPA314.0M	11	0.75	--	--	Deep-Middle
MW-59-250	Primary	07/31/2015	EPA314.0M	11	0.75	--	--	Deep-Middle
MW-59-250	Duplicate	07/31/2015	EPA314.0M	11	0.75	--	--	Deep-Middle
MW-59-250	Primary	01/21/2016	EPA314.0M	11	0.75	--	--	Deep-Middle
MW-59-250	Duplicate	01/21/2016	EPA314.0M	11	0.75	--	--	Deep-Middle
MW-59-250	Primary	07/14/2016	EPA314.0M	8.3	0.75	--	--	Deep-Middle
MW-59-345	Primary	01/21/2015	EPA314.0M	7.4	0.75	--	--	Deep-Middle
MW-59-345	Primary	07/31/2015	EPA314.0M	7.6	0.75	--	--	Deep-Middle
MW-59-345	Primary	07/25/2016	EPA314.0M	7.0	0.75	--	--	Deep-Middle
MW-60-300	Primary	01/14/2015	EPA314.0M	35	3.8	B	--	Deep-Middle
MW-60-300	Primary	07/24/2015	EPA314.0M	31	3.8	--	--	Deep-Middle
MW-60-300	Duplicate	07/24/2015	EPA314.0M	30	3.8	--	--	Deep-Middle
MW-60-300	Primary	07/21/2016	EPA314.0M	25	1.5	--	--	Deep-Middle
MW-60-345	Primary	01/13/2015	EPA314.0M	25	3.8	--	--	Deep-Middle
MW-60-345	Primary	07/22/2015	EPA314.0M	21	0.75	--	--	Deep-Middle

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MW-60-345	Primary	01/14/2016	EPA314.0M	18	1.5	--	--	Deep-Middle
MW-60-345	Primary	07/13/2016	EPA314.0M	18	0.75	--	--	Deep-Middle
MW-66-245	Primary	01/22/2015	EPA314.0M	10	0.75	--	--	Deep-Middle
MW-66-245	Primary	07/23/2015	EPA314.0M	9.8	0.75	--	--	Deep-Middle
MW-66-245	Duplicate	07/23/2015	EPA314.0M	9.9	0.75	--	--	Deep-Middle
MW-66-245	Primary	07/18/2016	EPA314.0M	9.5	0.75	--	--	Deep-Middle
MW-73-270	Primary	07/27/2015	EPA314.0M	3.7	2	J	--	Deep-Middle
MW-73-270	Primary	07/14/2016	EPA314.0M	3.4	0.75	J	--	Deep-Middle
MW-73-315	Primary	01/21/2015	EPA314.0M	3.6	0.75	J	--	Deep-Middle
MW-73-315	Primary	07/27/2015	EPA314.0M	3.5	2	J	--	Deep-Middle
MW-73-315	Primary	07/14/2016	EPA314.0M	3.7	0.75	J	--	Deep-Middle
MW-77-299	Primary	07/30/2015	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
MW-77-299	Primary	09/09/2015	EPA314.0M	4.3	0.75	--	--	Deep-Middle
MW-77-299	Primary	10/28/2015	EPA314.0M	ND < 80	15	--	--	Deep-Middle
MW-77-299	Primary	01/21/2016	EPA314.0M	2.5	0.75	J	--	Deep-Middle
MW-77-299	Primary	05/12/2016	EPA331.0	5.7	0.082	--	--	Deep-Middle
MW-77-299	Duplicate	05/12/2016	EPA331.0	5.6	0.082	--	--	Deep-Middle
MW-77-299	Primary	07/21/2016	EPA331.0	8.3	0.082	--	--	Deep-Middle
MW-77-299	Primary	11/15/2016	EPA331.0	4.8	0.082	--	--	Deep-Middle
MW-77-343	Primary	07/30/2015	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
MW-77-343	Primary	09/09/2015	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
MW-77-343	Primary	10/28/2015	EPA314.0M	ND < 20	3.8	--	--	Deep-Middle
MW-77-343	Duplicate	10/28/2015	EPA314.0M	ND < 20	3.8	--	--	Deep-Middle
MW-77-343	Primary	01/21/2016	EPA314.0M	ND < 400	75	--	--	Deep-Middle
MW-77-343	Primary	01/21/2016	EPA331.0	0.40	0.082	J	--	Deep-Middle
MW-77-343	Primary	05/12/2016	EPA331.0	0.55	0.082	--	--	Deep-Middle
MW-77-343	Primary	07/20/2016	EPA331.0	0.52	0.082	--	--	Deep-Middle
MW-77-343	Primary	11/15/2016	EPA331.0	0.55	0.082	--	--	Deep-Middle
MW-77-343	Duplicate	11/15/2016	EPA331.0	0.50	0.082	--	--	Deep-Middle
PMW-04-312	Primary	01/14/2015	EPA314.0M	ND < 4.0	0.75	J,B	U	Deep-Middle
PMW-04-312	Primary	07/28/2015	EPA314.0M	ND < 4.0	2	--	--	Deep-Middle
PMW-04-312	Primary	07/20/2016	EPA314.0M	2.3	0.75	J	--	Deep-Middle
PMW-05-305	Primary	01/20/2015	EPA314.0M	25	1.5	--	--	Deep-Middle
PMW-05-305	Primary	05/21/2015	EPA314.0M	19	1.5	--	--	Deep-Middle
PMW-05-305	Primary	07/27/2015	EPA314.0M	21	2	--	--	Deep-Middle
PMW-05-305	Primary	10/15/2015	EPA314.0	13	2	--	--	Deep-Middle
PMW-05-305	Primary	01/20/2016	EPA314.0M	20	1.5	--	--	Deep-Middle
PMW-05-305	Duplicate	01/20/2016	EPA314.0M	20	1.5	--	--	Deep-Middle
PMW-05-305	Primary	05/18/2016	EPA314.0M	9.0	0.75	--	--	Deep-Middle
PMW-05-305	Primary	07/12/2016	EPA314.0M	7.9	0.75	--	--	Deep-Middle
PMW-05-305	Primary	11/17/2016	EPA314.0M	2.2	0.75	J	--	Deep-Middle
PZ-01-333	Primary	07/01/2015	EPA314.0M	ND < 4.0	0.75	J,B	U	Deep-Middle
PZ-01-333	Primary	01/14/2016	EPA314.0M	3.2	0.75	J	--	Deep-Middle
PZ-01-333	Primary	07/11/2016	EPA314.0M	3.5	0.75	J	--	Deep-Middle
PZ-02-315	Primary	01/16/2015	EPA314.0M	4.1	0.75	B	--	Deep-Middle
PZ-02-315	Primary	07/20/2015	EPA314.0M	3.9	0.75	J	--	Deep-Middle
PZ-02-315	Primary	07/25/2016	EPA314.0M	3.2	0.75	J	--	Deep-Middle
PZ-02-315	Duplicate	07/25/2016	EPA314.0M	3.1	0.75	J	--	Deep-Middle
PZ-03-325	Primary	01/16/2015	EPA314.0M	ND < 4.0	0.75	J,B	U	Deep-Middle
PZ-03-325	Primary	07/28/2015	EPA314.0M	ND < 4.0	2	--	--	Deep-Middle
PZ-03-325	Primary	07/21/2016	EPA314.0M	0.95	0.75	J	--	Deep-Middle
PZ-04-335	Primary	01/16/2015	EPA314.0M	8.2	0.75	B	--	Deep-Middle
PZ-04-335	Primary	05/27/2015	EPA314.0M	8.9	0.75	--	--	Deep-Middle
PZ-04-335	Primary	07/28/2015	EPA314.0M	7.2	2	--	--	Deep-Middle
PZ-04-335	Primary	10/16/2015	EPA314.0	6.3	2	--	--	Deep-Middle
PZ-04-335	Primary	01/21/2016	EPA314.0M	6.4	0.75	--	--	Deep-Middle
PZ-04-335	Primary	05/20/2016	EPA314.0M	8.1	0.75	--	--	Deep-Middle
PZ-04-335	Duplicate	05/20/2016	EPA314.0M	8.2	0.75	--	--	Deep-Middle
PZ-04-335	Primary	07/26/2016	EPA314.0M	7.5	0.75	--	--	Deep-Middle

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
PZ-04-335	Primary	11/17/2016	EPA314.0M	7.2	0.75	--	--	Deep-Middle
PZ-05-339	Primary	01/15/2015	EPA314.0M	ND < 4.0	0.75	J,B	U	Deep-Middle
PZ-05-339	Primary	07/28/2015	EPA314.0M	2.8	2	J	--	Deep-Middle
PZ-05-339	Duplicate	07/28/2015	EPA314.0M	2.8	2	J	--	Deep-Middle
PZ-05-339	Primary	01/20/2016	EPA314.0M	3.4	0.75	J	--	Deep-Middle
PZ-05-339	Primary	07/20/2016	EPA314.0M	2.8	0.75	J	--	Deep-Middle
MW-26-415	Primary	01/26/2015	EPA314.0M	13	0.75	--	--	Deep-Lower
MW-26-415	Duplicate	01/26/2015	EPA314.0M	13	0.75	--	--	Deep-Lower
MW-26-415	Primary	07/29/2015	EPA314.0M	0.83	0.75	J	--	Deep-Lower
MW-26-415	Primary	02/26/2016	EPA314.0M	2.1	0.75	J	--	Deep-Lower
MW-26-415	Primary	07/28/2016	EPA314.0M	1.3	0.75	J	--	Deep-Lower
MW-26-415	Duplicate	07/28/2016	EPA314.0M	1.4	0.75	J	--	Deep-Lower
MW-26-415	Primary	11/18/2016	EPA314.0M	2.2	0.75	J	--	Deep-Lower
MW-26-415	Duplicate	11/18/2016	EPA314.0M	2.5	0.75	J	--	Deep-Lower
MW-29-428	Primary	1/26/2015	EPA314.0M	3.6	0.75	J	--	Deep-Lower
MW-29-428	Primary	5/28/2015	EPA314.0M	3.6	0.75	J	--	Deep-Lower
MW-29-428	Primary	7/29/2015	EPA314.0M	3.5	0.75	J	--	Deep-Lower
MW-29-428	Primary	10/16/2015	EPA314.0	2.6	2	J	--	Deep-Lower
MW-29-428	Primary	2/26/2016	EPA314.0M	3.7	0.75	J	--	Deep-Lower
MW-29-428	Primary	5/31/2016	EPA314.0M	3.6	0.75	J	--	Deep-Lower
MW-29-428	Primary	7/28/2016	EPA314.0M	3.0	0.75	J	--	Deep-Lower
MW-29-428	Primary	11/18/2016	EPA314.0M	4.0	0.75	--	--	Deep-Lower
MW-52-403	Primary	07/30/2015	EPA314.0M	29	3.8	--	--	Deep-Lower
MW-52-403	Primary	07/22/2016	EPA314.0M	25	1.5	--	--	Deep-Lower
MW-52-403	Primary	12/6/2016	EPA314.0M	25	1.5	--	--	Deep-Lower
MW-52-403	Duplicate	12/6/2016	EPA314.0M	25	1.5	--	--	Deep-Lower
MW-54-400	Primary	01/22/2015	EPA314.0M	8.3	0.75	--	--	Deep-Lower
MW-54-400	Primary	07/30/2015	EPA314.0M	9.0	0.75	--	--	Deep-Lower
MW-54-400	Primary	07/19/2016	EPA314.0M	8.5	0.75	--	--	Deep-Lower
MW-55-410	Primary	2/26/2016	EPA314.0M	2.4	0.75	J	--	Deep-Lower
MW-55-410	Primary	5/31/2016	EPA314.0M	2.5	0.75	J	--	Deep-Lower
MW-55-410	Primary	7/22/2016	EPA314.0M	2.1	0.75	J	--	Deep-Lower
MW-55-410	Primary	11/18/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Lower
MW-56-433	Primary	01/21/2015	EPA314.0M	5.9	0.75	--	--	Deep-Lower
MW-56-433	Primary	07/30/2015	EPA314.0M	6.9	0.75	--	--	Deep-Lower
MW-56-433	Primary	01/25/2016	EPA314.0M	7.1	0.75	--	--	Deep-Lower
MW-56-433	Primary	07/27/2016	EPA314.0M	7.3	0.75	--	--	Deep-Lower
MW-59-386	Primary	01/19/2015	EPA314.0M	40	3.8	--	--	Deep-Lower
MW-59-386	Primary	07/31/2015	EPA314.0M	38	3.8	--	--	Deep-Lower
MW-59-386	Primary	01/25/2016	EPA314.0M	38	3.8	--	--	Deep-Lower
MW-59-386	Primary	07/25/2016	EPA314.0M	34	3.8	--	--	Deep-Lower
MW-66-390	Primary	01/30/2015	EPA314.0M	9.6	0.75	--	--	Deep-Lower
MW-66-390	Primary	07/23/2015	EPA314.0M	10	0.75	--	--	Deep-Lower
MW-66-390	Primary	01/20/2016	EPA314.0M	11	0.75	--	--	Deep-Lower
MW-66-390	Primary	07/18/2016	EPA314.0M	11	0.75	--	--	Deep-Lower
MW-73-395	Primary	07/27/2015	EPA314.0M	33	2	--	--	Deep-Lower
MW-73-395	Duplicate	07/27/2015	EPA314.0M	33	2	--	--	Deep-Lower
MW-73-395	Primary	07/26/2016	EPA314.0M	36	1.5	--	--	Deep-Lower
MW-73-395	Duplicate	07/26/2016	EPA314.0M	35	1.5	--	--	Deep-Lower
PMW-06-416	Primary	02/03/2015	EPA314.0M	5.4	0.75	--	--	Deep-Lower
PMW-06-416	Primary	05/27/2015	EPA314.0M	4.0	0.75	--	--	Deep-Lower
PMW-06-416	Duplicate	05/27/2015	EPA314.0M	4.0	0.75	--	--	Deep-Lower
PMW-06-416	Primary	08/13/2015	EPA314.0M	4.5	0.75	--	--	Deep-Lower
PMW-06-416	Primary	10/15/2015	EPA314.0	3.2	2	J	--	Deep-Lower
PMW-06-416	Primary	02/23/2016	EPA314.0M	5.0	0.75	--	--	Deep-Lower
PMW-06-416	Duplicate	02/23/2016	EPA314.0M	4.1	0.75	--	--	Deep-Lower
PMW-06-416	Primary	05/24/2016	EPA314.0M	3.8	0.75	J	--	Deep-Lower
PMW-06-416	Primary	07/15/2016	EPA314.0M	4.5	0.75	--	--	Deep-Lower
PMW-06-416	Primary	11/10/2016	EPA314.0M	2.2	0.75	J	--	Deep-Lower

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TABLE 2

PERCHLORATE RESULTS - MONITORING AND EXTRACTION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date ¹	Test Method	Perchlorate Concentration (µg/L) ²	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
PMW-06-445	Primary	02/03/2015	EPA314.0M	6.3	0.75	--	--	Deep-Lower
PMW-06-445	Primary	05/27/2015	EPA314.0M	6.4	0.75	--	--	Deep-Lower
PMW-06-445	Primary	08/13/2015	EPA314.0M	7.1	0.75	--	--	Deep-Lower
PMW-06-445	Primary	10/15/2015	EPA314.0	5.7	2	--	--	Deep-Lower
PMW-06-445	Primary	02/23/2016	EPA314.0M	4.1	0.75	--	--	Deep-Lower
PMW-06-445	Primary	05/24/2016	EPA314.0M	6.1	0.75	--	--	Deep-Lower
PMW-06-445	Primary	07/15/2016	EPA314.0M	4.2	0.75	--	--	Deep-Lower
PMW-06-445	Primary	11/10/2016	EPA314.0M	2.8	0.75	J	--	Deep-Lower
PZ-02-415	Primary	01/20/2015	EPA314.0M	3.9	0.75	J	--	Deep-Lower
PZ-02-415	Primary	07/20/2015	EPA314.0M	4.8	0.75	--	--	Deep-Lower
PZ-02-415	Primary	02/25/2016	EPA314.0M	4.7	0.75	--	--	Deep-Lower
PZ-02-415	Primary	07/21/2016	EPA314.0M	4.9	0.75	--	--	Deep-Lower
PZ-02-415	Duplicate	07/21/2016	EPA314.0M	4.7	0.75	--	--	Deep-Lower
PZ-02-415	Primary	11/16/2016	EPA314.0M	5.6	0.75	--	--	Deep-Lower
PZ-03-427	Primary	01/16/2015	EPA314.0M	5.5	0.75	B	--	Deep-Lower
PZ-03-427	Primary	07/20/2015	EPA314.0M	4.9	0.75	--	--	Deep-Lower
PZ-03-427	Primary	02/25/2016	EPA314.0M	5.2	0.75	--	--	Deep-Lower
PZ-03-427	Primary	07/26/2016	EPA314.0M	4.9	0.75	--	--	Deep-Lower
PZ-03-427	Primary	11/16/2016	EPA314.0M	5.9	0.75	--	--	Deep-Lower
PZ-05-390	Primary	01/15/2015	EPA314.0M	9.5	0.75	B	--	Deep-Lower
PZ-05-390	Primary	07/27/2015	EPA314.0M	5.1	2	--	--	Deep-Lower
PZ-05-390	Primary	02/25/2016	EPA314.0M	5.9	0.75	--	--	Deep-Lower
PZ-05-390	Primary	07/25/2016	EPA314.0M	4.6	0.75	--	--	Deep-Lower
PZ-05-390	Primary	11/17/2016	EPA314.0M	5.1	0.75	--	--	Deep-Lower

Notes

1. All wells designated for semiannual or annual sampling for perchlorate in the MRP were sampled during 3Q16, with the exceptions noted above.

All wells designated for quarterly sampling for perchlorate in the MRP or GDR MRP were sampled during 3Q16 and 4Q16, except as noted.

MRP wells that could not be sampled as required in previous quarters were identified in the associated groundwater monitoring reports.

2. **Bold face type** denotes concentration that exceeds the Maximum Contaminant Level (6 µg/L).

Abbreviations

-- = not applicable

µg/L = micrograms per liter; equivalent to parts per billion

3Q16 = Third Quarter 2016 (July 1 through September 30)

4Q16 = Fourth Quarter 2016 (October 1 through December 31)

MDL = Method Detection Limit

ND < = Not Detected at or above the reporting limit shown

Laboratory Qualifiers

B = Compound was detected in the blank and sample

J = Perchlorate detected between the MDL and reporting limit. The reported value is estimated.

F1 = MS and/or MSD Recovery exceeds the control limits.

Validation Qualifiers

J = Concentration qualified as estimated in accordance with the Quality Assurance Project Plan.

R = Data are rejected. There is a significant potential for reporting of false negatives or false positives.

U = Result qualified as not detected because the analyte was observed

in an associated laboratory or field blank.

See Data Validation Report appendix of associated quarterly report for rationale of specific qualifiers.

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TABLE 3

PERCHLORATE RESULTS - DOMESTIC AND IRRIGATION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID ¹	Sample Type	Sample Date ²	Test Method	Perchlorate Concentration (µg/L) ³	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E34C001	Primary	02/02/2015	EPA331.0	2.1	0.082	--	--	Intermediate
09S03E34C001	Primary	08/18/2015	EPA331.0	1.8	0.082	--	--	Intermediate
09S03E34C001	Primary	01/27/2016	EPA331.0	1.8	0.082	--	--	Intermediate
09S03E34C001	Primary	07/27/2016	EPA331.0	2.0	0.082	--	--	Intermediate
09S03E35N013	Primary	02/02/2015	EPA331.0	2.1	0.082	--	--	Intermediate
09S03E35N013	Primary	08/18/2015	EPA331.0	4.7	0.082	--	--	Intermediate
09S03E35N013	Primary	01/27/2016	EPA331.0	2.1	0.082	--	--	Intermediate
09S03E35N013	Primary	07/27/2016	EPA331.0	4.4	0.082	--	--	Intermediate
09S03E34J012	Primary	02/02/2015	EPA331.0	9.0	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	02/10/2015	EPA331.0	9.3	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	05/19/2015	EPA331.0	9.0	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	08/18/2015	EPA331.0	7.9	0.082	--	--	Intermediate-Deep
09S03E34J012	Duplicate	10/27/2015	EPA331.0	7.4	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	10/27/2015	EPA331.0	7.8	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	11/05/2015	EPA331.0	8.9	0.082	--	--	Intermediate-Deep
09S03E34J012	Duplicate	01/27/2016	EPA331.0	7.3	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	01/27/2016	EPA331.0	7.5	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	04/22/2016	EPA331.0	8.2	0.082	--	--	Intermediate-Deep
09S03E34J012	Primary	08/03/2016	EPA314.0M	7.6	0.75	--	--	Intermediate-Deep
09S03E34J012	Duplicate	08/03/2016	EPA314.0M	7.7	0.75	--	--	Intermediate-Deep
09S03E34J012	Primary	10/17/2016	EPA314.0M	6.9	0.75	--	--	Intermediate-Deep
09S03E34J012	Duplicate	10/17/2016	EPA314.0M	7.0	0.75	--	--	Intermediate-Deep
09S03E34C002	Primary	02/02/2015	EPA331.0	20	0.16	--	--	Intermediate (Unk)
09S03E34C002	Primary	05/19/2015	EPA331.0	20	0.082	--	--	Intermediate (Unk)
09S03E34C002	Primary	08/18/2015	EPA331.0	19	0.082	--	--	Intermediate (Unk)
09S03E34C002	Primary	10/27/2015	EPA331.0	19	0.082	--	--	Intermediate (Unk)

TABLE 3

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2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID ¹	Sample Type	Sample Date ²	Test Method	Perchlorate Concentration (µg/L) ³	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E34C002	Primary	01/27/2016	EPA331.0	13	0.082	--	--	Intermediate (Unk)
09S03E34C002	Primary	04/22/2016	EPA331.0	9.2	0.082	--	--	Intermediate (Unk)
09S03E34C002	Primary	07/27/2016	EPA331.0	4.9	0.082	--	--	Intermediate (Unk)
09S03E34C002	Duplicate	07/27/2016	EPA331.0	4.9	0.082	--	--	Intermediate (Unk)
09S03E34C002	Primary	10/25/2016	EPA331.0	11	0.082	--	--	Intermediate (Unk)
09S03E34C003	Primary	01/15/2015	EPA314.0M	44	3.8	B	--	Intermediate (Unk)
09S03E34C003	Primary	04/10/2015	EPA314.0M	38	3.8	--	--	Intermediate (Unk)
09S03E34C003	Primary	07/20/2015	EPA314.0M	40	3.8	--	--	Intermediate (Unk)
09S03E34C003	Primary	10/08/2015	EPA314.0	28	2	--	--	Intermediate (Unk)
09S03E34C003	Primary	01/20/2016	EPA314.0M	39	3.8	B	--	Intermediate (Unk)
09S03E34C003	Primary	04/12/2016	EPA314.0M	6.6	0.75	--	--	Intermediate (Unk)
09S03E34C003	Primary	07/19/2016	EPA314.0M	34	1.5	--	--	Intermediate (Unk)
09S03E34C003	Primary	10/17/2016	EPA314.0M	31	1.5	--	--	Intermediate (Unk)
09S03E34G001	Primary	01/15/2015	EPA314.0M	13	0.75	B	--	Intermediate (Unk)
09S03E34G001	Primary	04/10/2015	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G001	Duplicate	04/10/2015	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G001	Primary	07/20/2015	EPA314.0M	17	0.75	--	--	Intermediate (Unk)
09S03E34G001	Duplicate	10/08/2015	EPA314.0	14	2	--	--	Intermediate (Unk)
09S03E34G001	Primary	10/08/2015	EPA314.0	15	2	--	--	Intermediate (Unk)
09S03E34G001	Primary	01/20/2016	EPA314.0M	13	0.75	B	--	Intermediate (Unk)
09S03E34G001	Primary	04/12/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G001	Primary	07/19/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G001	Primary	10/17/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G002	Primary	01/15/2015	EPA314.0M	20	0.75	B	--	Intermediate (Unk)
09S03E34G002	Duplicate	01/15/2015	EPA314.0M	20	0.75	B	--	Intermediate (Unk)
09S03E34G002	Primary	04/10/2015	EPA314.0M	12	1.5	--	--	Intermediate (Unk)

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Olin Site

Morgan Hill, California

Well ID ¹	Sample Type	Sample Date ²	Test Method	Perchlorate Concentration (µg/L) ³	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E34G002	Primary	07/20/2015	EPA314.0M	14	0.75	--	--	Intermediate (Unk)
09S03E34G002	Primary	10/08/2015	EPA314.0	11	2	--	--	Intermediate (Unk)
09S03E34G002	Primary	01/20/2016	EPA314.0M	13	0.75	B	--	Intermediate (Unk)
09S03E34G002	Primary	04/12/2016	EPA314.0M	14	0.75	--	--	Intermediate (Unk)
09S03E34G002	Primary	07/19/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G002	Primary	10/17/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34J003	Primary	12/18/2015	EPA331.0	2.0	0.082	--	--	Intermediate (Unk)
09S03E34J003	Primary	01/27/2016	EPA331.0	2.3	0.082	--	--	Intermediate (Unk)
09S03E34J003	Primary	07/27/2016	EPA331.0	5.1	0.082	--	--	Intermediate (Unk)
09S03E34J003	Primary	09/22/2016	EPA331.0	0.21	0.082	J	--	Intermediate (Unk)
09S03E34J003	Primary	11/14/2016	EPA331.0	0.29	0.082	J	--	Intermediate (Unk)
09S03E34R007	Primary	02/02/2015	EPA331.0	5.1	0.082	--	--	Intermediate (Unk)
09S03E34R007	Duplicate	05/19/2015	EPA331.0	3.1	0.082	--	J	Intermediate (Unk)
09S03E34R007	Primary	05/19/2015	EPA331.0	4.7	0.082	--	J	Intermediate (Unk)
09S03E34R007	Primary	08/18/2015	EPA331.0	6.3	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	08/27/2015	EPA331.0	6.2	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	10/27/2015	EPA331.0	8.8	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	11/05/2015	EPA331.0	10	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	01/27/2016	EPA331.0	1.0	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	04/22/2016	EPA331.0	3.0	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	07/27/2016	EPA331.0	4.5	0.082	--	--	Intermediate (Unk)
09S03E34R007	Primary	10/25/2016	EPA331.0	5.5	0.082	--	--	Intermediate (Unk)
09S03E34R011	Primary	08/18/2015	EPA331.0	2.1	0.082	--	--	Intermediate (Unk)
09S03E34R011	Primary	07/27/2016	EPA331.0	2.3	0.082	--	--	Intermediate (Unk)
09S03E35M006	Primary	08/18/2015	EPA331.0	0.86	0.082	--	--	Intermediate (Unk)
09S03E35M006	Primary	07/27/2016	EPA331.0	3.4	0.082	--	--	Intermediate (Unk)

TABLE 3

PERCHLORATE RESULTS - DOMESTIC AND IRRIGATION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID ¹	Sample Type	Sample Date ²	Test Method	Perchlorate Concentration (µg/L) ³	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E35N008	Primary	01/30/2015	EPA331.0	6.5	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	02/10/2015	EPA331.0	7.0	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	05/19/2015	EPA331.0	8.7	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	06/02/2015	EPA331.0	8.8	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	08/18/2015	EPA331.0	6.4	0.082	--	--	Intermediate (Unk)
09S03E35N008	Duplicate	08/18/2015	EPA331.0	6.5	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	10/27/2015	EPA331.0	2.7	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	01/27/2016	EPA331.0	2.9	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	04/22/2016	EPA331.0	6.0	0.082	--	--	Intermediate (Unk)
09S03E35N008	Duplicate	04/22/2016	EPA331.0	6.0	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	07/27/2016	EPA331.0	5.6	0.082	--	--	Intermediate (Unk)
09S03E35N008	Primary	10/25/2016	EPA331.0	3.2	0.082	--	--	Intermediate (Unk)
09S03E35N008	Duplicate	10/25/2016	EPA331.0	3.2	0.082	--	--	Intermediate (Unk)
10S03E01F007	Primary	08/18/2015	EPA331.0	4.4	0.082	--	--	Intermediate (Unk)
10S03E01F007	Primary	07/27/2016	EPA331.0	4.2	0.082	--	--	Intermediate (Unk)
10S03E11F010	Primary	08/18/2015	EPA331.0	1.8	0.082	--	--	Deep-Upper
10S03E11F010	Primary	07/27/2016	EPA331.0	5.7	0.082	--	--	Deep-Upper
10S03E11H001	Primary	08/20/2015	EPA331.0	1.7	0.082	--	--	Deep-Upper-Middle
10S03E11H001	Primary	07/27/2016	EPA331.0	3.0	0.082	--	--	Deep-Upper-Middle
09S03E35M020	Primary	03/25/2015	EPA314.0	3.5	--	--	--	Deep-Middle
09S03E35M020	Primary	02/04/2016	EPA331.0	2.4	0.082	--	--	Deep-Middle
09S03E35M020	Duplicate	02/04/2016	EPA331.0	2.4	0.082	--	--	Deep-Middle
09S03E35M020	Primary	07/27/2016	EPA331.0	5.9	0.082	--	--	Deep-Middle
09S03E35N014	Duplicate	02/02/2015	EPA331.0	17	0.082	--	--	Deep-Middle
09S03E35N014	Primary	02/02/2015	EPA331.0	18	0.16	--	--	Deep-Middle
09S03E35N014	Primary	05/19/2015	EPA331.0	18	0.082	--	--	Deep-Middle

TABLE 3

PERCHLORATE RESULTS - DOMESTIC AND IRRIGATION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID ¹	Sample Type	Sample Date ²	Test Method	Perchlorate Concentration (µg/L) ³	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E35N014	Primary	08/18/2015	EPA331.0	17	0.082	--	--	Deep-Middle
09S03E35N014	Primary	08/25/2015	EPA314.0M	18	0.75	--	--	Deep-Middle
09S03E35N014	Primary	10/08/2015	EPA314.0	16	2	--	--	Deep-Middle
09S03E35N014	Duplicate	01/20/2016	EPA314.0M	19	0.75	--	--	Deep-Middle
09S03E35N014	Primary	01/20/2016	EPA314.0M	20	0.75	--	--	Deep-Middle
09S03E35N014	Primary	04/12/2016	EPA314.0M	19	0.75	--	--	Deep-Middle
09S03E35N014	Primary	07/19/2016	EPA314.0M	18	0.75	--	--	Deep-Middle
09S03E35N014	Duplicate	07/19/2016	EPA314.0M	18	0.75	--	--	Deep-Middle
09S03E35N014	Primary	10/17/2016	EPA314.0M	20	0.75	--	--	Deep-Middle

TABLE 3

PERCHLORATE RESULTS - DOMESTIC AND IRRIGATION WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Notes

1. See Table 4 for replacement water status.
2. All wells designated for semiannual or annual sampling for perchlorate in the MRP dated 2/20/15 were sampled during 3Q16, and all wells designated for quarterly sampling for perchlorate in the MRP were sampled during 3Q16 and 4Q16, except as noted. Wells were also sampled in accordance with the replacement water program.
3. **Bold face type** denotes concentration that exceeds the Maximum Contaminant Level (6 µg/L).

Abbreviations

-- = not applicable
 µg/L = micrograms per liter; equivalent to parts per billion
 3Q16 = Third Quarter 2016
 4Q16 = Fourth Quarter 2016
 Intermediate (Unk) = Screen interval unknown; assigned to intermediate aquifer based on production rate and local domestic wells
 MDL = Method Detection Limit
 ND < = Not Detected at or above the reporting limit shown
 NS = Well could not be sampled because it was offline for repairs.

Laboratory Qualifiers

B = Compound was detected in the blank and sample

Validation Qualifiers

J = Concentration qualified as estimated in accordance with the Quality Assurance Project Plan.
 See Appendix E, Data Validation and Precision Assessment Results, for rationale of specific qualifiers.

TABLE 4

REPLACEMENT WATER PROGRAM WELL STATUS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Replacement Water Method	RWP Approved Sampling Frequency	MRP Sampling Frequency	Most Recent Perchlorate Concentration (µg/L) ¹	Most Recent Quarter Sampled
09S03E34C002	BW	QTR	--	11	4Q16
09S03E34C003	IX	QTR	SEMI	31	4Q16
09S03E34G001	IX	QTR	--	12	4Q16
09S03E34G002	IX	QTR	--	12	4Q16
09S03E34J003	--	BIMO	ANN	0.29	4Q16
09S03E34J012	IX	QTR	--	6.9 / 7.0	4Q16
09S03E34R007	BW	QTR	SEMI	5.5	4Q16
09S03E35N008 ²	BW	SEMI	SEMI	3.2 / 3.2	4Q16
09S03E35N013	--	ANN	SEMI	4.4	3Q16
09S03E35N014	IX	QTR	--	20	4Q16

Notes

1. **Bold face type** denotes concentration that exceeds the Maximum Contaminant Level (6 µg/L).
2. Bottled water was terminated for well 09S03E35N008 in December 2016, with Water Board concurrence.

Abbreviations

-- = Not required
 3Q16 = Third Quarter 2016
 4Q16 = Fourth Quarter 2016
 ANN = annual
 BIMO = bimonthly
 BW = well receiving bottled water
 IX = well with ion exchange system installed
 MRP = Monitoring and Reporting Program
 QTR = quarterly
 RWP = Replacement Water Program
 SEMI = semiannual

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 5

MANN KENDALL TREND ANALYSIS - DOMESTIC AND MONITORING WELLS
 2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Well ID	Aquifer	Homogeneous Data Start Date ¹	Number of Samples ²	Number of Detects ²	Perchlorate Concentration (µg/L)				Mann Kendall Evaluation ³			
					Historic Minimum	Historic Maximum	Third Quarter 2016 Maximum ⁴	Fourth Quarter 2016 Maximum ⁴	Coefficient of Variation	Mann Kendall Statistic	Confidence in Trend	Concentration Trend
09S03E34C003	Intermediate (Unk)	11/1/2007	42	42	ND < 4.0	100	34	31	0.34	-447	100.0%	D
09S03E34G001	Intermediate (Unk)	4/2/2008	55	55	12	78	12	12	0.31	-780	100.0%	D
09S03E34J003	Intermediate (Unk)	7/5/2012	15	15	ND < 4.0	19	5.1	0.29	0.85	-53	99.6%	D
09S03E34J012	Intermediate-Deep	All	10	10	6.9	9.3	7.7	7.0	0.09	-30	99.7%	D
09S03E34R007	Intermediate (Unk)	10/1/2008	36	35	ND < 4.0	15	4.5	5.5	0.32	-149	97.9%	D
10S03E11F010	Deep-Upper	1/12/2009	15	15	1.8	10	5.7	--	0.24	-49	99.2%	D
DEW-01	Deep-Upper-Middle	11/11/2014	26	26	ND < 4.0	29	14	14	0.07	-149	100.0%	D
IEW-1R	Intermediate	10/2/2013	39	39	7.0	15	8.3	8.8	0.07	-138	95.1%	D
MP-21-089	Intermediate-Upper	8/5/2008	20	20	2.3	24	8.5	--	0.28	-121	100.0%	D
MW-01	Shallow	1/20/2004	35	35	4.3	770	4.3	--	2.17	-187	99.6%	D
MW-04C	Deep-Middle	9/6/2007	25	25	ND < 2.0	36	14	--	0.25	-195	100.0%	D
MW-05C	Deep-Middle	10/9/2008	20	16	ND < 4.0	29.2	ND < 4.0	--	0.85	-116	100.0%	D
MW-06C	Deep-Middle	4/11/2006	31	30	ND < 4.0	312	ND < 4.0	--	1.17	-149	99.4%	D
MW-16-328	Deep-Middle	4/13/2010	13	13	40	62	40	--	0.09	-64	100.0%	D
MW-17-085	Intermediate-Upper	4/21/2008	14	14	5.1	94	5.9	--	0.52	-47	99.5%	D
MW-21-332	Deep-Middle	10/20/2009	15	15	3.0	17	3.0	--	0.33	-63	99.9%	D
MW-53-264	Deep-Middle	7/31/2012	9	9	8.1	17	8.5	--	0.23	-31	100.0%	D
MW-54-400	Deep-Lower	8/4/2011	10	10	2.6	14	8.5	--	0.09	-27	99.2%	D
MW-59-250	Deep-Middle	8/6/2012	9	9	8.3	14	8.3	--	0.13	-21	98.3%	D
MW-59-345	Deep-Middle	10/9/2008	19	19	7.0	50.8	7.0	--	0.88	-91	99.9%	D
MW-59-386	Deep-Lower	2/15/2011	12	12	34	58	34	--	0.12	-56	100.0%	D
MW-60-220	Deep-Upper	7/29/2010	13	13	9.2	25	9.4	--	0.23	-61	100.0%	D
MW-60-300	Deep-Middle	7/30/2010	12	12	18.1	47	25	--	0.13	-36	99.3%	D
MW-61-056	A/B Aquitard	7/14/2011	10	10	5.5	140	8.8	--	0.6	-39	100.0%	D
MW-62-041	Shallow	7/14/2011	9	8	ND < 4.0	12	3.6	--	0.62	-22	98.8%	D
MW-62-055	A/B Aquitard	7/27/2009	11	11	170	650	170	--	0.29	-46	100.0%	D
MW-63-035	Shallow	4/15/2009	14	14	3.1	8.1	4.7	--	0.22	-49	99.7%	D
MW-63-057	A/B Aquitard	4/15/2009	13	13	6.1	200	36	--	0.51	-31	96.7%	D
MW-63-080	Intermediate-Upper	7/27/2010	13	13	13	41	17	--	0.15	-29	95.6%	D
MW-64-060	A/B Aquitard	8/18/2008	16	16	6.6	27	10	--	0.27	-62	99.8%	D
MW-65-027	Shallow	All	24	22	ND < 4.0	14	4.3	--	0.39	-84	98.1%	D
MW-65-087	Intermediate-Upper	10/21/2008	20	20	12	31	12	--	0.26	-97	99.9%	D
MW-65-114	Intermediate-Middle	7/23/2013	7	7	7.0	21	7.8	--	0.31	-13	96.5%	D

TABLE 5

MANN KENDALL TREND ANALYSIS - DOMESTIC AND MONITORING WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Aquifer	Homogeneous Data Start Date ¹	Number of Samples ²	Number of Detects ²	Perchlorate Concentration (µg/L)				Mann Kendall Evaluation ³			
					Historic Minimum	Historic Maximum	Third Quarter 2016 Maximum ⁴	Fourth Quarter 2016 Maximum ⁴	Coefficient of Variation	Mann Kendall Statistic	Confidence in Trend	Concentration Trend
MW-66-245	Deep-Middle	8/12/2011	10	10	5.3	15	9.5	--	0.1	-31	99.8%	D
MW-71-075	Intermediate-Upper	4/12/2013	11	11	16	25.4	16	--	0.11	-47	100.0%	D
MW-72-070	Intermediate-Upper	4/9/2012	14	14	7.1	21.9	7.7	--	0.18	-62	100.0%	D
MW-73-315	Deep-Middle	2/6/2012	13	13	3.5	7.5	3.7	--	0.23	-37	98.7%	D
PMW-04-255	Deep-Upper	4/13/2010	14	14	ND < 4.0	6.4	4.8	--	0.08	-44	99.2%	D
PMW-05-305	Deep-Middle	7/16/2014	10	10	2.2	45	7.9	2.2	0.51	-37	100.0%	D
PMW-06-416	Deep-Lower	All	11	11	2.2	6.0	4.5	2.2	0.24	-26	97.5%	D
PZ-05-390	Deep-Lower	11/1/2012	16	16	ND < 4.0	29	4.6	5.1	0.46	-93	100.0%	D
09S03E34G002	Intermediate (Unk)	1/5/2009	34	34	11	32	12	12	0.19	-105	93.8%	PD
10S03E11H001	Deep-Upper-Middle	10/20/2008	22	22	1.7	11	3.0	--	0.29	-59	94.9%	PD
MP-29-292	Deep-Middle	All	31	28	ND < 4.0	6.5	4.6	--	0.27	-82	91.5%	PD
MW-02	Shallow	8/7/2006	21	20	ND < 4.0	290	6.4	--	1.58	-51	93.4%	PD
MW-61-047	Shallow	1/17/2012	9	8	ND < 4.0	37	7.2	--	0.5	-14	91.0%	PD
MW-64-082	Intermediate-Upper	1/26/2012	10	10	7.1	34	13	--	0.39	-19	94.6%	PD
MW-71-115	Intermediate-Middle	1/16/2014	8	8	4.7	16	5.9	--	0.28	-12	91.1%	PD
PMW-06-445	Deep-Lower	All	11	11	2.8	8.4	4.2	2.8	0.27	-21	94.0%	PD
09S03E34C002	Intermediate (Unk)	10/1/2008	33	33	2.7	100	4.9	11	0.83	-54	79.3%	S
09S03E35M006	Intermediate (Unk)	10/5/2011	14	14	ND < 4.0	23	3.4	--	0.49	-9	66.6%	S
09S03E35N013	Intermediate	7/2/2008	36	36	ND < 4.0	19	4.4	--	0.39	-75	84.2%	S
10S03E01F007	Intermediate (Unk)	11/6/2008	17	16	ND < 4.0	8.0	4.2	--	0.22	-9	62.7%	S
MP-16-138	Intermediate-Middle	All	28	27	ND < 4.0	8.2	3.0	--	0.35	-62	88.5%	S
MP-16-229	Deep-Upper	10/7/2009	15	13	ND < 4.0	32	ND < 4.0	--	0.57	-24	87.0%	S
MP-51-213	Deep-Upper	10/30/2008	19	16	ND < 4.0	6.7	3.4	--	0.33	-25	79.7%	S
MP-52-273	Deep-Upper	10/7/2008	19	18	ND < 4.0	11	6.0	--	0.39	-16	69.8%	S
MW-16-363	Deep-Middle	4/21/2008	21	21	9.6	44	25	--	0.2	-6	55.9%	S
MW-52-403	Deep-Lower	1/26/2012	15	15	6.0	40	25	25	0.09	-24	87.0%	S
MW-54-333	Deep-Middle	11/4/2008	18	18	3.2	6.5	4.5	--	0.16	-33	88.5%	S
MW-56-220	Deep-Upper	All	23	23	4.6	9.8	6.5	--	0.16	-12	61.3%	S
MW-60-082	Intermediate-Upper	10/7/2011	21	21	3.3	26.9	10	5.6	0.43	-27	78.1%	S
MW-60-180	Intermediate-Lower	10/7/2011	14	14	2.6	5.8	4.2	--	0.15	-11	70.5%	S
MW-64-027	Shallow	8/3/2010	8	6	ND < 4.0	13.2	6.0	--	0.38	-4	64.0%	S
MW-73-395	Deep-Lower	All	26	26	33	43	36	--	0.06	-32	75.1%	S
MW-75-085	Intermediate-Upper	11/18/2014	9	9	48	70	50	58	0.13	-9	79.2%	S

TABLE 5

MANN KENDALL TREND ANALYSIS - DOMESTIC AND MONITORING WELLS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Aquifer	Homogeneous Data Start Date ¹	Number of Samples ²	Number of Detects ²	Perchlorate Concentration (µg/L)				Mann Kendall Evaluation ³			
					Historic Minimum	Historic Maximum	Third Quarter 2016 Maximum ⁴	Fourth Quarter 2016 Maximum ⁴	Coefficient of Variation	Mann Kendall Statistic	Confidence in Trend	Concentration Trend
MW-76-085	Intermediate-Upper	All	7	7	24	88	24	58	0.4	-4	66.7%	S
PM-03B1	Intermediate-Upper	4/17/2006	39	39	2.1	96	12	--	0.49	-37	67.0%	S
PMW-05-090	Intermediate-Upper	All	24	24	1.4	14	8.1	3.9	0.53	-23	70.6%	S
PZ-02-315	Deep-Middle	All	31	29	ND < 4.0	5.4	3.2	--	0.21	-54	81.5%	S
PZ-04-335	Deep-Middle	All	34	33	ND < 4.0	15.1	7.5	7.2	0.29	-11	55.8%	S
PZ-02-415	Deep-Lower	10/6/2009	23	22	ND < 4.0	5.6	4.9	5.6	0.16	55	92.2%	PI
EW-01B1	Intermediate-Upper	2/6/2015	23	23	25	150	150	140	0.09	83	98.5%	I
MP-04-088	Intermediate-Upper	10/6/2009	19	19	6.8	33	33	--	0.2	77	99.7%	I
MW-19	Intermediate-Upper	All	25	25	17	68	47	--	0.33	102	99.1%	I
MW-29-352	Deep-Middle	8/4/2010	13	13	3.7	9.3	8.8	--	0.12	50	99.9%	I
MW-56-433	Deep-Lower	All	22	22	2.1	7.7	7.3	--	0.32	143	100.0%	I
MW-76-133	Intermediate-Middle	All	7	7	1.8	11	10	11	0.36	14	97.5%	I
OW-01B1	Intermediate-Upper	All	38	38	57.8	590	530	--	0.27	132	95.0%	I
PM-01A	Shallow	All	70	68	ND < 4.0	18	2.0	--	0.5	70	100.0%	I
PM-01B1	Intermediate-Upper	11/9/2005	45	45	4.5	300	35	26	1.4	233	100.0%	I
PMW-04-225	Deep-Upper	1/30/2012	10	10	ND < 4.0	12	11	--	0.07	22	97.1%	I
09S03E34C001	Intermediate	10/2/2009	15	14	ND < 4.0	9.5	2.0	--	1.56	-5	89.6%	NT
09S03E34R011	Intermediate (Unk)	7/13/2009	8	7	ND < 4.0	8.0	2.3	--	0.13	5	68.3%	NT
09S03E35N008	Intermediate (Unk)	10/4/2011	23	23	2.6	19	5.6	3.2	0.37	1	50.0%	NT
09S03E35N014	Deep-Middle	All	16	16	6.7	23	18	20	0.25	21	81.3%	NT
MP-16-261	Deep-Middle	4/17/2009	15	11	ND < 4.0	84	6.9	--	1.15	-8	63.3%	NT
MP-17-110	Intermediate-Upper	7/22/2010	11	11	8.0	42	21	--	0.44	2	53.0%	NT
MW-04B	Deep-Upper	3/9/2004	37	35	ND < 4.0	8.0	8.0	--	0.22	29	64.2%	NT
MW-16-082	Intermediate-Upper	4/7/2010	14	14	17	110	25	--	0.33	8	64.6%	NT
MW-26-342	Deep-Middle	All	32	31	ND < 4.0	6.3	4.5	--	0.2	26	65.6%	NT
MW-54-260	Deep-Middle	All	27	27	4.6	9.6	6.3	--	0.14	51	85.0%	NT
MW-56-335	Deep-Middle	All	23	20	ND < 4.0	11	8.4	--	0.32	16	65.3%	NT
MW-60-270	Deep-Upper	1/26/2012	10	10	2.0	23	21	--	0.25	9	75.8%	NT
MW-60-345	Deep-Middle	All	27	27	18	44	18	--	0.23	23	67.5%	NT
MW-66-390	Deep-Lower	2/27/2012	10	10	4.9	11	11	--	0.08	15	89.2%	NT
MW-74-084	Intermediate-Upper	7/27/2015	6	6	3.5	7.3	5.3	6.5	0.18	5	76.5%	NT
MW-77-299	Deep-Middle	All	7	5	ND < 80	8.3	8.3	4.8	1.4	7	80.9%	NT
MW-77-343	Deep-Middle	1/21/2016	4	4	ND < 400	0.55	0.52	0.55	1.98	-3	72.9%	NT

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Well ID	Aquifer	Homogeneous Data Start Date ¹	Number of Samples ²	Number of Detects ²	Perchlorate Concentration (µg/L)				Mann Kendall Evaluation ³			
					Historic Minimum	Historic Maximum	Third Quarter 2016 Maximum ⁴	Fourth Quarter 2016 Maximum ⁴	Coefficient of Variation	Mann Kendall Statistic	Confidence in Trend	Concentration Trend
PZ-03-427	Deep-Lower	All	37	30	ND < 4.0	6.0	4.9	5.9	0.3	80	84.8%	NT
EW-01A	Shallow	6/1/2010	37	33	ND < 4.0	52	1.9	1.5	NA - majority of results nondetect or estimated <RL			<RL
EW-02A	Shallow	9/30/2011	22	18	ND < 4.0	230	5.6	6.5	NA - majority of results nondetect or estimated <RL			<RL
GDR-1	Intermediate	All	5	3	ND < 200	4.2	ND < 4.0	0.75	NA - majority of results nondetect or estimated <RL			<RL
MP-01-090	Intermediate-Upper	All	12	7	ND < 4.0	2.7	ND < 4.0	--	NA - all results nondetect or estimated <RL			<RL
MP-02-095	Intermediate-Upper	All	20	9	ND < 4.0	2.6	1.5	1.0	NA - all results nondetect or estimated <RL			<RL
MP-02-150	Intermediate-Middle	All	17	0	ND < 4.0	ND < 4.0	ND < 4.0	ND < 4.0	NA - all results nondetect			<RL
MP-03-120	Intermediate-Middle	All	14	3	ND < 4.0	0.44	ND < 4.0	--	NA - all results nondetect or estimated <RL			<RL
MP-04-038	Shallow	All	23	10	ND < 4.0	2.5	ND < 4.0	--	NA - all results nondetect or estimated <RL			<RL
MP-05-090	Intermediate-Upper	All	16	7	ND < 4.0	1.7	1.2	ND < 4.0	NA - all results nondetect or estimated <RL			<RL
MP-05-136	Intermediate-Middle	All	16	8	ND < 4.0	1.3	1.3	0.93	NA - all results nondetect or estimated <RL			<RL
MP-21-278	Deep-Middle	4/14/2010	13	9	ND < 4.0	9.2	2.7	--	NA - majority of results nondetect or estimated <RL			<RL
MP-21-295	Deep-Middle	10/19/2009	12	8	ND < 4.0	16	2.8	--	NA - majority of results nondetect or estimated <RL			<RL
MP-26-140	Intermediate	10/16/2008	19	17	ND < 4.0	7.7	1.5	--	NA - majority of results nondetect or estimated <RL			<RL
MP-29-169	Intermediate	10/22/2008	19	17	ND < 4.0	6.6	3.1	--	NA - majority of results nondetect or estimated <RL			<RL
MP-35-162	Intermediate	5/21/2008	18	16	ND < 4.0	7.7	3.0	--	NA - majority of results nondetect or estimated <RL			<RL
MP-40-185	Intermediate	11/11/2008	16	13	ND < 4.0	6.5	2.9	--	NA - majority of results nondetect or estimated <RL			<RL
MP-44-141	Intermediate	9/3/2008	17	13	ND < 4.0	6.2	3.2	--	NA - majority of results nondetect or estimated <RL			<RL
MP-51-164	Intermediate	1/26/2010	14	12	ND < 4.0	5.1	2.5	--	NA - majority of results nondetect or estimated <RL			<RL
MP-51-272	Deep-Middle	8/25/2009	12	9	ND < 4.0	7.3	3.5	--	NA - majority of results nondetect or estimated <RL			<RL
MP-52-095	Intermediate-Upper	All	33	23	ND < 4.0	7.2	0.88	--	NA - majority of results nondetect or estimated <RL			<RL
MW-13A	Shallow	All	43	2	ND < 4.0	2.1	ND < 4.0	--	NA - all results nondetect or estimated <RL			<RL
MW-17-025	Shallow	All	23	21	ND < 4.0	28.6	2.9	--	NA - majority of results nondetect or estimated <RL			<RL
MW-26-415	Deep-Lower	1/26/2015	8	7	ND < 4.0	13	1.4	2.5	NA - majority of results nondetect or estimated <RL			<RL
MW-29-428	Deep-Lower	All	20	17	ND < 4.0	4.0	3.0	4.0	NA - all results nondetect or estimated <RL			<RL
MW-52-347	Deep-Middle	7/30/2010	12	12	2.1	22	2.1	--	NA - majority of results nondetect or estimated <RL			<RL
MW-53-195	Intermediate-Lower	4/13/2009	17	15	ND < 4.0	42	2.5	--	NA - majority of results nondetect or estimated <RL			<RL
MW-55-410	Deep-Lower	4/24/2008	14	8	ND < 4.0	2.8	2.1	ND < 4.0	NA - all results nondetect or estimated <RL			<RL
MW-65-153	Intermediate-Middle	All	19	16	ND < 4.0	5.3	2.5	--	NA - majority of results nondetect or estimated <RL			<RL
MW-72-145	Intermediate-Middle	1/14/2013	12	12	ND < 4.0	8.1	1.6	--	NA - all results nondetect or estimated <RL			<RL
MW-73-270	Deep-Middle	All	21	20	ND < 4.0	4.2	3.4	--	NA - majority of results nondetect or estimated <RL			<RL
MW-74-142	Intermediate-Middle	All	11	10	ND < 4.0	2.4	1.8	2.3	NA - all results nondetect or estimated <RL			<RL
MW-75-120	Intermediate-Middle	All	11	10	ND < 4.0	19	1.5	2.1	NA - majority of results nondetect or estimated <RL			<RL

TABLE 5

MANN KENDALL TREND ANALYSIS - DOMESTIC AND MONITORING WELLS
 2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Well ID	Aquifer	Homogeneous Data Start Date ¹	Number of Samples ²	Number of Detects ²	Perchlorate Concentration (µg/L)				Mann Kendall Evaluation ³			
					Historic Minimum	Historic Maximum	Third Quarter 2016 Maximum ⁴	Fourth Quarter 2016 Maximum ⁴	Coefficient of Variation	Mann Kendall Statistic	Confidence in Trend	Concentration Trend
MW-75-180	Intermediate-Lower	All	7	7	0.92	1.7	1.1	1.7	NA - all results nondetect or estimated			<RL
MW-75-225	Deep-Upper	All	7	7	0.88	4.9	1.3	1.8	NA - majority of results nondetect or estimated			<RL
OW-01A	Shallow	4/25/2007	22	20	ND < 4.0	250	0.90	--	NA - majority of results nondetect or estimated			<RL
PM-02A	Shallow	4/1/2010	25	23	ND < 4.0	20	2.1	--	NA - majority of results nondetect or estimated			<RL
PMW-04-090	Intermediate-Upper	All	21	6	ND < 4.0	1.8	1.1	--	NA - all results nondetect or estimated			<RL
PMW-04-125	Intermediate-Middle	All	19	6	ND < 4.0	5.6	ND < 4.0	--	NA - majority of results nondetect or estimated			<RL
PMW-04-282	Deep-Upper	All	16	10	ND < 4.0	2.8	2.2	--	NA - all results nondetect or estimated			<RL
PMW-04-312	Deep-Middle	All	20	16	ND < 4.0	4.4	2.3	--	NA - majority of results nondetect or estimated			<RL
PZ-01-333	Deep-Middle	8/30/2006	22	21	ND < 4.0	4.6	3.5	--	NA - majority of results nondetect or estimated			<RL
PZ-03-325	Deep-Middle	All	23	10	ND < 4.0	2.4	0.95	--	NA - all results nondetect or estimated			<RL
PZ-05-339	Deep-Middle	7/26/2011	11	10	ND < 4.0	4.6	2.8	--	NA - majority of results nondetect or estimated			<RL

Notes

1. Homogeneous data set for each well was determined using Pettitt's Test for Change Point Detection. Mann Kendall analysis was performed on data beginning with the sample date listed above, or for all samples, if no data break was determined. Where duplicate samples were collected, the greater concentration value is used.
2. The Number of Samples and Number of Detects from the Homogeneous Data Start Date through the current reporting period, or for all samples if no data break was determined using Pettitt's Test for Change Point Detection.
3. Calculated using MAROS Software Version 2, 2003, AFCEE.
4. **Bold face type** denotes highest concentration detected in the current reporting period that exceeds the Maximum Contaminant Level (6 µg/L).

Abbreviations

µg/L = micrograms per liter
 3Q16 = Third Quarter 2016
 4Q16 = Fourth Quarter 2016
 D = Decreasing
 I = Increasing
 Intermediate (Unk) = Screen interval unknown; assigned to intermediate aquifer based on production rate and local domestic wells.
 NA = not applicable; well did not meet criteria for Mann Kendall analysis (50% of sample results greater than or equal to the reporting limit).
 ND < = Not Detected at or above the reporting limit shown
 NT = No Trend
 PD = Probably Decreasing
 PI = Probably Increasing
 S = Stable

TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
EW-01A	Primary	01/07/2015	30	2.6	--	--	Shallow
EW-01A	Primary	04/03/2015	33	2.6	--	--	Shallow
EW-01A	Duplicate	04/03/2015	32	2.6	--	--	Shallow
EW-01A	Primary	07/15/2015	33	2.6	--	--	Shallow
EW-01A	Primary	10/06/2015	29	2.6	--	--	Shallow
EW-01A	Primary	01/08/2016	31	2.6	--	--	Shallow
EW-01A	Duplicate	01/08/2016	33	2.6	--	--	Shallow
EW-01A	Primary	04/13/2016	29	2.6	--	--	Shallow
EW-01A	Primary	05/13/2016	33	2.6	--	--	Shallow
EW-01A	Duplicate	05/13/2016	34	2.6	--	--	Shallow
EW-01A	Primary	07/14/2016	34	2.6	--	--	Shallow
EW-01A	Primary	10/13/2016	33	2.6	--	--	Shallow
EW-01A	Duplicate	10/13/2016	34	2.6	--	--	Shallow
EW-02A	Primary	01/07/2015	30	2.6	--	--	Shallow
EW-02A	Duplicate	01/07/2015	30	2.6	--	--	Shallow
EW-02A	Primary	04/03/2015	31	2.6	--	--	Shallow
EW-02A	Primary	07/15/2015	27	2.6	--	--	Shallow
EW-02A	Primary	10/06/2015	28	2.6	--	--	Shallow
EW-02A	Duplicate	10/06/2015	29	2.6	--	--	Shallow
EW-02A	Primary	01/08/2016	33	2.6	--	--	Shallow
EW-02A	Primary	04/13/2016	27	2.6	--	--	Shallow
EW-02A	Primary	05/13/2016	32	2.6	--	--	Shallow
EW-02A	Primary	06/02/2016	30	2.6	--	--	Shallow
EW-02A	Duplicate	06/02/2016	29	2.6	--	--	Shallow
EW-02A	Primary	07/14/2016	34	2.6	--	--	Shallow
EW-02A	Primary	10/13/2016	33	2.6	--	--	Shallow
MP-01-050	--	NS (2015 - maintenance needed)		--	--	--	Shallow
MP-01-050	Primary	07/11/2016	8.9	0.26	--	--	Shallow
MP-04-038	Primary	07/28/2015	34	2.6	--	--	Shallow
MP-04-038	Primary	07/29/2016	31	2.6	--	--	Shallow
MP-52-032	--	NS (2015 - dry)		--	--	--	Shallow
MP-52-032	Primary	07/28/2016	13	0.26	--	--	Shallow
MP-OS-59-052	Primary	11/12/2015	7.4	0.26	--	--	Shallow
MP-OS-59-052	Primary	02/22/2016	0.82	0.26	J	--	Shallow
MP-OS-59-052	--	NS (2Q16, 3Q16 and 4Q16) - insufficient sample		--	--	--	Shallow
MW-01	--	NS (2015 - dry)		--	--	--	Shallow
MW-01	Primary	07/29/2016	29	2.6	--	--	Shallow
MW-13A	Primary	01/27/2015	32	2.6	--	--	Shallow
MW-13A	Primary	08/21/2015	33	2.6	--	--	Shallow
MW-13A	Primary	07/29/2016	35	2.6	--	--	Shallow
MW-17-025	--	NS (2015 - dry)		--	--	--	Shallow
MW-17-025	Primary	07/20/2016	33	2.6	--	--	Shallow
MW-53-044	Primary	01/19/2015	22	2.6	--	--	Shallow
MW-53-044	Primary	07/29/2015	28	2.6	--	--	Shallow
MW-53-044	Primary	07/19/2016	29	2.6	--	--	Shallow
MW-61-047	Primary	01/20/2015	31	2.6	--	--	Shallow
MW-61-047	Primary	07/22/2015	35	2.6	--	--	Shallow
MW-61-047	Primary	07/19/2016	33	2.6	--	--	Shallow
MW-63-035	--	NS (2015 - dry)		--	--	--	Shallow
MW-63-035	Primary	07/20/2016	29	2.6	--	--	Shallow
MW-64-027	--	NS (2015 - dry)		--	--	--	Shallow
MW-64-027	Primary	07/14/2016	53	2.6	--	--	Shallow
PM-01A	Primary	01/27/2015	32	2.6	--	--	Shallow
PM-01A	Primary	08/24/2015	35	2.6	--	--	Shallow
PM-01A	Primary	01/27/2016	29	2.6	--	--	Shallow
PM-01A	Primary	07/20/2016	35	2.6	--	--	Shallow
PM-02A	--	NS (2015 - dry)		--	--	--	Shallow
PM-02A	Primary	01/27/2016	28	2.6	--	--	Shallow
PM-02A	Primary	07/20/2016	35	2.6	--	--	Shallow
MP-OS-59-057.5	Primary	09/10/2015	3.3	0.26	--	--	A/B Aquitard

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TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MP-OS-59-057.5	Primary	11/12/2015	5.1	0.26	--	--	A/B Aquitard
MP-OS-59-057.5	--	NS (2016 - dry)	--	--	--	--	A/B Aquitard
MP-OS-59-063	Primary	09/10/2015	6.8	0.26	--	--	A/B Aquitard
MP-OS-59-063	Primary	11/12/2015	3.6	0.26	--	--	A/B Aquitard
MP-OS-59-063	Primary	02/22/2016	0.81	0.26	J	--	A/B Aquitard
MP-OS-59-063	--	NS (2Q16, 3Q16 and 4Q16) - insufficient sample	--	--	--	--	A/B Aquitard
MP-OS-59-070	Primary	09/10/2015	3.1	0.26	--	--	A/B Aquitard
MP-OS-59-070	Primary	02/22/2016	5.4	0.26	--	--	A/B Aquitard
MP-OS-59-070	Primary	04/27/2016	ND < 1.0	0.26	--	--	A/B Aquitard
MP-OS-59-070	--	NS (2Q16, 3Q16 and 4Q16) - insufficient sample	--	--	--	--	A/B Aquitard
MP-OS-59-075	Primary	09/10/2015	27	2.6	--	--	A/B Aquitard
MP-OS-59-075	--	NS (4Q15) - dry	--	--	--	--	A/B Aquitard
MP-OS-59-075	Primary	02/22/2016	0.43	0.26	J	--	A/B Aquitard
MP-OS-59-075	--	NS (2Q16, 3Q16 and 4Q16) - insufficient sample	--	--	--	--	A/B Aquitard
09S03E34C001	Primary	02/02/2015	15	0.26	--	--	Intermediate
09S03E34C001	Primary	08/18/2015	17	0.26	--	--	Intermediate
09S03E34C001	Primary	07/27/2016	18	0.26	--	--	Intermediate
GDR-1	Primary	1/29/2016	19	0.26	--	--	Intermediate
GDR-1	Primary	2/23/2016	3.8	0.26	--	--	Intermediate
GDR-1	Primary	6/2/2016	6.3	0.26	--	--	Intermediate
GDR-1	Primary	7/15/2016	6.3	0.26	--	--	Intermediate
GDR-1	Primary	11/10/2016	6.1	0.26	--	--	Intermediate
IEW-1R	Primary	01/07/2015	35	2.6	--	--	Intermediate
IEW-1R	Primary	02/06/2015	34	2.6	--	--	Intermediate
IEW-1R	Primary	03/03/2015	34	2.6	--	--	Intermediate
IEW-1R	Primary	04/03/2015	34	2.6	--	--	Intermediate
IEW-1R	Primary	05/11/2015	31	2.6	--	--	Intermediate
IEW-1R	Primary	06/02/2015	30	2.6	--	--	Intermediate
IEW-1R	Primary	07/15/2015	35	2.6	--	--	Intermediate
IEW-1R	Primary	08/14/2015	34	2.6	--	--	Intermediate
IEW-1R	Primary	09/11/2015	30	2.6	--	--	Intermediate
IEW-1R	Primary	10/06/2015	30	2.6	--	--	Intermediate
IEW-1R	Primary	11/06/2015	28	2.6	--	--	Intermediate
IEW-1R	Primary	12/01/2015	31	2.6	--	--	Intermediate
IEW-1R	Primary	01/08/2016	32	2.6	--	--	Intermediate
IEW-1R	Primary	02/03/2016	30	2.6	--	--	Intermediate
IEW-1R	Primary	03/10/2016	33	0.097	--	--	Intermediate
IEW-1R	Duplicate	03/10/2016	32	0.097	--	--	Intermediate
IEW-1R	Primary	04/13/2016	33	2.6	--	--	Intermediate
IEW-1R	Primary	05/13/2016	36	2.6	--	--	Intermediate
IEW-1R	Primary	06/02/2016	31	2.6	--	--	Intermediate
IEW-1R	Primary	07/14/2016	36	2.6	--	--	Intermediate
IEW-1R	Duplicate	07/14/2016	36	2.6	--	--	Intermediate
IEW-1R	Primary	08/03/2016	33	2.6	--	--	Intermediate
IEW-1R	Primary	09/09/2016	33	2.6	--	--	Intermediate
IEW-1R	Primary	10/13/2016	32	2.6	--	--	Intermediate
IEW-1R	Primary	11/04/2016	32	2.6	--	--	Intermediate
IEW-1R	Primary	12/07/2016	32	2.6	--	--	Intermediate
EW-01B1	Primary	01/07/2015	33	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	02/06/2015	33	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	03/03/2015	33	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	04/03/2015	34	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	05/11/2015	32	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	06/02/2015	31	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	07/15/2015	33	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	08/14/2015	35	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	09/11/2015	32	2.6	--	--	Intermediate-Upper
EW-01B1	Duplicate	09/11/2015	32	2.6	H	--	Intermediate-Upper
EW-01B1	Primary	10/06/2015	32	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	11/06/2015	32	2.6	--	--	Intermediate-Upper

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TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
EW-01B1	Primary	12/01/2015	33	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	01/08/2016	34	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	02/03/2016	31	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	03/10/2016	33	0.097	--	--	Intermediate-Upper
EW-01B1	Primary	04/13/2016	34	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	05/13/2016	36	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	06/02/2016	32	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	07/14/2016	36	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	08/03/2016	37	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	09/09/2016	35	2.6	--	--	Intermediate-Upper
EW-01B1	Duplicate	09/09/2016	35	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	10/13/2016	36	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	11/04/2016	35	2.6	--	--	Intermediate-Upper
EW-01B1	Primary	12/07/2016	32	2.6	--	--	Intermediate-Upper
MP-02-095	Primary	2/22/2016	12	0.26	--	--	Intermediate-Upper
MP-02-095	Primary	5/20/2016	7.2	0.26	--	--	Intermediate-Upper
MP-02-095	Primary	7/27/2016	13	0.26	--	--	Intermediate-Upper
MP-02-095	Primary	11/16/2016	12	0.26	--	--	Intermediate-Upper
MP-04-088	Primary	01/27/2015	30	2.6	--	--	Intermediate-Upper
MP-04-088	Primary	07/28/2015	32	2.6	--	--	Intermediate-Upper
MP-04-088	Primary	01/27/2016	31	2.6	--	--	Intermediate-Upper
MP-04-088	Primary	07/29/2016	35	2.6	--	--	Intermediate-Upper
MP-05-090	Primary	2/23/2016	7.2	0.26	--	--	Intermediate-Upper
MP-05-090	Primary	5/25/2016	2.2	0.26	--	--	Intermediate-Upper
MP-05-090	Primary	7/26/2016	11	0.26	--	--	Intermediate-Upper
MP-05-090	Primary	11/17/2016	12	0.26	--	--	Intermediate-Upper
MP-17-110	Primary	07/23/2015	39	2.6	--	--	Intermediate-Upper
MP-17-110	Primary	07/29/2016	37	2.6	--	--	Intermediate-Upper
MP-52-095	Primary	01/27/2015	23	2.6	--	--	Intermediate-Upper
MP-52-095	Primary	07/21/2015	8.7	0.26	--	--	Intermediate-Upper
MP-52-095	Primary	07/28/2016	7.8	0.26	--	--	Intermediate-Upper
MP-OS-59-080	Primary	09/10/2015	8	0.26	--	--	Intermediate-Upper
MP-OS-59-080	Primary	11/12/2015	3.5	0.26	--	--	Intermediate-Upper
MP-OS-59-080	Primary	02/22/2016	3.9	0.26	--	--	Intermediate-Upper
MP-OS-59-080	Primary	NS (2Q16, 3Q16 and 4Q16) - insufficient sample				--	Intermediate-Upper
MP-OS-59-084	Primary	09/10/2015	2.1	0.26	--	--	Intermediate-Upper
MP-OS-59-084	Primary	11/12/2015	2.7	0.26	--	--	Intermediate-Upper
MP-OS-59-084	Primary	02/22/2016	15	0.26	--	--	Intermediate-Upper
MP-OS-59-084	Primary	NS (2Q16, 3Q16 and 4Q16) - insufficient sample				--	Intermediate-Upper
MW-16-082	Primary	01/06/2015	30	2.6	--	--	Intermediate-Upper
MW-16-082	Primary	07/01/2015	30	2.6	--	--	Intermediate-Upper
MW-16-082	Primary	07/11/2016	33	2.6	--	--	Intermediate-Upper
MW-60-082	Primary	01/20/2015	37	2.6	--	--	Intermediate-Upper
MW-60-082	Primary	07/22/2015	28	2.6	--	--	Intermediate-Upper
MW-60-082	Primary	07/13/2016	26	2.6	--	--	Intermediate-Upper
MW-64-082	Primary	01/13/2015	24	2.6	--	--	Intermediate-Upper
MW-64-082	Duplicate	01/13/2015	26	2.6	--	--	Intermediate-Upper
MW-64-082	Primary	07/23/2015	27	2.6	--	--	Intermediate-Upper
MW-64-082	Primary	07/14/2016	30	2.6	--	--	Intermediate-Upper
MW-72-070	Primary	01/20/2015	19	0.26	--	--	Intermediate-Upper
MW-72-070	Primary	07/24/2015	18	0.26	--	--	Intermediate-Upper
MW-72-070	Primary	07/14/2016	20	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	01/19/2015	26	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	05/20/2015	27	2.6	--	--	Intermediate-Upper
MW-74-084	Duplicate	05/20/2015	28	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	07/27/2015	31	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	11/05/2015	27	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	01/21/2016	28	2.6	--	--	Intermediate-Upper
MW-74-084	Duplicate	01/21/2016	27	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	04/26/2016	28	2.6	--	--	Intermediate-Upper

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TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-74-084	Primary	07/18/2016	31	2.6	--	--	Intermediate-Upper
MW-74-084	Primary	10/24/2016	28	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	01/19/2015	71	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	05/21/2015	64	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	07/27/2015	70	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	10/14/2015	65	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	01/20/2016	62	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	05/11/2016	71	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	07/18/2016	73	2.6	--	--	Intermediate-Upper
MW-75-085	Primary	11/15/2016	77	2.6	--	--	Intermediate-Upper
MW-76-085	Primary	07/20/2015	33	2.6	--	--	Intermediate-Upper
MW-76-085	Primary	10/28/2015	36	2.6	--	--	Intermediate-Upper
MW-76-085	Primary	01/26/2016	37	2.6	--	--	Intermediate-Upper
MW-76-085	Duplicate	01/26/2016	37	2.6	--	--	Intermediate-Upper
MW-76-085	Primary	05/12/2016	38	2.6	--	--	Intermediate-Upper
MW-76-085	Primary	07/19/2016	38	2.6	--	--	Intermediate-Upper
MW-76-085	Primary	11/15/2016	40	2.6	--	--	Intermediate-Upper
OW-01B1	Primary	01/29/2015	38	2.6	--	--	Intermediate-Upper
OW-01B1	Primary	08/21/2015	45	2.6	--	--	Intermediate-Upper
OW-01B1	Primary	01/27/2016	40	2.6	--	--	Intermediate-Upper
OW-01B1	Primary	07/29/2016	36	2.6	--	--	Intermediate-Upper
PM-01B1	Primary	01/27/2015	49	2.6	--	--	Intermediate-Upper
PM-01B1	Primary	08/24/2015	36	2.6	--	--	Intermediate-Upper
PM-01B1	Primary	01/27/2016	34	2.6	--	--	Intermediate-Upper
PM-01B1	Primary	07/29/2016	45	2.6	--	--	Intermediate-Upper
PM-03B1	Primary	01/29/2015	31	2.6	--	--	Intermediate-Upper
PM-03B1	Duplicate	01/29/2015	31	2.6	--	--	Intermediate-Upper
PM-03B1	Primary	08/21/2015	32	2.6	--	--	Intermediate-Upper
PM-03B1	Duplicate	08/21/2015	33	2.6	--	--	Intermediate-Upper
PM-03B1	Primary	01/27/2016	28	2.6	--	--	Intermediate-Upper
PM-03B1	Primary	07/29/2016	35	2.6	--	--	Intermediate-Upper
MP-02-150	Primary	2/22/2016	4.2	0.26	--	--	Intermediate-Middle
MP-02-150	Primary	5/20/2016	2.2	0.26	--	--	Intermediate-Middle
MP-02-150	Primary	7/27/2016	7.2	0.26	--	--	Intermediate-Middle
MP-02-150	Primary	11/16/2016	5.7	0.26	--	--	Intermediate-Middle
MP-05-136	Primary	2/23/2016	5.8	0.26	--	--	Intermediate-Middle
MP-05-136	Primary	5/25/2016	9.8	0.26	--	--	Intermediate-Middle
MP-05-136	Duplicate	5/25/2016	9.8	0.26	--	--	Intermediate-Middle
MP-05-136	Primary	7/27/2016	11	0.26	--	--	Intermediate-Middle
MP-05-136	Primary	11/17/2016	7.7	0.26	--	--	Intermediate-Middle
MP-16-138	Primary	07/01/2015	8.2	0.26	--	--	Intermediate-Middle
MP-16-138	Primary	07/11/2016	14	0.26	--	--	Intermediate-Middle
MW-74-142	Primary	01/19/2015	33	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	05/20/2015	30	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	07/27/2015	32	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	11/05/2015	27	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	01/21/2016	29	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	04/26/2016	32	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	07/18/2016	30	2.6	--	--	Intermediate-Middle
MW-74-142	Primary	10/24/2016	27	2.6	--	--	Intermediate-Middle
MW-74-142	Duplicate	10/24/2016	28	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	01/19/2015	27	2.6	--	--	Intermediate-Middle
MW-75-120	Duplicate	01/19/2015	26	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	05/21/2015	23	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	07/27/2015	27	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	10/14/2015	24	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	01/20/2016	23	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	05/11/2016	24	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	07/18/2016	27	2.6	--	--	Intermediate-Middle
MW-75-120	Primary	11/15/2016	24	2.6	--	--	Intermediate-Middle

TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-76-133	Primary	07/20/2015	39	2.6	--	--	Intermediate-Middle
MW-76-133	Primary	10/28/2015	37	2.6	--	--	Intermediate-Middle
MW-76-133	Primary	01/26/2016	39	2.6	--	--	Intermediate-Middle
MW-76-133	Primary	05/12/2016	44	2.6	--	--	Intermediate-Middle
MW-76-133	Primary	07/19/2016	44	2.6	--	--	Intermediate-Middle
MW-76-133	Primary	11/15/2016	44	2.6	--	--	Intermediate-Middle
MW-75-180	Primary	07/20/2015	15	0.26	--	--	Intermediate-Lower
MW-75-180	Duplicate	07/20/2015	16	0.26	--	--	Intermediate-Lower
MW-75-180	Primary	10/28/2015	17	0.26	--	--	Intermediate-Lower
MW-75-180	Primary	01/20/2016	20	2.6	--	--	Intermediate-Lower
MW-75-180	Primary	05/11/2016	20	2.6	--	--	Intermediate-Lower
MW-75-180	Primary	07/18/2016	21	2.6	--	--	Intermediate-Lower
MW-75-180	Primary	11/15/2016	21	2.6	--	--	Intermediate-Lower
MW-75-180	Duplicate	11/15/2016	20	2.6	--	--	Intermediate-Lower
OW-01B3	Primary	01/29/2015	27	2.6	--	--	Intermediate-Lower
OW-01B3	Primary	08/21/2015	29	2.6	--	--	Intermediate-Lower
OW-01B3	Primary	01/27/2016	16	2.6	--	--	Intermediate-Lower
OW-01B3	Primary	07/29/2016	2.4	0.26	--	--	Intermediate-Lower
09S03E34J012	Primary	02/02/2015	39	2.6	--	--	Intermediate-Deep
09S03E34J012	Primary	08/18/2015	42	2.6	--	--	Intermediate-Deep
09S03E34J012	Primary	08/03/2016	41	2.6	--	--	Intermediate-Deep
09S03E34C003	Primary	01/15/2015	35	2.6	--	--	Intermediate (Unk)
09S03E34C003	Primary	07/20/2015	37	2.6	--	--	Intermediate (Unk)
09S03E34C003	Primary	07/20/2016	35	2.6	--	--	Intermediate (Unk)
09S03E34J003	--	NS (2015) - repairs & new owner		--	--	--	Intermediate (Unk)
09S03E34J003	Primary	07/27/2016	38	2.6	--	--	Intermediate (Unk)
MP-16-229	Primary	01/06/2015	11	0.26	--	--	Deep-Upper
MP-16-229	--	NS (3Q15) - obstruction		--	--	--	Deep-Upper
MP-16-229	Primary	07/11/2016	ND(1.0)	0.26	--	--	Deep-Upper
MP-52-273	Primary	01/27/2015	27	2.6	--	--	Deep-Upper
MP-52-273	Primary	07/21/2015	29	2.6	--	--	Deep-Upper
MP-52-273	Primary	07/28/2016	27	2.6	--	--	Deep-Upper
MW-04B	Primary	02/04/2015	34	2.6	--	--	Deep-Upper
MW-04B	Primary	09/03/2015	32	2.6	--	--	Deep-Upper
MW-04B	Primary	08/19/2016	29	2.6	--	--	Deep-Upper
MW-60-220	Primary	01/13/2015	37	2.6	--	--	Deep-Upper
MW-60-220	Primary	07/22/2015	34	2.6	--	--	Deep-Upper
MW-60-220	Primary	07/13/2016	36	2.6	--	--	Deep-Upper
MW-60-220	Duplicate	07/13/2016	35	2.6	--	--	Deep-Upper
MW-60-270	Primary	01/13/2015	36	2.6	--	--	Deep-Upper
MW-60-270	Primary	07/24/2015	36	2.6	--	--	Deep-Upper
MW-60-270	Primary	01/26/2016	33	2.6	--	--	Deep-Upper
MW-60-270	Primary	07/21/2016	36	2.6	--	--	Deep-Upper
MW-75-225	Primary	07/20/2015	19	0.26	--	--	Deep-Upper
MW-75-225	Primary	10/28/2015	18	0.26	--	--	Deep-Upper
MW-75-225	Primary	01/20/2016	19	2.6	--	--	Deep-Upper
MW-75-225	Primary	05/11/2016	20	0.26	--	--	Deep-Upper
MW-75-225	Primary	07/18/2016	20	2.6	--	--	Deep-Upper
MW-75-225	Duplicate	07/18/2016	19	2.6	--	--	Deep-Upper
MW-75-225	Primary	11/15/2016	20	0.26	--	--	Deep-Upper
PMW-04-225	Primary	01/14/2015	30	2.6	--	--	Deep-Upper
PMW-04-225	Primary	07/23/2015	30	2.6	--	--	Deep-Upper
PMW-04-225	Primary	07/14/2016	31	2.6	--	--	Deep-Upper
PMW-04-282	Primary	07/28/2015	28	2.6	--	--	Deep-Upper
PMW-04-282	Primary	07/22/2016	28	2.6	--	--	Deep-Upper
DEW-01	Primary	01/07/2015	31	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	02/06/2015	31	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	03/03/2015	31	2.6	--	--	Deep-Upper-Middle
DEW-01	Duplicate	03/03/2015	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	04/03/2015	31	2.6	--	--	Deep-Upper-Middle

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TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
DEW-01	Primary	05/11/2015	29	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	06/02/2015	29	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	07/15/2015	32	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	08/14/2015	33	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	09/11/2015	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	10/06/2015	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	11/06/2015	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	12/01/2015	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	01/08/2016	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	02/03/2016	28	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	03/10/2016	29	0.097	--	--	Deep-Upper-Middle
DEW-01	Primary	04/13/2016	28	2.6	--	--	Deep-Upper-Middle
DEW-01	Duplicate	04/13/2016	28	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	05/13/2016	30	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	06/02/2016	28	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	07/14/2016	33	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	08/03/2016	32	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	09/09/2016	31	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	10/13/2016	31	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	11/04/2016	31	2.6	--	--	Deep-Upper-Middle
DEW-01	Primary	12/07/2016	29	2.6	--	--	Deep-Upper-Middle
MP-16-261	Primary	01/06/2015	13	0.26	--	--	Deep-Middle
MP-16-261	--	NS (3Q15) - obstruction		--	--	--	Deep-Middle
MP-16-261	Primary	07/11/2016	4.1	0.26	--	--	Deep-Middle
MW-04C	Primary	02/04/2015	24	2.6	--	--	Deep-Middle
MW-04C	Primary	09/03/2015	20	0.26	--	--	Deep-Middle
MW-04C	Primary	08/19/2016	20	0.26	--	--	Deep-Middle
MW-16-328	Primary	01/02/2014	38	2.6	--	--	Deep-Middle
MW-16-328	Primary	07/10/2014	37	2.6	--	--	Deep-Middle
MW-16-328	Primary	01/06/2015	38	2.6	--	--	Deep-Middle
MW-16-328	Primary	07/01/2015	37	2.6	--	--	Deep-Middle
MW-16-328	--	NS (3Q16) - missed		--	--	--	Deep-Middle
MW-52-347	Primary	01/15/2015	22	2.6	--	--	Deep-Middle
MW-52-347	Primary	07/30/2015	23	2.6	--	--	Deep-Middle
MW-52-347	Duplicate	07/30/2015	23	2.6	--	--	Deep-Middle
MW-52-347	Primary	07/22/2016	27	2.6	--	--	Deep-Middle
MW-60-300	Primary	01/14/2015	38	2.6	--	--	Deep-Middle
MW-60-300	Primary	07/24/2015	38	2.6	--	--	Deep-Middle
MW-60-300	Duplicate	07/24/2015	38	2.6	--	--	Deep-Middle
MW-60-300	Primary	01/26/2016	35	2.6	--	--	Deep-Middle
MW-60-300	Primary	07/21/2016	40	2.6	--	--	Deep-Middle
MW-77-299	Primary	07/30/2015	2.1	0.26	--	--	Deep-Middle
MW-77-299	Primary	10/28/2015	10	0.26	--	--	Deep-Middle
MW-77-299	Primary	01/21/2016	4.8	0.26	--	--	Deep-Middle
MW-77-299	Primary	05/12/2016	12	0.26	--	--	Deep-Middle
MW-77-299	Primary	07/21/2016	18	0.26	--	--	Deep-Middle
MW-77-299	Primary	11/15/2016	0.43	0.26	J	--	Deep-Middle
MW-77-343	Primary	07/30/2015	ND < 1.0	0.26	--	--	Deep-Middle
MW-77-343	Primary	10/28/2015	ND < 1.0	0.26	--	--	Deep-Middle
MW-77-343	Primary	01/21/2016	ND < 1.0	0.26	--	--	Deep-Middle
MW-77-343	Primary	05/12/2016	ND < 1.0	0.26	--	--	Deep-Middle
MW-77-343	Primary	07/20/2016	ND < 1.0	0.26	--	--	Deep-Middle
MW-77-343	Primary	11/15/2016	ND < 1.0	0.26	--	--	Deep-Middle
PZ-05-339	Primary	01/15/2015	22	2.6	--	--	Deep-Middle
PZ-05-339	Primary	07/28/2015	23	2.6	--	--	Deep-Middle
PZ-05-339	Duplicate	07/28/2015	23	2.6	--	--	Deep-Middle
PZ-05-339	Primary	07/20/2016	22	2.6	--	--	Deep-Middle
MW-52-403	Primary	07/30/2015	34	2.6	--	--	Deep-Lower
MW-52-403	Primary	07/22/2016	34	2.6	--	--	Deep-Lower
MW-55-410	Primary	2/26/2016	12	0.26	--	--	Deep-Lower

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TABLE 6

NITRATE RESULTS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Well ID	Sample Type	Sample Date	Nitrate Concentration (mg/L)	Lab MDL (mg/L)	Lab Qualifier	Validation Qualifier	Aquifer
MW-55-410	Primary	7/22/2016	14	0.26	--	--	Deep-Lower
PMW-06-416	Primary	02/03/2015	25	2.6	--	--	Deep-Lower
PMW-06-416	Primary	05/27/2015	15	0.26	--	--	Deep-Lower
PMW-06-416	Primary	08/13/2015	8.4	0.26	--	--	Deep-Lower
PMW-06-416	Primary	11/17/2015	18	2.6	--	--	Deep-Lower
PMW-06-416	Duplicate	11/17/2015	18	2.6	--	--	Deep-Lower
PMW-06-416	Primary	02/23/2016	20	2.6	--	--	Deep-Lower
PMW-06-416	Duplicate	02/23/2016	20	2.6	--	--	Deep-Lower
PMW-06-416	Primary	05/24/2016	18	0.26	--	--	Deep-Lower
PMW-06-416	Primary	07/15/2016	25	2.6	--	--	Deep-Lower
PMW-06-416	Primary	11/10/2016	13	0.26	--	--	Deep-Lower
PMW-06-445	Primary	02/03/2015	28	2.6	--	--	Deep-Lower
PMW-06-445	Primary	05/27/2015	28	2.6	--	--	Deep-Lower
PMW-06-445	Primary	08/13/2015	29	2.6	--	--	Deep-Lower
PMW-06-445	Primary	11/17/2015	27	2.6	--	--	Deep-Lower
PMW-06-445	Primary	02/23/2016	18	0.26	--	--	Deep-Lower
PMW-06-445	Primary	05/24/2016	23	2.6	--	--	Deep-Lower
PMW-06-445	Primary	07/15/2016	24	2.6	--	--	Deep-Lower
PMW-06-445	Primary	11/10/2016	10	0.26	--	--	Deep-Lower
PZ-02-415	Primary	2/25/2016	30	2.6	--	--	Deep-Lower
PZ-02-415	Primary	5/25/2016	31	2.6	--	--	Deep-Lower
PZ-02-415	Primary	7/21/2016	34	2.6	--	--	Deep-Lower
PZ-02-415	Duplicate	7/21/2016	34	2.6	--	--	Deep-Lower
PZ-02-415	Primary	11/16/2016	32	2.6	--	--	Deep-Lower
PZ-05-390	Primary	07/27/2015	15	0.26	--	--	Deep-Lower
PZ-05-390	Primary	07/25/2016	23	2.6	--	--	Deep-Lower

Notes

1. All wells designated for semiannual or annual sampling for nitrate in the MRP dated 2/20/15 were sampled during 3Q16, and all wells designated for quarterly sampling for perchlorate in the MRP were sampled during 3Q16 and 4Q16, except as noted.

Abbreviations

- = not applicable
 3Q16 = Third Quarter 2016 annual groundwater sampling event
 Intermediate (Unk) = Screen interval unknown; assigned to intermediate aquifer based on production rate and local domestic wells.
 MDL = Method Detection Limit
 mg/L = milligrams per liter; equivalent to parts per million
 ND < = Not Detected at or above the reporting limit shown
 NS = Well could not be sampled because of insufficient water or a blockage in the well

Laboratory Qualifiers

- B = Compound was detected in the blank and sample
 H = Sample was prepped or analyzed beyond the specified holding time.
 J = Nitrate detected between the MDL and reporting limit. The reported value is estimated.

TABLE 7

QUARTERLY AVERAGE FLOW RATES AND VOLUMES EXTRACTED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Monitoring Period	Extraction System			Injection System		
	Wells	Average Flow Rate (gpm) ¹	Total Monthly Flow (gallons)	Wells	Average Flow Rate (gpm) ¹	Total Monthly Flow (gallons)
July (6/30/16 - 7/31/16)	EW-01A	0	1,117	INJ-001	70	3,139,040
	EW-02A	24	1,068,580	INJ-002	36	1,595,500
	EW-01B1	12	548,408	INJ-003	87	3,903,888
	IEW-1R	240	10,697,216	INJ-004	120	5,348,448
	DEW-1	135	6,025,664	INJ-005	67	2,986,568
				INJ-006	20	902,700
August (7/31/16 - 8/31/16)	EW-01A	0	0	INJ-001	55	2,469,048
	EW-02A	1	54,539	INJ-002	28	1,262,824
	EW-01B1	11	477,440	INJ-003	71	3,157,232
	IEW-1R	209	9,333,920	INJ-004	105	4,669,104
	DEW-1	120	5,338,976	INJ-005	54	2,386,280
				INJ-006	19	851,528
September (8/31/16 - 9/30/16)	EW-01A	0	0	INJ-001	62	2,688,432
	EW-02A	0	0	INJ-002	33	1,404,596
	EW-01B1	12	537,376	INJ-003	81	3,478,544
	IEW-1R	238	10,299,168	INJ-004	119	5,149,680
	DEW-1	125	5,405,282	INJ-005	61	2,650,688
				INJ-006	21	922,296
October (9/30/16 - 10/31/16)	EW-01A	0	913	INJ-001	62	2,767,128
	EW-02A	0	1,385	INJ-002	33	1,477,576
	EW-01B1	12	551,112	INJ-003	79	3,523,376
	IEW-1R	240	10,703,968	INJ-004	120	5,344,928
	DEW-1	140	6,259,454	INJ-005	61	2,719,256
				INJ-006	21	926,952
November (10/31/16 - 11/30/16)	EW-01A	0	0	INJ-001	62	2,660,112
	EW-02A	0	0	INJ-002	33	1,423,448
	EW-01B1	12	525,700	INJ-003	77	3,313,488
	IEW-1R	237	10,222,720	INJ-004	117	5,056,752
	DEW-1	113	4,864,480	INJ-005	61	2,615,600
				INJ-006	12	497,400
December (11/30/16 - 12/31/16)	EW-01A	0	0	INJ-001	63	2,797,840
	EW-02A	0	0	INJ-002	34	1,512,144
	EW-01B1	12	540,132	INJ-003	79	3,542,032
	IEW-1R	240	10,722,752	INJ-004	120	5,356,800
	DEW-1	121	5,396,672	INJ-005	62	2,770,528
				INJ-006	12	539,280
Total Flow - 2SA2016 (gallons)			99,576,974			97,811,036
Percent Reinject²:			100%			

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TABLE 7

QUARTERLY AVERAGE FLOW RATES AND VOLUMES EXTRACTED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Notes

1. Average flow rates were calculated over the period of operation. Average monthly flow rates less than 0.5 gpm are rounded to zero.
2. All extracted groundwater is reinjected to the Llagas Subbasin per design of the GWTS. Differences between recorded extraction and injection volumes originate either from groundwater in temporary storage within the treatment system or slight differences in flow meter tolerances. Additional differences may arise from treatment and injection of water originating from monitoring well purging activities or other investigation-derived water.

Abbreviations

2SA2016 = second semiannual period of 2016

gpm = gallons per minute

GWTS = Groundwater Treatment System

TABLE 8

GROUNDWATER TREATMENT SYSTEM ANALYTICAL RESULTS
 2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Parameters	Date	SV-100 (Influent)	SV-200 (Midpoint) ¹	SV-300 (Effluent)	Lab MDL	Reporting Limit	Test Method
Critical Parameters							
Perchlorate, µg/L	7/14/2016	13	ND < 4.0	ND < 4.0	0.75	4	EPA 314.0M
	8/3/2016	15	ND < 4.0 / ND < 4.0 ²	ND < 4.0	0.75	4	EPA 314.0M
	9/9/2016	14	ND < 4.0	ND < 4.0	0.75	4	EPA 314.0M
	10/13/2016	13	ND < 4.0	ND < 4.0	0.75	4	EPA 314.0M
	11/14/2016	15	0.75 J	ND < 4.0 / ND < 4.0 ²	0.75	4	EPA 314.0M
	12/7/2016	14	0.93 J	ND < 4.0	0.75	4	EPA 314.0M
pH (field)	7/14/2016	6.87	6.88	6.65	--	--	--
	8/3/2016	6.47	6.65	6.66	--	--	--
	9/9/2016	6.97	6.85	6.97	--	--	--
	10/13/2016	6.99	6.93	6.94	--	--	--
	11/14/2016	6.93	6.94	6.96	--	--	--
	12/7/2016	6.87	6.79	6.67	--	--	--
Additional Analytical Data							
Chloride, mg/L	7/14/2016	37	--	36	5	10	EPA 300.0
	8/3/2016	39	--	39	5	10	EPA 300.0
	9/9/2016	35	--	36	5	10	EPA 300.0
	10/13/2016	44	--	44	5	10	EPA 300.0
	11/14/2016	41	--	42 / 42 ²	5	10	EPA 300.0
	12/7/2016	38	--	37	5	10	EPA 300.0
Nitrate (as NO ₃), mg/L	7/14/2016	34	33	34	2.6	10	EPA 300.0
	8/3/2016	33	34 / 34 ²	34	2.6	10	EPA 300.0
	9/9/2016	32	32	32	2.6	10	EPA 300.0
	10/13/2016	31	34	34	2.6	10	EPA 300.0
	11/14/2016	32	33	33 / 32 ²	2.6	10	EPA 300.0
	12/7/2016	30	31	30	2.6	10	EPA 300.0
Sulfate, mg/L	7/14/2016	23	--	23	4	10	EPA 300.0
	8/3/2016	27	--	27	4	10	EPA 300.0
	9/9/2016	27	--	27	4	10	EPA 300.0
	10/13/2016	27	--	27	4	10	EPA 300.0
	11/14/2016	27	--	28 / 28 ²	4	10	EPA 300.0
	12/7/2016	26	--	26	4	10	EPA 300.0
Field Data							
Specific Conductivity, µS/cm	7/14/2016	456	458	499	--	--	--
	8/3/2016	499	501	501	--	--	--
	9/9/2016	450	462	473	--	--	--
	10/13/2016	460	462	470	--	--	--
	11/14/2016	462	462	464	--	--	--
	12/7/2016	427	427	448	--	--	--
Temperature, °C	7/14/2016	20.17	20.57	21.19	--	--	--
	8/3/2016	19.53	20.00	19.07	--	--	--
	9/9/2016	18.48	18.91	19.28	--	--	--
	10/13/2016	18.95	18.92	19.30	--	--	--
	11/14/2016	16.90	16.80	16.94	--	--	--
	12/7/2016	18.48	18.89	19.51	--	--	--
Total Dissolved Solids, mg/L	7/14/2016	0.296	0.298	0.325	--	--	--
	8/3/2016	0.325	0.325	0.325	--	--	--
	9/9/2016	0.301	0.300	0.303	--	--	--
	10/13/2016	0.299	0.300	0.305	--	--	--
	11/14/2016	0.301	0.300	0.305	--	--	--
	12/7/2016	0.278	0.279	0.292	--	--	--

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TABLE 8

GROUNDWATER TREATMENT SYSTEM ANALYTICAL RESULTS
 2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Notes

1. Midpoint refers to the effluent of the lead IX resin vessel prior to entering the lag IX resin vessel.
2. Duplicate sample results are separated by a forward slash.
3. Perchlorate was detected below the laboratory reporting limit and is considered an estimated value.
4. Analyses were subcontracted to a different lab where the method was not modified to meet the project QAPP.

Abbreviations

-- = Not analyzed or not applicable
 °C = degrees Celsius
 µg/L = micrograms per liter
 µS/cm = microsiemens per centimeter
 EPA = United States Environmental Protection Agency
 IX = treatment
 MDL = method detection limit
 mg/L = milligrams per liter
 ND < = Not Detected at or above the laboratory reporting limit shown

TABLE 9

PERCHLORATE MASS REMOVED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual
Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Date	Perchlorate Concentrations ¹ (µg/L)	Treated Volume (gallons)	Mass Removal ² (kg)
02/23/04	45	--	--
02/24/04	73	--	--
02/26/04	76	--	--
03/03/04	31	200,000	0.04
03/04/04	47	140,000	0.02
03/12/04	35	880,000	0.14
03/18/04	62	1,110,000	0.20
03/25/04	71	430,000	0.11
03/31/04	64	--	--
04/06/04	--	2,200,000	0.56
04/07/04	58	190,000	0.04
04/21/04	49	2,680,000	0.54
05/04/04	43	2,250,000	0.39
06/03/04	27	4,550,000	0.60
07/07/04	23	4,540,000	0.43
08/05/04	31	3,670,000	0.38
09/09/04	31	2,910,000	0.34
10/06/04	44	1,560,000	0.22
11/09/04	30	2,190,000	0.31
12/14/04	36	2,600,000	0.33
01/10/05	35	2,130,000	0.29
02/04/05	59	2,970,000	0.53
03/08/05	85	4,940,000	1.35
04/06/05	110	5,880,000	2.17
05/11/05	64	6,720,000	2.21
06/07/05	65	5,450,000	1.33
06/30/05	45	4,330,000	0.90
08/03/05	29	6,570,000	0.92
09/02/05	26	4,900,000	0.51
09/29/05	70	--	--
09/30/05	84	--	--
10/15/05	--	4,440,000	1.01
11/02/05	84	--	--
11/03/05	--	1,220,000	0.39
11/17/05	160	--	--
11/25/05	--	1,970,000	0.91
01/05/06	130	4,950,000	2.72
01/11/06	88	--	--
01/12/06	--	1,370,000	0.56
02/07/06	71	--	--
02/09/06	--	5,270,000	1.59
02/28/06	63	--	--
03/01/06	--	3,910,000	0.99
03/30/06	58	5,540,000	1.27
04/13/06	60	2,770,000	0.62
05/03/06	73	3,880,000	0.98
06/01/06	77	1,910,000	0.54

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TABLE 9

PERCHLORATE MASS REMOVED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual
Groundwater Monitoring Report

Olin Site
Morgan Hill, California

Date	Perchlorate Concentrations ¹ (µg/L)	Treated Volume (gallons)	Mass Removal ² (kg)
06/30/06	35	4,390,000	0.93
07/31/06	24	6,100,000	0.68
08/30/06	27	4,300,000	0.42
09/27/06	17	5,270,000	0.44
10/30/06	16	6,250,000	0.39
11/30/06 ³	15	5,080,000	0.30
12/29/06 ³	--	5,520,000	--
01/04/07 ³	16	1,150,000	0.39
01/31/07 ³	15	5,080,000	0.30
02/28/07 ³	23	4,960,000	0.36
03/29/07 ³	17	6,040,000	0.46
04/30/07	18	6,670,000	0.44
05/31/07	15	6,940,000	0.43
06/28/07	12	5,230,000	0.27
07/31/07	13	6,580,000	0.31
08/14/07	18	1,970,000	0.12
08/28/07	15	3,060,000	0.19
09/13/07	16	3,100,000	0.18
09/27/07	17	2,340,000	0.15
10/16/07	16	--	--
10/31/07	16	5,360,000	0.33
11/29/07	17	4,580,000	0.29
12/31/07	21	4,030,000	0.29
01/31/08	40	3,930,000	0.45
02/29/08	25	3,150,000	0.39
03/31/08	19	6,990,000	0.58
04/30/08	18	6,130,000	0.43
05/29/08	19	4,390,000	0.31
06/30/08	23	5,780,000	0.46
07/31/08	110	1,980,000	0.50
08/28/08	110	450,000	0.19
09/30/08	110	490,000	0.20
10/17/08	--	160,000	--
10/30/08	79	--	0.06
11/24/08	56	--	--
12/31/08	150	--	--
01/07/09	25.2	0	0.00
01/27/09	87.3	600,000	0.13
02/26/09	NS	130,000	0.03
03/31/09	NS	0	0.00
04/02/09	94.9	0	0.00
04/29/09	110	640,000	0.25
05/28/09	115	380,000	0.16
06/30/09	99.5	710,000	0.29
07/30/09	114	500,000	0.20
08/31/09	--	520,000	--
09/09/09	116	--	0.22

TABLE 9

PERCHLORATE MASS REMOVED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual
Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Date	Perchlorate Concentrations ¹ (µg/L)	Treated Volume (gallons)	Mass Removal ² (kg)
09/29/09	107	--	--
09/30/09	--	360,000	0.15
10/29/09 ³	--	490,000	--
11/03/09	118	--	0.21
12/01/09 ³	90.4	290,000	0.11
12/31/09 ³	116	550,000	0.22
02/01/10 ³	124	440,000	0.20
03/01/10 ⁴	109	570,000	0.25
04/01/10 ³	150	920,000	0.45
05/03/10	130	1,180,000	0.62
06/01/10	110	1,790,000	0.81
06/30/10	85	1,640,000	0.60
07/29/10	79	1,610,000	0.50
08/31/10	68	1,820,000	0.51
09/30/10	--	1,660,000	--
10/01/10	55	--	0.39
10/29/10	49	1,600,000	0.31
11/30/10	54	1,200,000	0.23
12/30/10	--	1,410,000	--
01/04/11	55	--	0.29
01/31/11	--	1,190,000	--
02/03/11	57	--	0.25
02/28/11	--	1,110,000	--
03/02/11	69	--	0.26
03/30/11	--	1,690,000	--
04/06/11	130	--	0.64
04/29/11	--	1,890,000	--
05/03/11	92	--	0.79
05/31/11	--	1,540,000	--
06/01/11	79	--	0.50
06/30/11	--	1,330,000	--
07/01/11	47	--	0.32
07/29/11	--	1,640,000	--
08/01/11	45	--	0.29
08/15/11	99	--	--
08/31/11	100	1,130,000	0.35
09/15/11	98	280,000	0.11
09/30/11	110	280,000	0.11
10/14/11	96	--	--
10/31/11	95	590,000	0.21
11/15/11	87	--	--
11/30/11	96	570,000	0.20
12/12/11	95	--	--
12/29/11	--	370,000	0.13
01/03/12	96	--	--
01/16/12	96	330,000	0.12
02/02/12	88	320,000	0.11

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TABLE 9

PERCHLORATE MASS REMOVED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual
Groundwater Monitoring Report

Olin Site
Morgan Hill, California

Date	Perchlorate Concentrations ¹ (µg/L)	Treated Volume (gallons)	Mass Removal ² (kg)
02/16/12	--	270,000	0.09
--	--	--	--
7/12/12 ^b	20	--	--
07/31/12	--	6,740,000	0.48
08/02/12	18	--	--
08/08/12	17	--	--
08/30/12	18	--	--
08/31/12	--	24,860,000	1.79
09/28/12	23	--	--
09/30/12	--	16,460,000	1.40
10/02/12	22	--	--
10/31/12	--	13,600,000	1.13
11/01/12	22	--	--
11/30/12	--	13,670,000	1.14
12/04/12	22	--	--
12/31/12	--	13,430,000	1.19
01/03/13	25	--	--
01/31/13	--	14,870,000	1.27
02/06/13	20	--	--
02/28/13	--	13,090,000	0.97
03/07/13	19	--	--
03/31/13	--	13,830,000	0.99
04/02/13	19	--	--
04/30/13	--	14,690,000	1.06
05/06/13	19	--	--
05/31/13	--	15,640,000	1.07
06/04/13	17	--	--
06/30/13	--	17,270,000	1.11
07/08/13	17	--	--
07/31/13	--	14,520,000	0.93
08/05/13	17	--	--
08/31/13	--	16,880,000	1.05
09/04/13	16	--	--
09/30/13	--	16,260,000	0.98
10/02/13	16	--	--
10/31/13	--	14,680,000	0.81
11/08/13	13	--	--
11/31/13	--	14,820,000	0.79
12/03/13	15	--	--
12/31/13	--	16,100,000	0.88
01/08/14	14	--	--
01/31/14	--	16,160,000	0.89
02/04/14	15	--	--
02/28/14	--	14,590,000	0.83
03/06/14	15	--	--
03/31/14	--	17,130,000	0.94
04/02/14	14	--	--

TABLE 9

PERCHLORATE MASS REMOVED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual
Groundwater Monitoring Report

Olin Site
Morgan Hill, California

Date	Perchlorate Concentrations ¹ (µg/L)	Treated Volume (gallons)	Mass Removal ² (kg)
04/30/14	--	16,660,000	0.88
05/06/14	14	--	--
05/31/14	--	16,000,000	0.88
06/04/14	15	--	--
06/30/14	--	14,300,000	0.81
07/15/14	15	--	--
07/31/14	--	13,540,000	0.77
08/08/14	15	--	--
08/31/14	--	12,060,000	0.68
09/05/14	15	--	--
09/30/14	--	9,180,000	0.52
10/02/14	15	--	--
10/31/14	--	11,180,000	0.63
11/11/14	15	--	--
11/30/14	--	8,700,000	0.44
12/02/14	12	--	--
12/31/14	--	13,530,000	0.67
1/7/2015	14	--	--
01/31/15	--	13,760,000	0.73
2/6/2015	14	--	--
02/28/15	--	12,420,000	0.66
3/3/2015	14	--	--
03/31/15	--	13,690,000	0.75
4/3/2015	15	--	--
4/30/2015	--	14,000,000	0.77
5/11/2015	14	--	--
5/31/2015	--	14,480,000	0.82
6/2/2015	16	--	--
6/30/2015	--	13,820,000	0.84
--	--	--	--
07/15/15	14	--	--
07/31/15	--	16,710,000	0.92
08/14/15	15	--	--
08/31/15	--	15,550,000	0.88
09/11/15	15	--	--
09/30/15	--	14,950,000	0.79
10/06/15	13	--	--
10/31/15	--	14,500,000	0.74
11/06/15	14	--	--
11/30/15	--	15,690,000	0.83
12/01/15	14	--	--
12/31/15	--	16,080,000	0.88
01/08/16	15	--	--
01/31/16	--	16,500,000	0.91
02/03/16	14	--	--
02/29/16	--	15,440,000	0.85
03/10/16	15	--	--

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TABLE 9

PERCHLORATE MASS REMOVED

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual
Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Date	Perchlorate Concentrations ¹ (µg/L)	Treated Volume (gallons)	Mass Removal ² (kg)
03/31/16	--	16,580,000	0.91
04/13/16	14	--	--
04/30/16	--	16,280,000	0.89
05/13/16	15	--	--
05/31/16	--	17,640,000	0.97
06/02/16	14	--	--
06/30/16	--	17,250,000	0.88
07/14/16	13	--	--
07/31/16	--	18,340,000	0.97
08/03/16	15	--	--
08/31/16	--	15,210,000	0.83
09/09/16	14	--	--
09/30/16	--	16,240,000	0.83
10/13/16	13	--	--
10/31/16	--	17,520,000	0.93
11/04/16	15	--	--
11/30/16	--	15,610,000	0.86
12/07/16	14	--	--
12/31/16	--	16,660,000	0.88
		Gallons	Mass Removed (kg)
Total 1SA2016	--	99,690,000	5.41
Total 2SA2016	--	99,580,000	5.30
Grand Total	--	995,990,000	97.60

Notes

1. Samples from GWTS influent (SV-100)
2. Mass Removal = (treated volume) * (average concentrations between sample periods)
3. Total volume from extraction wells
4. Total volume from injection wells
5. Expanded Groundwater Treatment System testing began 7/12/12 and full operation began 9/07/12. Treated volume is the sum of groundwater extracted from all active extraction wells.

Abbreviations

-- = not applicable
 µg/L = micrograms per liter
 1SA2016 = first semiannual reporting period of 2016 (January through June)
 2SA2016 = second semiannual reporting period of 2016 (July through December)
 gpm = gallons per minute
 kg = kilogram
 NS = not sampled

TABLE 10

PERCHLORATE RESULTS - DOMESTIC ION EXCHANGE SYSTEMS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Station	Sample Type	Sample Date	Test Method	Perchlorate Concentration (µg/L) ¹	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E34C003	Primary	07/19/2016	EPA314.0M	34	1.5	--	--	Intermediate (Unk)
09S03E34C003-MID	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34C003-EFF	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34C003	Primary	10/17/2016	EPA314.0M	31	1.5	--	--	Intermediate (Unk)
09S03E34C003-MID	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34C003-EFF	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G001	Primary	07/19/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G001-MID	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G001-EFF	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G001	Primary	10/17/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G001-MID	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G001-EFF	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G002	Primary	07/19/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G002-MID	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G002-EFF	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G002	Primary	10/17/2016	EPA314.0M	12	0.75	--	--	Intermediate (Unk)
09S03E34G002-B-MID	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate (Unk)
09S03E34G002-B-EFF	Primary	10/17/2016	EPA314.0M	0.75	0.75	J	--	Intermediate (Unk)
09S03E34J012	Primary	08/03/2016	EPA314.0M	7.6	0.75	--	--	Intermediate-Deep
09S03E34J012-DUP	Duplicate	08/03/2016	EPA314.0M	7.7	0.75	--	--	Intermediate-Deep
09S03E34J012-MID	Primary	08/03/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Deep
09S03E34J012-EFF	Primary	08/03/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Deep
09S03E34J012	Primary	10/17/2016	EPA314.0M	6.9	0.75	--	--	Intermediate-Deep
09S03E34J012-DUP	Duplicate	10/17/2016	EPA314.0M	7.0	0.75	--	--	Intermediate-Deep
09S03E34J012-MID	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Deep
09S03E34J012-EFF	Primary	10/26/2016	EPA314.0M	ND < 4.0	0.75	--	--	Intermediate-Deep
09S03E35N014	Primary	07/19/2016	EPA314.0M	18	0.75	--	--	Deep-Middle
09S03E35N014-DUP	Duplicate	07/19/2016	EPA314.0M	18	0.75	--	--	Deep-Middle
09S03E35N014-MID	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle

TABLE 10

PERCHLORATE RESULTS - DOMESTIC ION EXCHANGE SYSTEMS

2016 Annual Cleanup Progress Status Report and 2016 Second Semiannual Groundwater Monitoring Report

Olin Site

Morgan Hill, California

Station	Sample Type	Sample Date	Test Method	Perchlorate Concentration (µg/L) ¹	Lab MDL (µg/L)	Lab Qualifier	Validation Qualifier	Aquifer
09S03E35N014-EFF	Primary	07/19/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
09S03E35N014	Primary	10/17/2016	EPA314.0M	20	0.75	--	--	Deep-Middle
09S03E35N014-MID	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle
09S03E35N014-EFF	Primary	10/17/2016	EPA314.0M	ND < 4.0	0.75	--	--	Deep-Middle

Note1. **Bold face type** denotes concentration that exceeds the Maximum Contaminant Level (6 µg/L).Abbreviations

-- = not applicable

µg/L = micrograms per liter; equivalent to parts per billion

EFF = Treated effluent sample, collected downstream of the lag ion exchange vessel

Intermediate (Unk) = Screen interval unknown; assigned to intermediate aquifer based on production rate and local domestic wells

MID = Midpoint sample, collected between the lead and lag ion exchange vessels

MDL = Method Detection Limit

ND < = Not Detected at or above the reporting limit shown

Laboratory Qualifiers

J = Perchlorate detected between the MDL and reporting limit. The reported value is estimated.

TABLE 11

ANALYTICAL RESULTS – GRADIENT DRIVEN REMEDIATION PERFORMANCE MONITORING PROGRAM
 2016 Annual Cleanup Progress Status Report and Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Well ID	Sample Name	Sample Type	Aquifer	Sample Date ¹	Test Method	Units	Nitrate as NO3	Chloride	Sulfate as SO4	Total Organic Carbon	Deuterium	Oxygen-18	Dissolved Barium	Calcium	Iron	Magnesium	Manganese
							EPA300.0	EPA300.0	EPA300.0	SM5310B	CF-IRMS ‰ relative to VSMOW	CF-IRMS ‰ relative to VSMOW	EPA200.8	EPA200.7	EPA200.7	EPA200.7	EPA200.7
Intermediate Aquifer																	
GDR-1	GDR-1-418 ³	Primary	Intermediate	1/19/2016		ND < 4.0	5.1	72	39	ND < 1.0	-65.7	-8.69	210	42 [^] /	2.1	19	0.059
GDR-1	GDR-1	Primary	Intermediate	02/23/2016		ND < 20	3.8	93	42	ND < 1.0	-64.1	-8.48	150	36	ND < 0.5	17	ND < 0.02
GDR-1	GDR-1	Primary	Intermediate	6/2/2016		ND < 4.0	6.3	81	43	ND < 1.0	-62.4	-8.04	130 ⁸	33	ND < 0.5	15	0.0022 ⁵
GDR-1	GDR-1	Primary	Intermediate	7/15/2016		ND < 4.0	6.3	85	43	ND < 1.0	-60.7	-8.06	150	39	ND < 0.5	18	ND < 0.02
GDR-1	GDR-1	Primary	Intermediate	11/10/2016		0.75 J	6.1	98	47	---	-60.3	-7.74	---	39	ND < 1.0	18	ND < 0.02
MP-02-095	MP-02-095	Primary	Upper Int.	02/22/2016		ND < 4.0	12	62	37	---	---	---	---	31	0.22 J /	18	0.02
MP-02-095	MP-02-095	Primary	Upper Int.	5/20/2016		ND < 4.0	7.2	---	---	---	---	---	---	---	---	---	---
MP-02-095	MP-02-095	Primary	Intermediate-Upper	7/27/2016		1.5 J /	13	64	34	---	---	---	---	31	ND < 0.5	18	0.014 J /
MP-02-095	MP-02-095	Primary	Intermediate-Upper	11/16/2016		1.0 J /	12	---	---	---	---	---	---	---	---	---	---
MP-02-150	MP-02-150	Primary	Middle Int.	02/22/2016		ND < 4.0	4.2	88	39	---	---	---	---	38	0.21 J /	17	0.02 J /
MP-02-150	MP-02-150	Primary	Middle Int.	5/20/2016		ND < 4.0	2.2	---	---	---	---	---	---	---	---	---	---
MP-02-150	MP-02-150	Primary	Intermediate-Middle	7/27/2016		ND < 4.0	7.2	80	39	---	---	---	---	37	7.1	17	0.33
MP-02-150	MP-02-150	Primary	Intermediate-Middle	11/16/2016		ND < 4.0	5.7	---	---	---	---	---	---	---	---	---	---
MP-05-090	MP-05-090	Primary	Upper Int.	02/23/2016		ND < 4.0	7.2	77	40	---	---	---	---	38	1.5	18	0.11
MP-05-090	MP-05-090	Primary	Upper Int.	5/25/2016		ND < 4.0	2.2	---	---	---	---	---	---	---	---	---	---
MP-05-090	MP-05-090	Primary	Intermediate-Upper	7/26/2016		1.2 J /	11	61	39	---	---	---	---	34	14	20	0.44
MP-05-090	MP-05-090	Primary	Intermediate-Upper	11/17/2016		ND < 4.0	12	---	---	---	---	---	---	---	---	---	---
MP-05-090	MP-05-090	Duplicate	Intermediate-Upper	11/17/2016		ND < 4.0	---	---	---	---	---	---	---	---	---	---	---
MP-05-136	MP-05-136	Primary	Middle Int.	02/23/2016		ND < 4.0	5.8	60	35	---	---	---	---	42	0.39 J /	15	0.05
MP-05-136	MP-05-136	Primary	Middle Int.	5/25/2016		0.90 J /	9.8	---	---	---	---	---	---	---	---	---	---
MP-05-136	MP-05-136	Duplicate	Middle Int.	5/25/2016		0.78 J /	9.8	---	---	---	---	---	---	---	---	---	---
MP-05-136	MP-05-136	Primary	Intermediate-Middle	7/27/2016		1.3 J /	11	59	37	---	---	---	---	32	1.1	18	0.075
MP-05-136	MP-05-136	Primary	Intermediate-Middle	11/17/2016		0.93 J /	7.7	---	---	---	---	---	---	---	---	---	---
MW-75-120	MW-75-120	Primary	Middle Int.	1/20/2016		2.0 J /	23	---	---	---	---	---	---	---	---	---	---
MW-75-120	MW-75-120	Primary	Middle Int.	5/11/2016		1.8 J /	24	---	---	---	---	---	---	---	---	---	---
MW-75-120	MW-75-120	Primary	Intermediate-Middle	7/18/2016		1.5 J /	27	---	---	---	---	---	---	---	---	---	---
MW-75-120	MW-75-120	Primary	Intermediate-Middle	11/15/2016		2.1 J /	24	---	---	---	---	---	---	---	---	---	---
Lower Deep Aquifer Zone																	
GDR-1	GDR-1-418	Primary	Lower Deep	01/29/2016		4.2 ⁴	19	59	39	1.9	-52.2	-7.18	99	42	1.5	19	0.07 B /
MW-26-415	MW-26-415	Primary	Lower Deep	02/26/2016		2.1 J /	---	---	---	---	---	---	---	---	---	---	---
MW-26-415	MW-26-415	Primary	Lower Deep	5/31/2016		2.8 J /	---	---	---	---	---	---	---	---	---	---	---
MW-26-415	MW-26-415	Duplicate	Lower Deep	5/31/2016		2.8 J /	---	---	---	---	---	---	---	---	---	---	---
MW-26-415	MW-26-415	Primary	Deep-Lower	7/28/2016		1.3 J /	---	---	---	---	---	---	---	---	---	---	---
MW-26-415	MW-26-415	Duplicate	Deep-Lower	7/28/2016		1.4 J /	---	---	---	---	---	---	---	---	---	---	---
MW-26-415	MW-26-415	Primary	Deep-Lower	11/18/2016		2.2 J /	---	---	---	---	---	---	---	---	---	---	---
MW-26-415	MW-26-415	Duplicate	Deep-Lower	11/18/2016		2.5 J /	---	---	---	---	---	---	---	---	---	---	---

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TABLE 11

ANALYTICAL RESULTS – GRADIENT DRIVEN REMEDIATION PERFORMANCE MONITORING PROGRAM
 2016 Annual Cleanup Progress Status Report and Second Semiannual Groundwater Monitoring Report

Olin Site
 Morgan Hill, California

Well ID	Sample Name	Sample Type	Aquifer	Sample Date ¹	Potassium EPA200.7 mg/L	Sodium EPA200.7 mg/L	Bicarbonate Alkalinity mg/L	Carbonate Alkalinity mg/L	Hydroxide Alkalinity mg/L	Total Alkalinity mg/L	Total Dissolved Solids mg/L	Fluoride mg/L	Orthophosphate as P mg/L
Test Method													
Units													
Intermediate Aquifer													
GDR-1	GDR-1-418 ³	Primary	Intermediate	1/19/2016	1.8	27	110	ND < 5.0	ND < 5.0	110	340	0.15	0.026
GDR-1	GDR-1	Primary	Intermediate	02/23/2016	1.0	42	100 / J	ND < 5.0 / UJ	ND < 5.0 / UJ	100 / J	360	0.12	0.01 J /
GDR-1	GDR-1	Primary	Intermediate	6/2/2016	0.93 J /	39	110	ND < 5.0	ND < 5.0	110	350	0.10	0.01
GDR-1	GDR-1	Primary	Intermediate	7/15/2016	1.4	45	120 B /	ND < 5.0	ND < 5.0	120 B /	330	0.12	ND < 0.02
GDR-1	GDR-1	Primary	Intermediate	11/10/2016	1.2	43	120	ND < 5.0	ND < 5.0	120	350	0.095 J /	0.011 J /
MP-02-095	MP-02-095	Primary	Upper Int.	02/22/2016	1.1	33	110 / J	ND < 5.0 / UJ	ND < 5.0 / UJ	110 / J	320	0.08 J /	0.01 J /
MP-02-095	MP-02-095	Primary	Upper Int.	5/20/2016	--	--	--	--	--	--	--	--	--
MP-02-095	MP-02-095	Primary	Intermediate-Upper	7/27/2016	1.0	37	150 B /	ND < 5.0	ND < 5.0	150 B /	340	0.085 J /	0.013 J /
MP-02-095	MP-02-095	Primary	Intermediate-Upper	11/16/2016	--	--	--	--	--	--	--	--	--
MP-02-150	MP-02-150	Primary	Middle Int.	02/22/2016	1.4	34	100 / J	ND < 5.0 / UJ	ND < 5.0 / UJ	100 / J	350	0.15	0.02 J /
MP-02-150	MP-02-150	Primary	Middle Int.	5/20/2016	--	--	--	--	--	--	--	--	--
MP-02-150	MP-02-150	Primary	Intermediate-Middle	7/27/2016	2.5	35	120 B /	ND < 5.0	ND < 5.0	120 B /	340	0.11	0.014 J /
MP-02-150	MP-02-150	Primary	Intermediate-Middle	11/16/2016	--	--	--	--	--	--	--	--	--
MP-05-090	MP-05-090	Primary	Upper Int.	02/23/2016	1.5	35	120	ND < 5.0	ND < 5.0	120	380	0.12	0.02
MP-05-090	MP-05-090	Primary	Upper Int.	5/25/2016	--	--	--	--	--	--	--	--	--
MP-05-090	MP-05-090	Primary	Intermediate-Upper	7/26/2016	3.3	32	130 B /	ND < 5.0	ND < 5.0	130 B /	340	0.11	0.022
MP-05-090	MP-05-090	Primary	Intermediate-Upper	11/17/2016	--	--	--	--	--	--	--	--	--
MP-05-090	MP-05-090	Duplicate	Intermediate-Upper	11/17/2016	--	--	--	--	--	--	--	--	--
MP-05-136	MP-05-136	Primary	Middle Int.	02/23/2016	1.8	22	120	ND < 5.0	ND < 5.0	120	310	0.12	0.02 J /
MP-05-136	MP-05-136	Primary	Middle Int.	5/25/2016	--	--	--	--	--	--	--	--	--
MP-05-136	MP-05-136	Duplicate	Middle Int.	5/25/2016	--	--	--	--	--	--	--	--	--
MP-05-136	MP-05-136	Primary	Intermediate-Middle	7/27/2016	1.6	30	130 B /	ND < 5.0	ND < 5.0	130 B /	370	0.13	0.03
MP-05-136	MP-05-136	Primary	Intermediate-Middle	11/17/2016	--	--	--	--	--	--	--	--	--
MP-05-136	MP-05-136	Primary	Intermediate-Middle	11/17/2016	--	--	--	--	--	--	--	--	--
MW-75-120	MW-75-120	Primary	Middle Int.	1/20/2016	--	--	--	--	--	--	--	--	--
MW-75-120	MW-75-120	Primary	Middle Int.	5/11/2016	--	--	--	--	--	--	--	--	--
MW-75-120	MW-75-120	Primary	Middle Int.	7/18/2016	--	--	--	--	--	--	--	--	--
MW-75-120	MW-75-120	Primary	Intermediate-Middle	7/18/2016	--	--	--	--	--	--	--	--	--
MW-75-120	MW-75-120	Primary	Intermediate-Middle	11/15/2016	--	--	--	--	--	--	--	--	--
Lower Deep Aquifer Zone													
GDR-1	GDR-1-418	Primary	Lower Deep	01/29/2016	1.7	39	160	ND < 5.0	ND < 5.0	160	350	0.15	0.04
MW-26-415	MW-26-415	Primary	Lower Deep	02/26/2016	--	--	--	--	--	--	--	--	--
MW-26-415	MW-26-415	Primary	Lower Deep	5/31/2016	--	--	--	--	--	--	--	--	--
MW-26-415	MW-26-415	Duplicate	Lower Deep	5/31/2016	--	--	--	--	--	--	--	--	--
MW-26-415	MW-26-415	Primary	Deep-Lower	7/28/2016	--	--	--	--	--	--	--	--	--
MW-26-415	MW-26-415	Duplicate	Deep-Lower	7/28/2016	--	--	--	--	--	--	--	--	--
MW-26-415	MW-26-415	Primary	Deep-Lower	11/18/2016	--	--	--	--	--	--	--	--	--
MW-26-415	MW-26-415	Duplicate	Deep-Lower	11/18/2016	--	--	--	--	--	--	--	--	--

TABLE 11

ANALYTICAL RESULTS – GRADIENT DRIVEN REMEDIATION PERFORMANCE MONITORING PROGRAM
 2016 Annual Cleanup Progress Status Report and Second Semiannual Groundwater Monitoring Report

Olin Site
 Morgan Hill, California

Well ID	Sample Name	Sample Type	Aquifer	Sample Date	Test Method	Units	Perchlorate	Nitrate as NO ₃	Chloride	Sulfate as SO ₄	Total Organic Carbon	Deuterium	Oxygen-18	Dissolved Barium	Calcium	Iron	Magnesium	Manganese
							EPA314.0	EPA300.0	EPA300.0	EPA300.0	SM5310B	CF-IRMS ‰ relative to VSMOW	CF-IRMS ‰ relative to VSMOW	EPA200.8	EPA200.7	EPA200.7	EPA200.7	EPA200.7
							µg/L ²	mg/L	mg/L	mg/L	mg/L	‰	‰	µg/L	mg/L	mg/L	mg/L	mg/L
MW-29-428	MW-29-428	Primary	Lower Deep	02/26/2016		3.7 J /												
MW-29-428	MW-29-428	Primary	Lower Deep	5/31/2016		3.0 J /												
MW-29-428	MW-29-428	Primary	Deep-Lower	7/28/2016		3.0 J /												
MW-29-428	MW-29-428	Primary	Deep-Lower	11/18/2016		4.0												
MW-52-403	MW-52-403	Primary	Lower Deep	02/26/2016		29		31	29	32					42	2.3	17	0.05
MW-52-403	MW-52-403	Primary	Lower Deep	5/31/2016		30												
MW-52-403	MW-52-403	Primary	Deep-Lower	7/22/2016		25		34	30	32		-44.8	-6.47	81	39	0.85	16	0.019 J /
MW-52-403	MW-52-403	Primary	Deep-Lower	12/6/2016		25												
MW-52-403	MW-52-403	Duplicate	Deep-Lower	12/6/2016		25												
MW-55-410	MW-55-410	Primary	Lower Deep	02/26/2016		2.4 J /		12	21	47					50	ND < 0.5	20	0.02 J /
MW-55-410	MW-55-410	Primary	Lower Deep	5/31/2016		2.5 J /												
MW-55-410	MW-55-410	Primary	Deep-Lower	7/22/2016		2.1 J /		14	22	49		-44.5	-6.43	68	47	ND < 0.5	20	0.015 J /
MW-55-410	MW-55-410	Primary	Deep-Lower	11/18/2016		ND < 4.0												
MW-73-395	MW-73-395	Primary	Lower Deep	02/26/2016		36												
MW-73-395	MW-73-395-DUP	Duplicate	Lower Deep	02/26/2016		36												
MW-73-395	MW-73-395	Primary	Deep-Lower	7/26/2016		36												
MW-73-395	MW-73-395	Primary	Deep-Lower	7/26/2016		35												
MW-06-416	MW-06-416	Primary	Lower Deep	02/23/2016		5.0		20	32	32	1.4	-43.2	-6.28	84	42	0.53	16	0.14
MW-06-416	MW-06-416-DUP	Duplicate	Lower Deep	02/23/2016		4.1		20	32	31	1.3	-42.6	-6.31	90	39	0.36 J /	15	0.14
MW-06-416	MW-06-416	Primary	Lower Deep	5/24/2016		3.8 J /		18	28	34	1.5	-41.4	-6.20	100	38	6.0	16	0.22
MW-06-416	MW-06-416	Primary	Deep-Lower	7/15/2016		4.5		25	36	35	ND < 1.0	-43.9	-6.57	86	49	0.5 B / U	19	0.071
MW-06-416	MW-06-416	Primary	Deep-Lower	11/10/2016		2.2 J /		13	80	41		-53.2	-7.17		49	ND < 1.0	20	0.019 J /
MW-06-445	MW-06-445	Primary	Lower Deep	02/23/2016		4.1		18	28	26	2.0	-39.6	-6.01	64	32	0.79	13	0.07
MW-06-445	MW-06-445	Primary	Lower Deep	5/24/2016		6.1		23	48	39	0.73 J /	-45.4	-6.62	120	43	0.96	18	0.06
MW-06-445	MW-06-445	Primary	Deep-Lower	7/15/2016		4.2		24	55	38	ND < 1.0	-48.1	-6.87	100	52	1.7 B /	21	0.063
MW-06-445	MW-06-445	Primary	Deep-Lower	11/10/2016		2.8 J /		10	27	26		-52.4	-7.59		39	1.0	14	0.48
PZ-02-415	PZ-02-415	Primary	Lower Deep	02/25/2016		4.7		30	27	36	ND < 1.0	-43.5	-6.25	84	46	4.9	21	0.11
PZ-02-415	PZ-02-415	Primary	Lower Deep	5/25/2016		5.4		31	30	37	ND < 1.0	-41.2	-6.15	88	44	1.3	19	0.03
PZ-02-415	PZ-02-415	Primary	Deep-Lower	7/21/2016		4.9		34	30	36	ND < 1.0	-44.6	-6.41	84	47	2.5	21	0.057
PZ-02-415	PZ-02-415	Duplicate	Deep-Lower	7/21/2016		4.7		34	30	37	ND < 1.0	-42.9	-6.27	81	49	2.6	20	0.061
PZ-02-415	PZ-02-415	Primary	Deep-Lower	11/16/2016		5.6		32	32	36		-42.6	-6.44		42	ND < 1.0	17	0.017 J /
PZ-03-427	PZ-03-427	Primary	Lower Deep	02/25/2016		5.2												
PZ-03-427	PZ-03-427	Primary	Lower Deep	5/20/2016		5.7												
PZ-03-427	PZ-03-427	Primary	Deep-Lower	7/26/2016		4.9												
PZ-03-427	PZ-03-427	Primary	Deep-Lower	11/16/2016		5.9												
PZ-05-390	PZ-05-390	Primary	Lower Deep	02/25/2016		5.9		21	40	36	ND < 1.0	-45.6	-6.62	91	44	1.5	19	0.04
PZ-05-390	PZ-05-390	Primary	Lower Deep	5/25/2016		5.7		20	44	37	ND < 1.0	-45.4	-6.40	89	43	ND < 0.5	18	0.0042 J /
PZ-05-390	PZ-05-390	Primary	Deep-Lower	7/25/2016		4.6		23	44	36	ND < 1.0	-46.5	-6.71	84	45	1.7	19	0.046
PZ-05-390	PZ-05-390	Primary	Deep-Lower	11/17/2016		5.1		22	46	38		-46.2	-6.75		44	0.42 J /	18	0.092

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Amec Foster Wheeler
 Page 3 of 5

TABLE 11

ANALYTICAL RESULTS – GRADIENT DRIVEN REMEDIATION PERFORMANCE MONITORING PROGRAM
 2016 Annual Cleanup Progress Status Report and Second Semiannual Groundwater Monitoring Report

Olin Site
 Morgan Hill, California

Well ID	Sample Name	Sample Type	Aquifer	Sample Date	Test Method	Potassium	Sodium	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Total Alkalinity	Total Dissolved Solids	Fluoride	Orthophosphate as P
						mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-29-428	MW-29-428	Primary	Lower Deep	02/26/2016	Units	--	--	--	--	--	--	--	--	--
MW-29-428	MW-29-428	Primary	Lower Deep	5/31/2016		--	--	--	--	--	--	--	--	--
MW-29-428	MW-29-428	Primary	Deep-Lower	7/28/2016		--	--	--	--	--	--	--	--	--
MW-29-428	MW-29-428	Primary	Deep-Lower	11/18/2016		--	--	--	--	--	--	--	--	--
MW-52-403	MW-52-403	Primary	Lower Deep	02/26/2016		1.8	30	160	ND < 5.0	ND < 5.0	160	310	0.15	0.03
MW-52-403	MW-52-403	Primary	Lower Deep	5/31/2016		--	--	--	--	--	--	--	--	--
MW-52-403	MW-52-403	Primary	Deep-Lower	7/22/2016		1.4	29	170	ND < 5.0	ND < 5.0	170	310	0.16	0.028 H / J
MW-52-403	MW-52-403	Primary	Deep-Lower	12/6/2016		--	--	--	--	--	--	--	--	--
MW-52-403	MW-52-403	Duplicate	Deep-Lower	12/6/2016		--	--	--	--	--	--	--	--	--
MW-55-410	MW-55-410	Primary	Lower Deep	02/26/2016		1.7	35	220	ND < 5.0	ND < 5.0	220	350	0.15	0.02
MW-55-410	MW-55-410	Primary	Lower Deep	5/31/2016		--	--	--	--	--	--	--	--	--
MW-55-410	MW-55-410	Primary	Deep-Lower	7/22/2016		1.6	34	230	ND < 5.0	ND < 5.0	230	340	0.14	0.023 H / J
MW-55-410	MW-55-410	Primary	Deep-Lower	11/18/2016		--	--	--	--	--	--	--	--	--
MW-73-395	MW-73-395	Primary	Lower Deep	02/26/2016		--	--	--	--	--	--	--	--	--
MW-73-395	MW-73-395-DUP	Duplicate	Lower Deep	02/26/2016		--	--	--	--	--	--	--	--	--
MW-73-395	MW-73-395	Primary	Deep-Lower	7/28/2016		--	--	--	--	--	--	--	--	--
MW-73-395	MW-73-395-DUP	Duplicate	Deep-Lower	7/28/2016		--	--	--	--	--	--	--	--	--
PMW-06-416	PMW-06-416	Primary	Lower Deep	02/23/2016		1.7	25	160	ND < 5.0	ND < 5.0	160	320	0.14	0.03
PMW-06-416	PMW-06-416-DUP	Duplicate	Lower Deep	02/23/2016		1.6	24	160	ND < 5.0	ND < 5.0	160	320	0.13	0.03
PMW-06-416	PMW-06-416	Primary	Lower Deep	5/24/2016		2.7 B / J	31	170	ND < 5.0	ND < 5.0	170	320	0.18	0.03 J /
PMW-06-416	PMW-06-416	Primary	Deep-Lower	7/15/2016		2.0	33	180 B /	ND < 5.0	ND < 5.0	180 B /	320	0.17	0.025
PMW-06-416	PMW-06-416	Primary	Deep-Lower	11/10/2016		1.8	29	150	ND < 5.0	ND < 5.0	150	390	0.13	0.027
PMW-06-445	PMW-06-445	Primary	Lower Deep	02/23/2016		1.6	20	130	ND < 5.0	ND < 5.0	130	290	0.13	0.03
PMW-06-445	PMW-06-445	Primary	Lower Deep	5/24/2016		1.9 B / J	33	170	ND < 5.0	ND < 5.0	170	360	0.16	0.03 J /
PMW-06-445	PMW-06-445	Primary	Deep-Lower	7/15/2016		2.2	33	170 B /	ND < 5.0	ND < 5.0	170 B /	340	0.14	0.024
PMW-06-445	PMW-06-445	Primary	Deep-Lower	11/10/2016		3.0	22	150	ND < 5.0	ND < 5.0	150	280	0.11	0.033
PZ-02-415	PZ-02-415	Primary	Lower Deep	02/25/2016		2.1	31	190	ND < 5.0	ND < 5.0	190	330	0.14	0.03
PZ-02-415	PZ-02-415	Primary	Lower Deep	5/25/2016		1.9 B / J	31	200	ND < 5.0	ND < 5.0	200	350	0.17	0.03 J /
PZ-02-415	PZ-02-415	Primary	Deep-Lower	7/21/2016		2.3	31	200 B /	ND < 5.0	ND < 5.0	200 B /	340	0.16	0.026
PZ-02-415	PZ-02-415	Duplicate	Deep-Lower	7/21/2016		2.2	32	200 B /	ND < 5.0	ND < 5.0	200 B /	340	0.15	0.025
PZ-02-415	PZ-02-415	Primary	Deep-Lower	11/16/2016		1.5	27	200	ND < 5.0	ND < 5.0	200	370	0.13	0.027
PZ-03-427	PZ-03-427	Primary	Lower Deep	02/25/2016		--	--	--	--	--	--	--	--	--
PZ-03-427	PZ-03-427	Primary	Lower Deep	5/20/2016		--	--	--	--	--	--	--	--	--
PZ-03-427	PZ-03-427	Primary	Deep-Lower	7/28/2016		--	--	--	--	--	--	--	--	--
PZ-03-427	PZ-03-427	Primary	Deep-Lower	11/16/2016		--	--	--	--	--	--	--	--	--
PZ-05-390	PZ-05-390	Primary	Lower Deep	02/25/2016		2.0	30	180	ND < 5.0	ND < 5.0	180	330	0.13	0.04
PZ-05-390	PZ-05-390	Primary	Lower Deep	5/25/2016		1.8 B / J	31	190	ND < 5.0	ND < 5.0	190	340	0.17	0.04 J /
PZ-05-390	PZ-05-390	Primary	Deep-Lower	7/25/2016		1.8	31	190 B /	ND < 5.0	ND < 5.0	190 B /	360	0.13	0.029
PZ-05-390	PZ-05-390	Primary	Deep-Lower	11/17/2016		1.8	30	180	ND < 5.0	ND < 5.0	180	320	0.12	0.033

TABLE 11

ANALYTICAL RESULTS – GRADIENT DRIVEN REMEDIATION PERFORMANCE MONITORING PROGRAM
 2016 Annual Cleanup Progress Status Report and Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Notes

1. All wells designated for semiannual or quarterly sampling in the GDR MRP were sampled during 3Q16.
2. **Bold face type** denotes concentration that exceeds the perchlorate Maximum Contaminant Level (6 µg/L).

Abbreviations

-- = not applicable
 µg/L = micrograms per liter; equivalent to parts per billion
 mg/L = milligrams per liter; equivalent to parts per million
 % relative to VSMOW = parts per thousand, measured relative to Vienna Standard Mean Ocean Water
 3Q16 = Third Quarter 2016 (July 1 through September 30)
 MDL = Method Detection Limit
 ND < = Not Detected at or above the laboratory reporting limit shown

Laboratory Qualifiers

B = Compound was detected in the blank and sample
 H = Sample was prepped or analyzed beyond the specified holding time.
 J = Perchlorate detected between the MDL and reporting limit. The reported value is estimated.

Validation Qualifiers

J = Concentration qualified as estimated in accordance with the Quality Assurance Project Plan.
 U = Result qualified as not detected because the analyte was observed in an associated laboratory or field blank.
 See Data Validation Report appendix of associated quarterly report for rationale of specific qualifiers.

TABLE 12

MONITORED ATTENUATION RATES AND MANN KENDALL ANALYSIS FOR PMP WELLS

2016 Annual Cleanup Progress Status Report and
 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Station Name	Aquifer	Priority Zone ¹	Homogeneous Data Begin Date ²	Attenuation Rates	Mann Kendall Concentration Trend ³	MRP Sampling Frequency
MW-17-025	Shallow	PZA	all	NA	NA	A
MW-61-047	Shallow	PZA	1/17/2012	-0.0001	PD	A
MW-61-056	A/B Aquitard	PZA	7/14/2011	-0.0008	D	A
MW-62-055	A/B Aquitard	PZA	7/27/2009	-0.0004	D	A
MW-63-057	A/B Aquitard	PZA	4/15/2009	-0.0001	D	A
MW-64-060	A/B Aquitard	PZA	8/18/2008	-0.0003	D	A
MP-17-110	Intermediate-Upper	PZA	7/22/2010	0.0002	NT	A
MW-60-082	Intermediate-Upper	PZA	10/7/2011	-0.0002	S	Q
MW-63-080	Intermediate-Upper	PZA	7/27/2010	-0.0001	D	SA
MW-64-082	Intermediate-Upper	PZA	1/26/2012	-0.0004	PD	SA
MW-65-087	Intermediate-Upper	PZA	10/21/2008	-0.0002	D	SA
MW-71-075	Intermediate-Upper	PZA	4/12/2013	-0.0003	D	SA
MW-53-195	Intermediate-Lower	PZA	4/13/2009	NA	NA	A
MP-16-229	Deep-Upper	PZA	10/7/2009	-0.0003	S	A
MW-60-220	Deep-Upper	PZA	7/29/2010	-0.0003	D	SA
MP-16-261	Deep-Middle	PZA	4/17/2009	-0.00002	NT	A
MW-16-328	Deep-Middle	PZA	4/13/2010	-0.0001	D	SA
MW-16-363	Deep-Middle	PZA	4/21/2008	0.00002	S	SA
MW-59-345	Deep-Middle	PZA	10/9/2008	-0.0002	D	A
MW-60-300	Deep-Middle	PZA	7/30/2010	-0.0002	D	A
MW-60-345	Deep-Middle	PZA	all	0.000007	NT	SA
PMW-05-305	Deep-Middle	PZA	7/16/2014	-0.002	D	Q
MW-59-386	Deep-Lower	PZA	2/15/2011	-0.0002	D	SA
MW-73-395	Deep-Lower	PZA	all	-0.00002	S	SA-GDR
PZ-05-390	Deep-Lower	PZA	11/1/2012	-0.0009	D	Q-GDR
MW-62-041	Shallow	PZB	7/14/2011	-0.0005	D	A
MW-64-027	Shallow	PZB	8/3/2010	0.0001	S	A
MP-04-088	Intermediate-Upper	PZB	10/6/2009	0.0001	I	SA
MP-21-089	Intermediate-Upper	PZB	8/5/2008	-0.0002	D	A
MW-72-070	Intermediate-Upper	PZB	4/9/2012	-0.0003	D	SA
PMW-05-090	Intermediate-Upper	PZB	all	-0.00009	S	Q
MW-65-114	Intermediate-Middle	PZB	7/23/2013	-0.0006	D	SA
MW-71-115	Intermediate-Middle	PZB	1/16/2014	-0.0003	PD	SA
09S03E35M006	Intermediate (Unk)	PZB	10/5/2011	-0.0004	S	A
MW-60-270	Deep-Upper	PZB	1/26/2012	0.0004	NT	SA
MP-21-295	Deep-Middle	PZB	10/19/2009	NA	NA	A
MW-21-332	Deep-Middle	PZB	10/20/2009	-0.0004	D	A
MW-53-264	Deep-Middle	PZB	7/31/2012	-0.0005	D	SA
MW-59-250	Deep-Middle	PZB	8/6/2012	-0.0002	D	SA
MW-66-245	Deep-Middle	PZB	8/12/2011	-0.0002	D	A
PZ-04-335	Deep-Middle	PZB	all	-0.00004	S	Q

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 12

MONITORED ATTENUATION RATES AND MANN KENDALL ANALYSIS FOR PMP WELLS

2016 Annual Cleanup Progress Status Report and
 2016 Second Semiannual Groundwater Monitoring Report
 Olin Site
 Morgan Hill, California

Station Name	Aquifer	Priority Zone ¹	Homogeneous Data Begin Date ²	Attenuation Rates	Mann Kendall Concentration Trend ³	MRP Sampling Frequency
MW-26-415	Deep-Lower	PZB	1/26/2015	NA	NA	Q-GDR
MW-54-400	Deep-Lower	PZB	8/4/2011	-0.0001	D	A
MW-63-035	Shallow	PZC	4/15/2009	-0.0002	D	A
MW-65-027	Shallow	PZC	all	-0.0002	D	A
MP-16-138	Intermediate-Middle	PZC	all	-0.00009	S	A
MW-72-145	Intermediate-Middle	PZC	1/14/2013	-0.0004	D	SA
MP-26-140	Intermediate	PZC	10/16/2008	NA	NA	A
MP-29-169	Intermediate	PZC	10/22/2008	NA	NA	A
MP-35-162	Intermediate	PZC	5/21/2008	NA	NA	A
MP-40-185	Intermediate	PZC	11/11/2008	NA	NA	A
MP-44-141	Intermediate	PZC	9/3/2008	NA	NA	A
10S03E11F010	Deep-Upper	PZC	1/12/2009	-0.0003	D	A
10S03E11H001	Deep-Upper-Middle	PZC	10/20/2008	-0.0004	PD	A
MP-51-213	Deep-Upper	PZC	10/30/2008	-0.00007	S	A
MW-56-220	Deep-Upper	PZC	all	-0.000003	S	A
PMW-04-225	Deep-Upper	PZC	1/30/2012	0.00008	I	SA
PMW-04-255	Deep-Upper	PZC	4/13/2010	-0.00007	D	SA
MP-21-278	Deep-Middle	PZC	4/14/2010	NA	NA	A
MP-29-292	Deep-Middle	PZC	all	-0.00005	PD	A
MP-51-272	Deep-Middle	PZC	8/25/2009	NA	NA	A
MW-54-260	Deep-Middle	PZC	all	0.00002	NT	A
MW-54-333	Deep-Middle	PZC	11/4/2008	-0.00004	S	A
MW-56-335	Deep-Middle	PZC	all	0.00001	NT	A
MW-73-315	Deep-Middle	PZC	2/6/2012	-0.0003	D	A
MW-56-433	Deep-Lower	PZC	all	0.0003	I	SA
MW-66-390	Deep-Lower	PZC	2/27/2012	0.00007	NT	SA
MP-04-038	Shallow	sub-PZC	all	-0.0001	S	A
MP-05-090	Intermediate-Upper	sub-PZC	all	NA	NA	Q-GDR
PMW-04-090	Intermediate-Upper	sub-PZC	all	NA	NA	SA
MW-65-153	Intermediate-Middle	sub-PZC	all	NA	NA	A
PMW-04-125	Intermediate-Middle	sub-PZC	all	NA	NA	A
MW-60-180	Intermediate-Lower	sub-PZC	10/7/2011	-0.00009	S	A
MP-51-164	Intermediate	sub-PZC	1/26/2010	NA	NA	A
PZ-02-315	Deep-Middle	sub-PZC	all	-0.00003	S	A
PZ-05-339	Deep-Middle	sub-PZC	7/26/2011	-0.0001	D	SA
PZ-02-415	Deep-Lower	sub-PZC	10/6/2009	0.00002	PI	Q-GDR
10S03E02H003	Intermediate	PZC	--	--	--	--
10S04E17N012	Intermediate	PZC	--	--	--	--
10S04E18J005	Intermediate	PZC	--	--	--	--
10S04E19K007	Intermediate	PZC	--	--	--	--
10S04E20E004	Intermediate	PZC	--	--	--	--

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 12

MONITORED ATTENUATION RATES AND MANN KENDALL ANALYSIS FOR PMP WELLS

2016 Annual Cleanup Progress Status Report and
2016 Second Semiannual Groundwater Monitoring Report
Olin Site
Morgan Hill, California

Station Name	Aquifer	Priority Zone ¹	Homogeneous Data Begin Date ²	Attenuation Rates	Mann Kendall Concentration Trend ³	MRP Sampling Frequency
10S04E20M006	Intermediate	PZC	--	--	--	--
10S04E29C001	Intermediate-Deep	PZC	--	--	--	--
10S03E01M002	Deep-Upper	PZC	--	--	--	--
11S04E04R011	Intermediate	sub-PZC	--	--	--	--
MW-53-078	Intermediate-Upper	sub-PZC	--	--	--	--
PZ-04-375	Deep-Middle	PZC	--	--	--	--

Notes

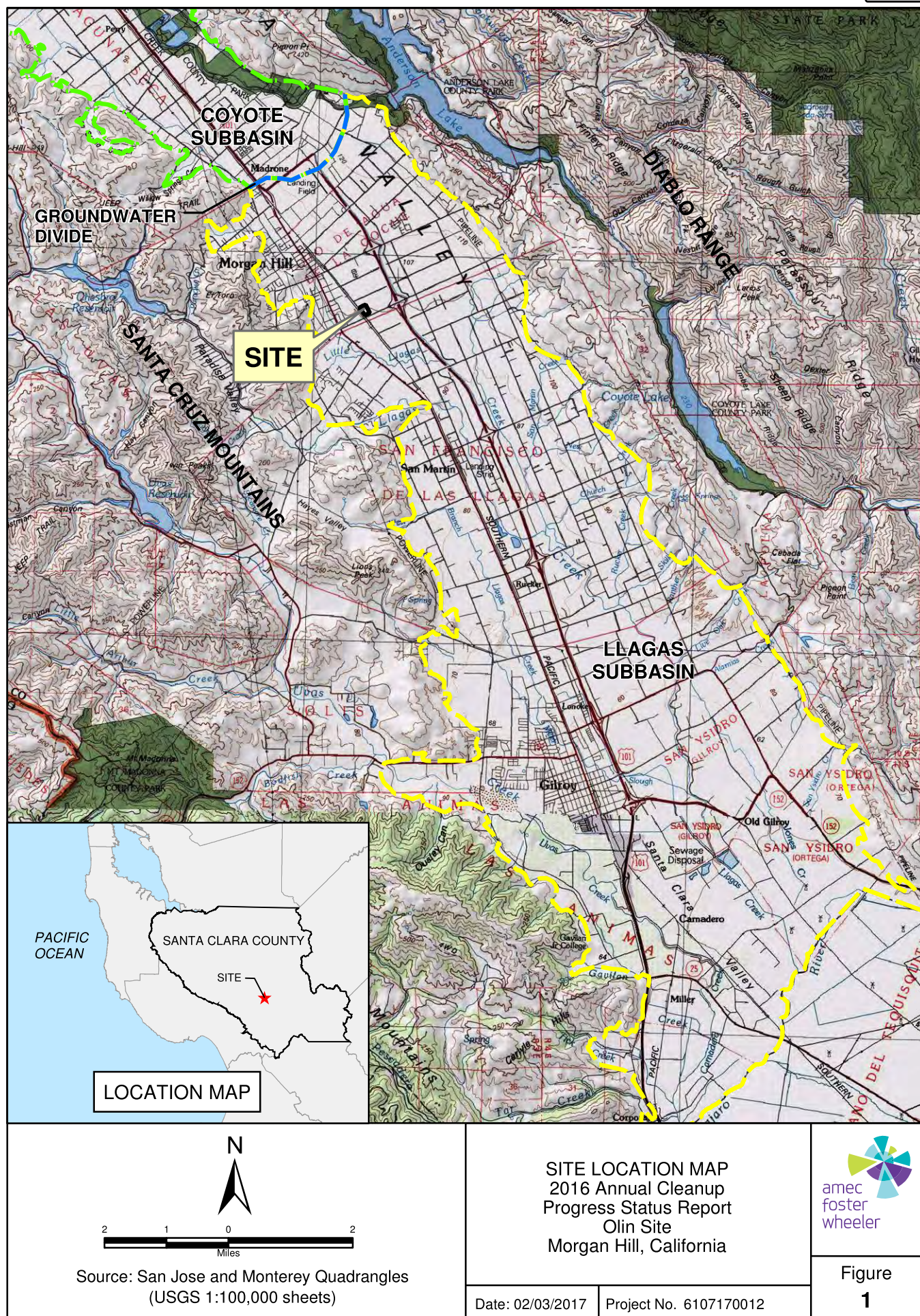
- The priority zone is based on the highest historical perchlorate concentration reported for each well during the baseline period, which ended after the third quarter of 2012.
PZA: Greater than 24.5 µg/L
PZB: 11.1 to 24.5 µg/L
PZC: 6.1 to 11 µg/L
sub-PZC: Non-detect to 6 µg/L
- Homogeneous data set for each well was determined using Pettitt's Test for Change Point Detection. Mann Kendall analysis was performed on data beginning with the sample date listed above, or for all samples, if no data break was determined. Where duplicate samples were collected, the greater concentration value is used.
- Mann Kendall trends are calculated using MAROS Software Version 2, 2003, AFCEE. Trends are calculated from the start of the homogeneous data set, as determined by Pettitt's test, where applicable, for wells where at least half of the detected perchlorate concentrations are greater than or equal to the practical quantitation limit.
- Time-series graphs for PMP wells sampled during 2016 are provided in Appendix D. Time-series graphs for PMP wells that are no longer sampled (as approved by the Water Board) are available in the 2015 CPSR.

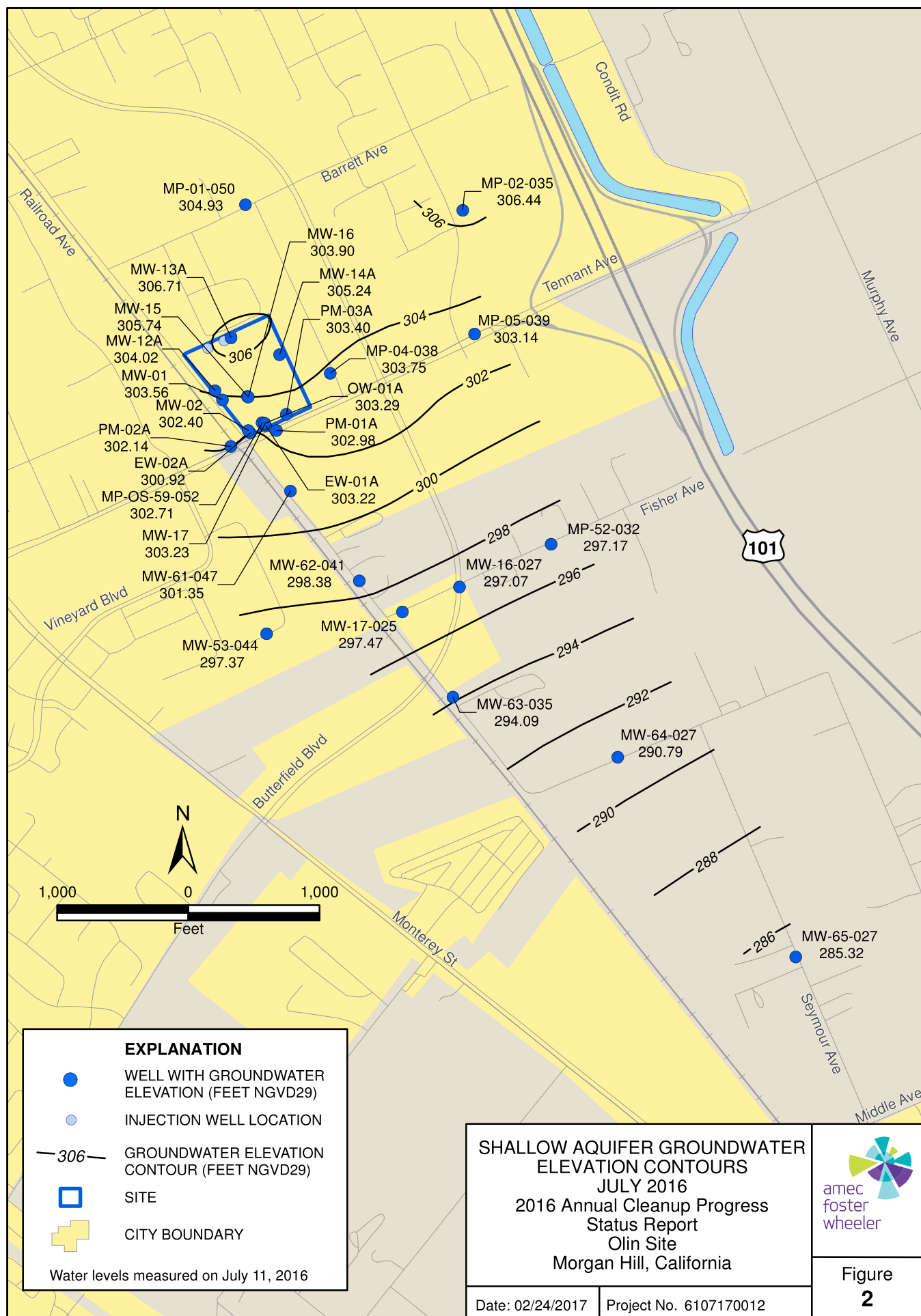
Abbreviations

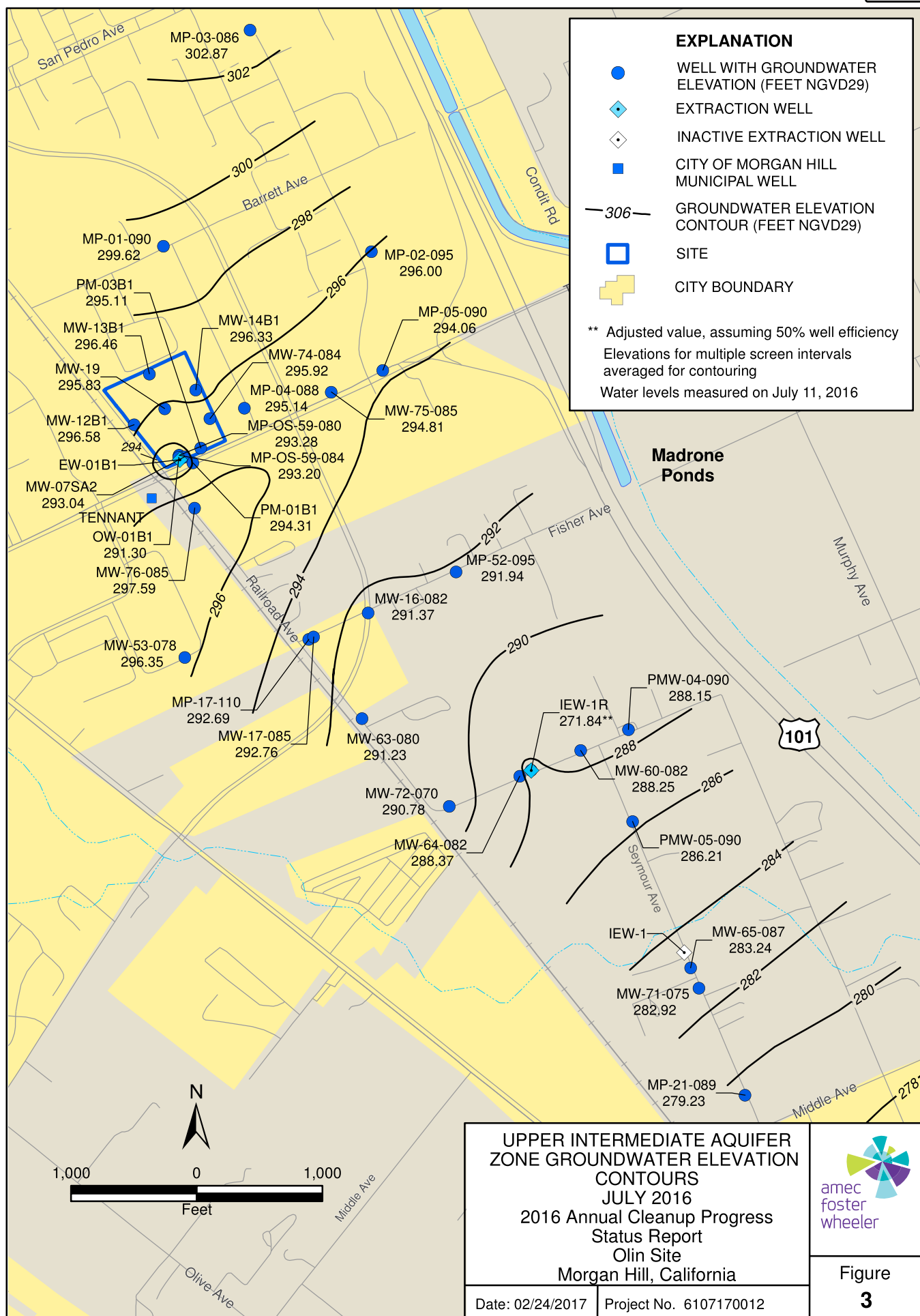
-- = well not sampled in accordance with the MRP or GDR MRP
2015 CPSR = 2015 Annual Cleanup Progress Status Report and
NA = not applicable; well did not meet criteria for calculation of Mann Kendall trend or attenuation factor
µg/L = micrograms per liter; equivalent to parts per billion
A = Annual
D = Decreasing
I = Increasing
GDR = Gradient Driven Remediation
GWTS = Operation, Maintenance, and Monitoring Plan for the On-site Groundwater Treatment System
MRP = Monitoring and Reporting Program
NT = No Trend
PD = Probably Decreasing
PI = Probably Increasing
PMP = Performance Monitoring Program
Q = Quarterly
S = Stable
SA = Semiannual



FIGURES







Appendix C

Trip Generation and Operations Analysis



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

To: Nick Pappani, Raney Planning & Management, Inc.
 From: Robert Del Rio, T.E., Luis Descanzo
 Date: February 15, 2018
 Subject: Zip Thru Car Wash Trip Generation and Operations Analysis

Hexagon Transportation Consultants, Inc. has completed a trip generation and operations analysis for the proposed Zip Thru Car Wash located at 16015 Caputo Drive in Morgan Hill, California. The project site is located at the northwest corner of the Caputo Drive and Tennant Avenue intersection and is currently vacant. The proposed project will consist of a single-tunnel automated car wash.

Scope of Study

The purpose of the trip generation and operations analysis is to evaluate the magnitude of traffic that would be added to the roadway system due to the proposed project and to determine whether a comprehensive traffic study is required for the proposed project. The analysis consists of an evaluation of trip generation and peak-hour intersection level of service analysis at the intersections of Butterfield Boulevard and Caputo Drive with Tennant Avenue. Traffic conditions were evaluated for the following scenarios:

Existing Conditions. Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from new peak-hour turning-movement counts conducted in January 2018.

Existing Plus Project Conditions. Existing plus project peak-hour traffic volumes were estimated by adding to the existing traffic volumes the additional traffic that would be generated by the proposed project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects of the proposed project on existing traffic conditions.

Trip Generation Estimates

Through empirical research, data have been collected that quantify the amount of traffic produced by common land uses. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. The trip generation rates contained in the Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, were used for this study. The vehicle trips generated by the proposed car wash were estimated using the ITE trip generation rates for automated car washes.

It is likely that a portion of the trips to the proposed car wash would be trips that would already be on the adjacent roadways (and are therefore already counted in the existing traffic) but would utilize the car wash while passing by, referred to as pass-by trips. Therefore, estimated project trips were reduced to account for the capture of pass-by trips. Justification for applying the pass-by-trip reduction is founded on the observation that such project trips are not actually generated by the car wash, but are already part of the ambient traffic levels and they stop at the site on their way to their final destination. Pass-by-trips are therefore excluded from the traffic projections (although pass-by traffic is accounted for at the site entrances).

Since there is no data available specific to pass-by-trip percentage associated with car wash, pass-by trip reductions for comparable land uses were investigated. For comparison, ITE data shows that trips generated by gasoline/service stations typically include from 20% to 60% of pass-by trips during the PM peak-hour, with an average of 42% of the total PM peak-hour trips consisting of pass-by trips. Trips generated by retail land uses typically consist of approximately 25% pass-by trips during the PM peak hour. Given that the proposed car wash would be located adjacent to a major roadway that links local streets to US 101, it is possible that a large number of pass-by trips would be captured by the proposed car wash. However, as a conservative approach, only a 25% pass-by reduction was applied to the estimated trips for the proposed car wash during the PM peak hour.

Based on the ITE trip generation rates and after applying the above pass-by trip reduction, it is estimated that the proposed single-tunnel car wash would generate 34 trips during the AM peak hour and 58 trips during the PM peak hour. The project trip generation estimates are presented in Table 1.

The above project trips were assigned to the roadway network based on traffic patterns in the study area and on the locations of complementary land uses. Figure 1 shows the project trip distribution and the assignment of project trips at the study intersection.

Project Conditions Intersection Level of Service Analysis

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of traffic. The weekday AM peak hour of traffic generally falls within the 7:00 to 9:00 AM period and the weekday PM peak hour is typically in the 4:00 to 6:00 PM period. It is during these times that the most congested traffic conditions occur on a typical weekday.

Signalized Intersection Analysis

The City of Morgan Hill level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersections level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of the following:

- **LOS F** for Downtown intersections and segments including at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Street;
- **LOS E** for the following intersections and freeway zones:
 - Main Avenue and Del Monte Avenue
 - Main Avenue and Depot Street
 - Dunne Avenue and Del Monte Avenue
 - Dunne Avenue and Monterey Avenue
 - Dunne Avenue and Church Street
 - Dunne Avenue and Depot Street
 - Cochrane Road and Monterey Road
 - Tennant Avenue and Monterey Road
 - Tennant Avenue and Butterfield Boulevard
 - Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane Road/DePaul Drive
 - Dunne Avenue Freeway Zone: from Walnut Grove Drive/East Dunne Avenue to Condit Road/East Dunne Avenue
 - Tennant Avenue Freeway Zone: from Butterfield Boulevard/Tennant Avenue to Condit Road/Tennant Avenue

Therefore, the signalized study intersection of Butterfield Boulevard/Tennant Avenue has a level of service standard of LOS E.

Unsignalized Intersection Analysis

The methodology used to determine the level of service for unsignalized intersections is also TRAFFIX and the 2000 HCM methodology for unsignalized intersection analysis. This method is applicable for both two-way and all-way stop-controlled intersections. For the analysis of stop-controlled intersections, the 2000 HCM methodology evaluates intersection operations on the basis of average control delay time for all vehicles on the stop-controlled approaches. For the purpose of reporting level of service for one- and two-way stop-controlled intersections, the delay and corresponding level of service for the stop-controlled minor street approach with the highest delay is reported. For all-way stop-controlled intersections, the reported average delay and corresponding level of service is the average for all approaches at the intersection. The City uses a minimum acceptable level of service standard of LOS D for unsignalized intersections, in accordance with its adopted threshold of significance in its Guidelines for Preparation of Transportation Impact Reports. Therefore, the unsignalized study intersection of Caputo Drive/Tennant Avenue has a level of service standard of LOS D.

Level of Service Results

The results of the intersection level of service analysis show that the intersection of Butterfield Boulevard and Tennant Avenue currently operates at an acceptable LOS D or better during the AM and PM peak hours, while the unsignalized intersection of Caputo Drive and Tennant Avenue currently operates at an acceptable LOS B during both peak hours.

The addition of project traffic would not result in the degradation of the study intersections' level of service nor would it increase the intersections' average delay by more than 1.0 second during the AM and PM peak hours (See Table 2). Therefore, the project would not have a significant impact at either of the study intersections.

Site Access and On-Site Circulation

A review of the project site plan was performed to determine if adequate site access and on-site circulation would be provided and to identify any access or circulation issues that should be improved. This review is based on the site plan prepared by K12 Architects, dated October 23, 2017, presented on Figure 2, and in accordance with generally accepted traffic engineering standards.

Site Access

The proposed project is located at the northwest corner of the Caputo Drive and Tennant Avenue intersection. Along the project frontage, Tennant Avenue consists of two travel lanes in each direction with a raised center median. The intersection of Caputo Drive and Tennant Avenue, located approximately 250 feet west of Butterfield Boulevard, consists of a T-intersection with right-in and out access only to/from Caputo Drive.

The project site is proposed to be served by two driveways: a full-access driveway along Caputo Drive, located approximately 160 feet north of Tennant Avenue, and a right-in and out access only driveway located along Tennant Avenue, approximately 230 feet west of Caputo Drive. Project traffic accessing the site from the east could do so from either driveway. Project traffic accessing the site from the west, however, would have to travel to the intersection of Butterfield Boulevard and Tennant Avenue and complete a u-turn. Likewise, project traffic exiting the site and heading westbound will be able to do so from both driveways, while outbound traffic heading eastbound would have exit the site and travel westbound to the first u-turn opportunity along Tennant Avenue. Two left-turn pockets/u-turn opportunities are located along Tennant Avenue, approximately 100 and 500 feet west of the project site.

The site plan shows the project driveways along Tennant Avenue and Caputo Drive to be approximately 36 feet and 26 feet wide, respectively. According to the City of Morgan Hill design standards, commercial driveways should be at least 16 feet wide and at most 36 feet wide. Therefore, the proposed driveway widths satisfy the City of Morgan Hill design standards.

On-Site Circulation

The site plan shows the car wash tunnel to be centrally located and oriented parallel to Tennant Avenue, with the tunnel entrance near the east project site boundary and the exit near the west project site boundary. Three automated pay stations (served by three lanes) would be located south of the car wash tunnel, located at the car wash tunnel entrance, while parking stalls equipped with vacuums would be located on the north side of the car wash tunnel. The proposed site layout allows for continuous traffic circulation. Vehicles entering the site via the Tennant Avenue driveway would immediately turn right into the pay station lanes, while vehicles entering the site via the Caputo Drive driveway would circulate around the car wash tunnel to enter the pay station lanes. Upon exiting the tunnel, users may exit the site via Tennant Avenue or park to access the vacuums and exit via Caputo Drive.

Overall, the site plan as proposed exhibits adequate site access and on-site circulation for vehicles. The City ultimately will determine the adequacy of the proposed driveways and internal on-site circulation design.

Queuing Analysis

A queuing analysis was conducted to estimate the expected queue length at the car wash pay stations. The proposed project consists of a single-tunnel car wash, therefore, Hexagon conducted queuing observations in February 2018 for a similar single-tunnel drive-through car wash located at First Street in Gilroy, California. Observations were conducted during the peak evening period from 4:00PM to 5:00PM on a typical weekday and from 11:30PM to 12:30PM on a typical Saturday. The queues at the driveway were recorded every minute and measured from the car wash tunnel pay station. The results of the survey were as follows:

Thursday, February 1, 2018: Maximum observed queue length = 5 vehicles
 Saturday, February 3, 2018: Maximum observed queue length = 10 vehicles

The maximum vehicle queue length of 10 vehicles occurred at 11:49 PM on Saturday. Based on the observed queue lengths and assuming a length of 20 feet per vehicle, the queuing storage space required to accommodate the maximum projected queue length for the proposed car wash would be 200 feet.

The proposed site plan shows the car wash design will incorporate one drive-through car wash tunnel with three pay station lanes located at the car wash entrance. Each pay station lane would be approximately 140 feet long, for a total of 420 feet of on-site queue storage space. Given the results of the queuing survey, the proposed on-site queue storage at the pay station lanes would be sufficient to meet the queuing demand for the proposed car wash.

The projected maximum queue for the proposed project also was estimated by using the estimated trip generation and assumed car wash service rates. The service rate is the average time required for each vehicle to provide payment and pass through the car wash tunnel. Field observations at the Gilroy car wash indicate a service rate of approximately three minutes. Unlike the proposed project, however, the observed car wash does not utilize automated payment through pay stations and had only one pay station. Therefore, the service rate for the proposed car wash can be expected to be less than three minutes.

Based on service rates of 1.5, 2, and 3 minutes per vehicle, the maximum total queue length at the pay stations is estimated to be approximately 380 feet long (see Table 3). Therefore, the 420 feet of proposed queue storage capacity would be sufficient to meet the queuing demand during the car wash's peak demand and would not result in vehicles extending out to Tennant Avenue.

However, reversing the site layout would ensure that vehicles would not spill out and disrupt traffic flow on Tennant Avenue. The reverse layout would consist of relocating the pay stations to the north side of the tunnel, near the western site boundary, and the vacuum parking stalls on the south side of the tunnel along Tennant Avenue. The Caputo Drive driveway would feed directly into the pay station lanes. Outbound traffic would continue to exit via Tennant Avenue or Caputo Drive. Tennant Avenue would be restricted to exit only with the reverse layout.

Traffic Study Requirements

The need for the preparation of a comprehensive traffic impact analysis for a particular development is based on its estimated trip generation and its effect on surrounding transportation facilities. The City of Morgan Hill requires the completion of a full traffic impact analysis if one of the following criteria are met:

1. Generates 100 or more net new peak hour trips; except that projects located in the 14-block Downtown Core area are exempt from this requirement. Net new peak hour trips are defined as the number of trips generated by the proposed development minus trips generated by existing development on the project site. (This threshold is consistent with the Valley Transportation Authority (VTA) policy.)
2. Adds 50 to 99 net new peak hour trips to the roadway system where nearby intersections are currently operating at or below the City's LOS standard, or projected to operate at or below the City's LOS standard with traffic added by approved developments; except that projects located in the 14-block Downtown Core area are exempt from this requirement. Adjacent or nearby intersections are defined as intersections to which the proposed development or proposed land use change adds 10 or more vehicle peak hour trips per lane.
3. Creates a transportation issue that City staff requests to have analyzed.

The proposed project will result in the addition of 34 AM peak hour trips and 58 PM peak hour trips to the roadway system. However, a review of intersection levels of service at the Butterfield Boulevard/Tennant Avenue and Caputo Drive/Tennant Avenue intersections indicates that both intersections are currently operating at acceptable conditions during each of the peak hours. The addition of project traffic would not result in the degradation of LOS or increase in average delay by more than 1.0 second at the intersections during each of the peak hours analyzed. The current and projected operating levels of the intersection with the proposed project traffic is better than the identified LOS standards for the intersections.

The evaluation of trip generation and intersection operations indicates that the proposed project will not meet the city's criteria to prepare a Traffic Impact Analysis. However, City staff ultimately determines the need for traffic studies for new development.



Figure 1
Site Location, Study Intersection, Project Trip Distribution and Net Project Trips Assignment

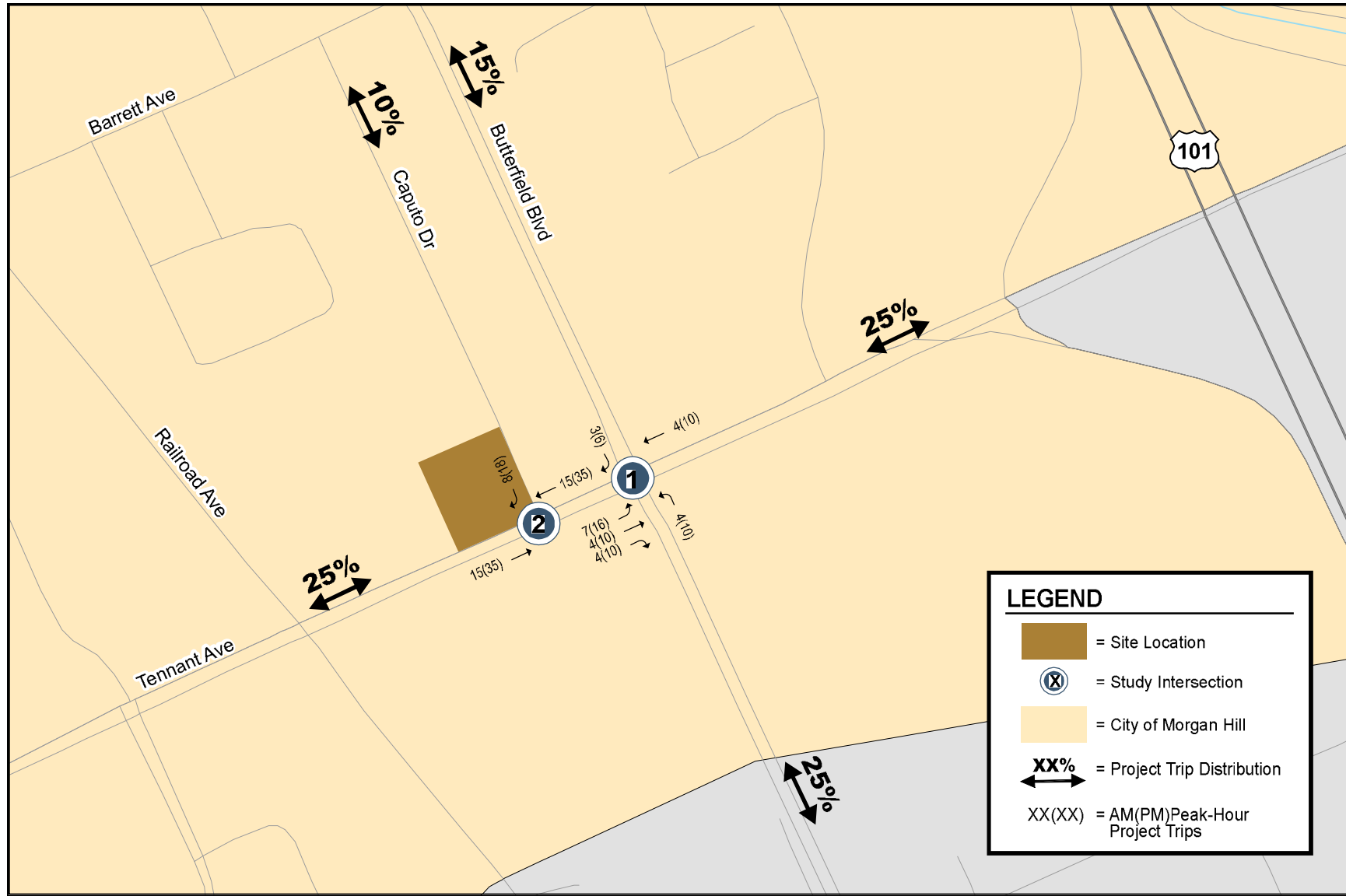


Figure 2
Site Plan, Internal Site Circulation, and Gross Peak-Hour Project Trips at Driveways

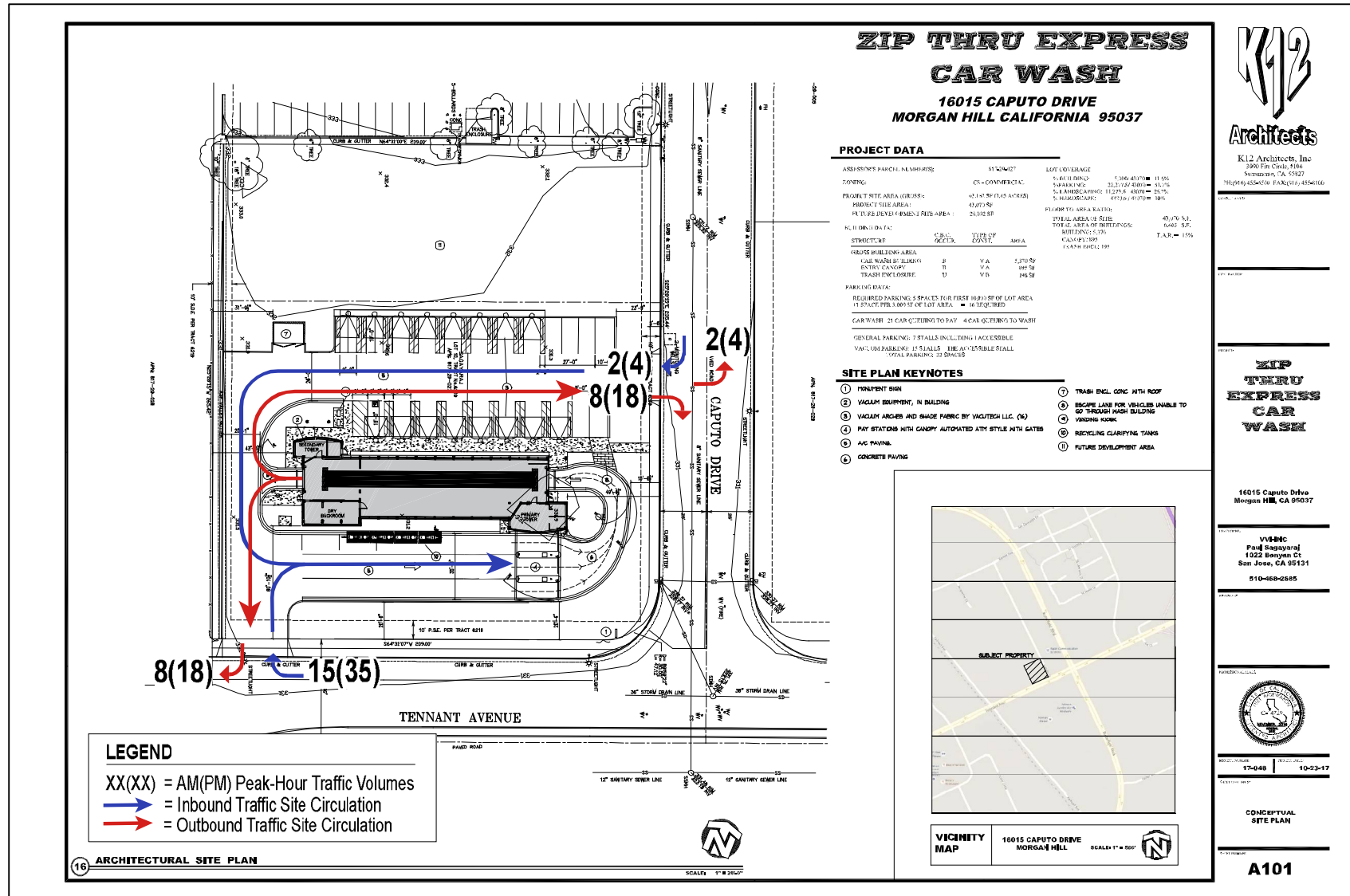


Table 1
Trip Generation Estimates

Land Uses	ITE Land Use	Size	AM Peak Hour						PM Peak Hour					
			Pk-Hr Rate	Split		Trip			Pk-Hr Rate	Split		Trip		
				In	Out	In	Out	Total		In	Out	In	Out	Total
Proposed Land Uses														
Self-service mechanical car wash ¹	# 948 - Automated Car Wash	1 Wash Stall (Tunnel)	34.44	50%	50%	17	17	34	77.50	50%	50%	39	39	78
<i>PM Pass-by Reduction (25%)²</i>												-10	-10	-20
Total Project Trips						17	17	34				29	29	58
Source of Proposed Trip Generation Rates: ITE <i>Trip Generation Manual</i>, 10th Edition 2017. ¹ The AM peak-hour trip generation rate for automated car wash is not available in the ITE <i>Trip Generation Manual</i>. Therefore, the AM peak-hour rate for automated car wash was derived by multiplying the ITE PM peak-hour trip rate by the ratio of AM to PM peak-hour trip rates for automatic car wash land use contained in the San Diego Association of Government (SANDAG) <i>Trip Generation Manual</i>, May 2003. ² A pass-by reduction of 25% is applied to the PM peak-hour project trip estimate. The ITE <i>Trip Generation Handbook</i> does not provide pass-by data for Car Wash land use. For reference, the <i>Trip Generation Handbook</i> provides a 42% average pass-by trip percentage for the Gasoline/Service Station land use.														

Table 2
Intersection Level of Service Summary

Study Number	Intersection	LOS Standard	Peak Hour	Existing		Existing Plus Project			
				Avg. Delay	LOS	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Butterfield Boulevard and Tennant Avenue	E	AM	23.9	C	24.0	C	0.2	0.006
			PM	37.3	D	37.4	D	0.0	0.002
2	Caputo Drive and Tennant Avenue	D	AM	0.1	B	0.2	B	0.1	0.014
			PM	0.2	B	0.3	B	0.1	0.023
Entries denoted in bold indicate conditions that exceed the applicable level of service standard.									

Table 3
PM Peak Hour Queue Analysis

Service Rate (min/veh)	Estimated Maximum Queue (veh) ¹	Required Storage (ft) ²	Adequate Storage Provided?
1.5	0	0	Yes
2	9	180	Yes
3	19	380	Yes
¹ Based on proposed trip generation, 39 inbound trips are expected during the PM peak hour. ² Average storage length is 20 feet per vehicle.			

APPENDICES

Traffic Counts



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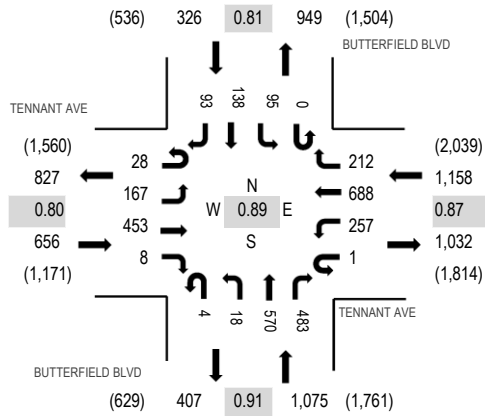
Location: 1 BUTTERFIELD BLVD & TENNANT AVE AM

Date and Start Time: Tuesday, January 23, 2018

Peak Hour: 07:15 AM - 08:15 AM

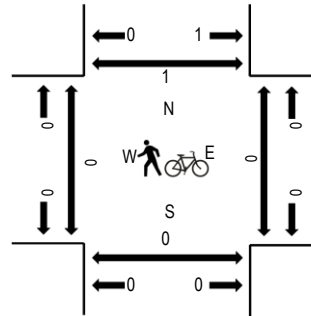
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	TENNANT AVE Eastbound				TENNANT AVE Westbound				BUTTERFIELD BLVD Northbound				BUTTERFIELD BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	4	30	77	1	0	22	101	59	2	3	136	95	0	13	12	4	559	3,011	0	0	0	0
7:15 AM	4	36	94	1	0	32	133	58	0	5	169	104	0	22	27	19	704	3,215	0	0	0	0
7:30 AM	2	58	145	1	0	71	140	65	1	0	145	127	0	24	36	30	845	3,117	0	0	0	0
7:45 AM	13	47	116	2	1	90	180	54	1	7	152	139	0	23	52	26	903	2,825	0	0	0	0
8:00 AM	9	26	98	4	0	64	235	35	2	6	104	113	0	26	23	18	763	2,496	0	0	0	0
8:15 AM	4	27	84	1	0	37	172	24	2	4	97	88	0	12	28	26	606		0	0	0	0
8:30 AM	7	19	106	4	0	34	165	26	0	4	55	78	0	17	19	19	553		0	0	1	0
8:45 AM	5	26	120	0	0	34	185	22	2	11	34	75	0	17	24	19	574		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	1	1	0	0	9	1	0	0	1	0	0	6	0	0	20
Lights	28	159	446	7	1	252	666	202	4	17	561	476	0	86	136	91	3,132
Mediums	0	7	6	0	0	5	13	9	0	1	8	7	0	3	2	2	63
Total	28	167	453	8	1	257	688	212	4	18	570	483	0	95	138	93	3,215



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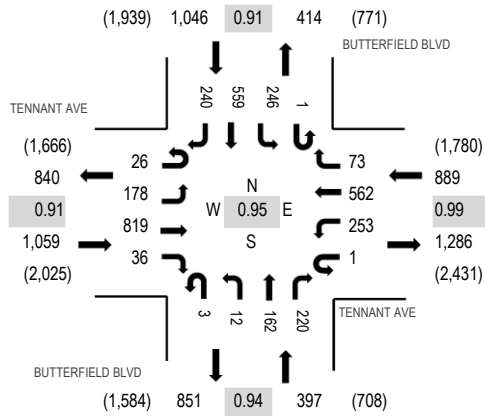
Location: 1 BUTTERFIELD BLVD & TENNANT AVE PM

Date and Start Time: Tuesday, January 23, 2018

Peak Hour: 04:30 PM - 05:30 PM

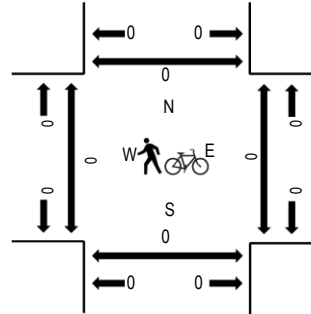
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	TENNANT AVE Eastbound				TENNANT AVE Westbound				BUTTERFIELD BLVD Northbound				BUTTERFIELD BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	13	37	184	10	0	54	155	19	0	3	43	31	0	71	121	44	785	3,147	0	0	1	0
4:15 PM	6	34	146	11	1	52	140	23	1	2	24	47	0	60	123	47	717	3,220	0	0	0	0
4:30 PM	6	43	208	11	0	46	154	19	1	4	34	61	0	76	143	64	870	3,391	0	0	0	0
4:45 PM	4	42	199	7	1	68	141	12	1	1	48	46	1	50	118	36	775	3,352	0	0	0	0
5:00 PM	6	45	201	8	0	77	127	18	0	4	42	60	0	55	147	68	858	3,305	0	0	0	0
5:15 PM	10	48	211	10	0	62	140	24	1	3	38	53	0	65	151	72	888		0	0	0	0
5:30 PM	3	51	240	6	0	59	152	12	1	4	21	56	0	48	119	59	831		0	0	1	0
5:45 PM	4	50	165	6	0	69	140	15	2	0	28	48	0	48	99	54	728		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	1	2	0	0	1	0	0	2	0	0	7
Lights	26	178	816	36	1	252	556	69	3	11	161	220	1	243	553	239	3,365
Mediums	0	0	2	0	0	1	5	2	0	1	0	0	0	1	6	1	19
Total	26	178	819	36	1	253	562	73	3	12	162	220	1	246	559	240	3,391



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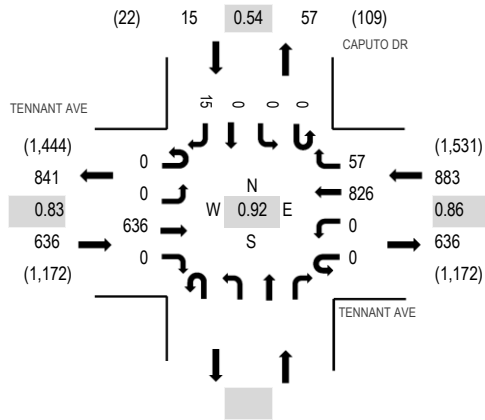
Location: 2 CAPUTO DR & TENNANT AVE AM

Date and Start Time: Tuesday, January 23, 2018

Peak Hour: 07:30 AM - 08:30 AM

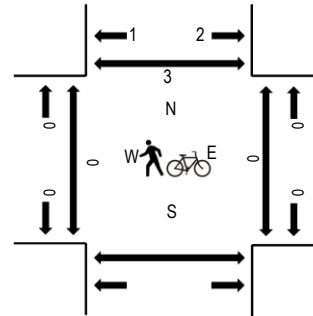
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	TENNANT AVE Eastbound				TENNANT AVE Westbound				Northbound				CAPUTO DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	106	0	0	0	0	92	8				0	0	0	0	206	1,293	0	0		2
7:15 AM	0	0	141	0	0	0	0	135	19				0	0	0	2	297	1,495	0	0		0
7:30 AM	0	0	200	0	0	0	0	162	8				0	0	0	3	373	1,534	0	0		0
7:45 AM	0	0	181	0	0	0	0	224	10				0	0	0	2	417	1,494	0	0		0
8:00 AM	0	0	140	0	0	0	0	242	23				0	0	0	3	408	1,432	0	0		1
8:15 AM	0	0	115	0	0	0	0	198	16				0	0	0	7	336		0	0		0
8:30 AM	0	0	134	0	0	0	0	185	11				0	0	0	3	333		0	0		0
8:45 AM	0	0	155	0	0	0	0	184	14				0	0	0	2	355		0	0		0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	6	2					0	0	0	0	12
Lights	0	0	619	0	0	0	804	55					0	0	0	14	1,492
Mediums	0	0	13	0	0	0	16	0					0	0	0	1	30
Total	0	0	636	0	0	0	826	57					0	0	0	15	1,534



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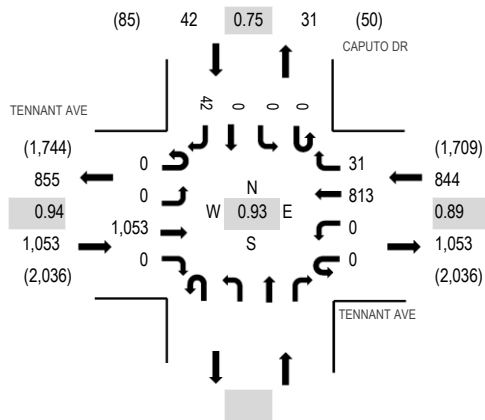
Location: 2 CAPUTO DR & TENNANT AVE PM

Date and Start Time: Tuesday, January 23, 2018

Peak Hour: 04:30 PM - 05:30 PM

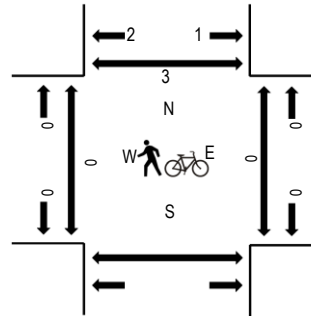
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	TENNANT AVE Eastbound				TENNANT AVE Westbound				Northbound				CAPUTO DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	250	0	0	0	0	235	9				0	0	0	12	506	1,894	0	0		
4:15 PM	0	0	213	0	0	0	0	185	7				0	0	0	14	419	1,836	0	0		
4:30 PM	0	0	265	0	0	0	0	225	12				0	0	0	16	518	1,939	0	0		
4:45 PM	0	0	249	0	0	0	0	186	10				0	0	0	6	451	1,912	0	0		
5:00 PM	0	0	255	0	0	0	0	182	3				0	0	0	8	448	1,936	0	0		
5:15 PM	0	0	284	0	0	0	0	220	6				0	0	0	12	522		0	0		
5:30 PM	0	0	277	0	0	0	0	203	2				0	0	0	9	491		0	0		
5:45 PM	0	0	243	0	0	0	0	223	1				0	0	0	8	475		0	0		

Peak Rolling Hour Flow Rates

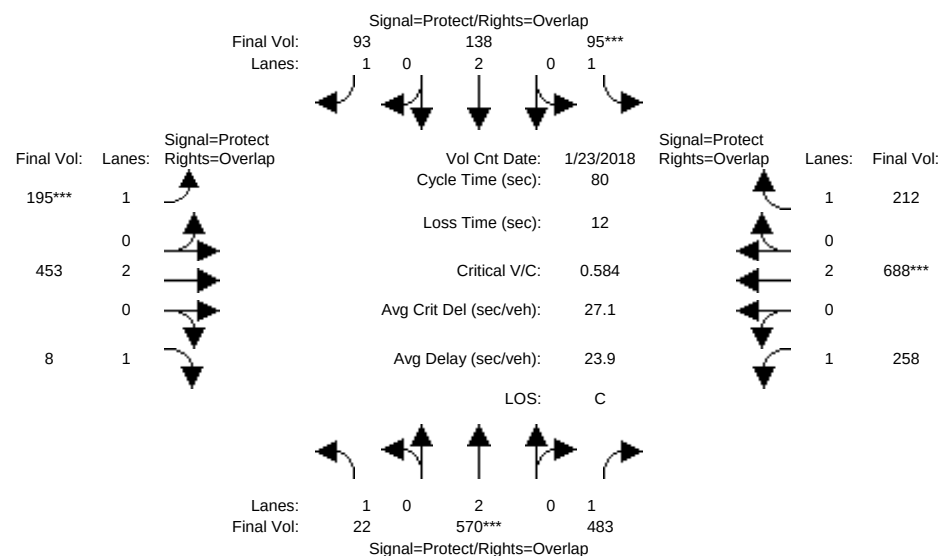
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	0	0	0	3	0					0	0	0	0	5
Lights	0	0	1,048	0	0	0	804	31					0	0	0	40	1,923
Mediums	0	0	3	0	0	0	6	0					0	0	0	2	11
Total	0	0	1,053	0	0	0	813	31					0	0	0	42	1,939

Intersection Level of Service Calculations

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #1111: Butterfield Boulevard and Tennant Avenue



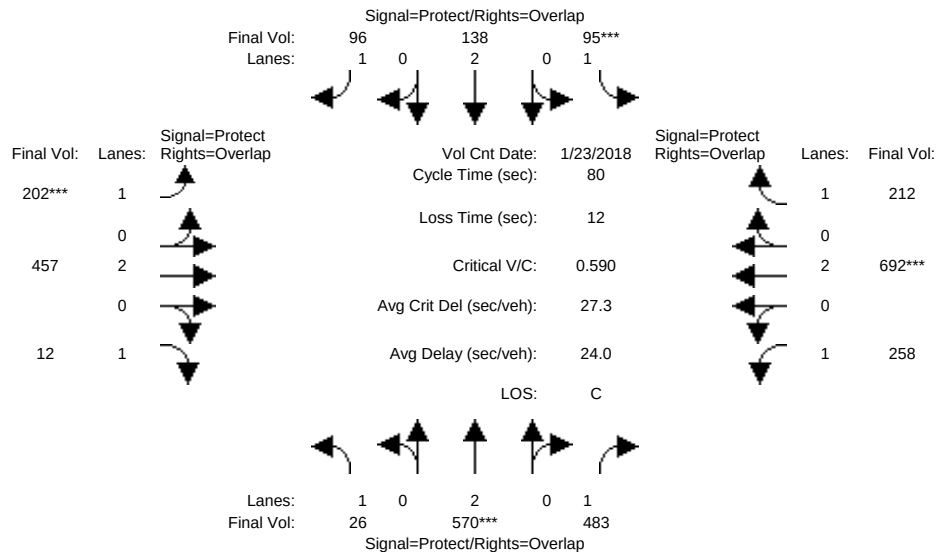
Street Name:	Butterfield Boulevard						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 23 Jan 2018 <<											
Base Vol:	22	570	483	95	138	93	195	453	8	258	688	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	570	483	95	138	93	195	453	8	258	688	212
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	570	483	95	138	93	195	453	8	258	688	212
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	570	483	95	138	93	195	453	8	258	688	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	570	483	95	138	93	195	453	8	258	688	212
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	22	570	483	95	138	93	195	453	8	258	688	212
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.28	0.05	0.04	0.05	0.11	0.12	0.00	0.15	0.18	0.12
Crit Moves:	****			****			****			****		
Green Time:	11.5	20.5	42.2	7.4	16.4	31.7	15.3	18.4	29.9	21.7	24.8	32.2
Volume/Cap:	0.09	0.58	0.52	0.58	0.18	0.13	0.58	0.52	0.01	0.54	0.58	0.30
Delay/Veh:	29.8	26.9	12.9	40.2	26.3	15.5	32.1	27.5	15.8	26.3	24.0	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.8	26.9	12.9	40.2	26.3	15.5	32.1	27.5	15.8	26.3	24.0	16.5
LOS by Move:	C	C	B	D	C	B	C	C	B	C	C	B
HCM2k95thQ:	1	13	16	7	3	3	11	11	0	12	15	8

Note: Queue reported is the number of cars per lane.

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing+Project AM

Intersection #1111: Butterfield Boulevard and Tennant Avenue



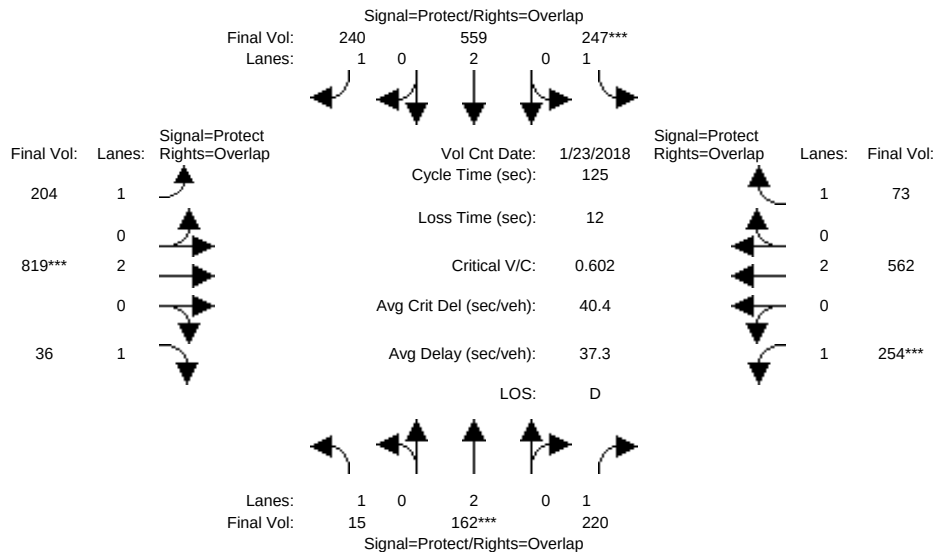
Street Name:	Butterfield Boulevard						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 23 Jan 2018 <<												
Base Vol:	22	570	483	95	138	93	195	453	8	258	688	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	570	483	95	138	93	195	453	8	258	688	212
Added Vol:	4	0	0	0	0	0	7	4	4	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	570	483	95	138	96	202	457	12	258	692	212
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	570	483	95	138	96	202	457	12	258	692	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	570	483	95	138	96	202	457	12	258	692	212
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	26	570	483	95	138	96	202	457	12	258	692	212
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.28	0.05	0.04	0.05	0.12	0.12	0.01	0.15	0.18	0.12
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	11.4	20.3	42.1	7.4	16.3	31.9	15.6	18.5	29.9	21.8	24.7	32.0
Volume/Cap:	0.10	0.59	0.52	0.59	0.18	0.14	0.59	0.52	0.02	0.54	0.59	0.30
Delay/Veh:	30.0	27.2	12.9	40.6	26.4	15.4	32.0	27.4	15.8	26.1	24.2	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	27.2	12.9	40.6	26.4	15.4	32.0	27.4	15.8	26.1	24.2	16.6
LOS by Move:	C	C	B	D	C	B	C	C	B	C	C	B
HCM2k95thQ:	1	13	16	7	3	3	11	11	0	12	15	8
Note: Queue reported is the number of cars per lane.												

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #1111: Butterfield Boulevard and Tennant Avenue



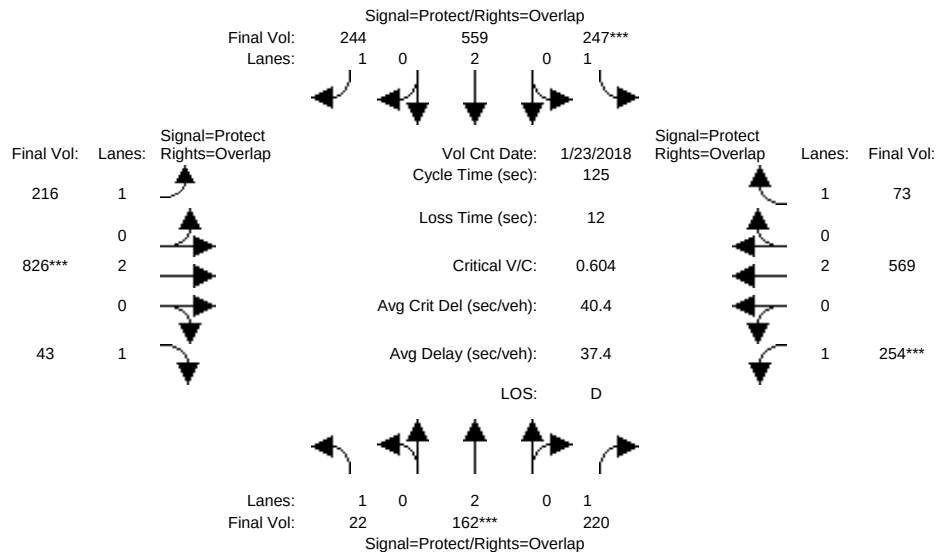
Street Name:	Butterfield Boulevard						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 23 Jan 2018 <<												
Base Vol:	15	162	220	247	559	240	204	819	36	254	562	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	162	220	247	559	240	204	819	36	254	562	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	162	220	247	559	240	204	819	36	254	562	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	162	220	247	559	240	204	819	36	254	562	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	162	220	247	559	240	204	819	36	254	562	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	15	162	220	247	559	240	204	819	36	254	562	73
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.13	0.14	0.15	0.14	0.12	0.22	0.02	0.15	0.15	0.04
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.7	10.0	39.8	29.0	28.2	60.9	32.6	44.2	55.0	29.8	41.4	70.4
Volume/Cap:	0.10	0.53	0.39	0.61	0.65	0.28	0.45	0.61	0.05	0.61	0.45	0.07
Delay/Veh:	53.0	57.1	33.7	45.6	45.7	19.3	39.3	34.1	20.0	45.0	33.1	12.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.0	57.1	33.7	45.6	45.7	19.3	39.3	34.1	20.0	45.0	33.1	12.5
LOS by Move:	D	E	C	D	D	B	D	C	C	D	C	B
HCM2k95thQ:	1	7	14	18	19	11	14	24	2	18	16	3
Note: Queue reported is the number of cars per lane.												

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing+Project PM

Intersection #1111: Butterfield Boulevard and Tennant Avenue



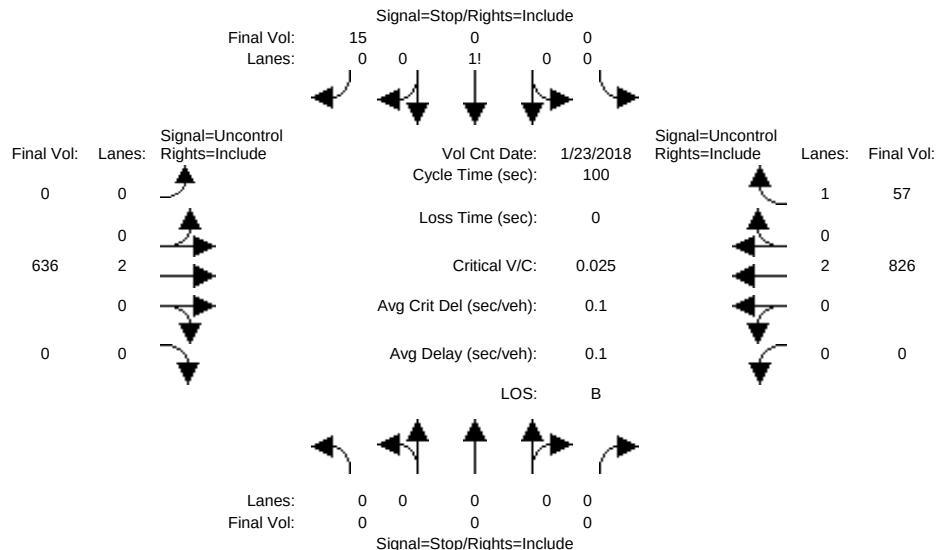
Street Name:	Butterfield Boulevard						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 23 Jan 2018 <<												
Base Vol:	15	162	220	247	559	240	204	819	36	254	562	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	162	220	247	559	240	204	819	36	254	562	73
Added Vol:	7	0	0	0	0	4	12	7	7	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	162	220	247	559	244	216	826	43	254	569	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	162	220	247	559	244	216	826	43	254	569	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	162	220	247	559	244	216	826	43	254	569	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	22	162	220	247	559	244	216	826	43	254	569	73
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.13	0.14	0.15	0.14	0.12	0.22	0.02	0.15	0.15	0.04
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.7	10.0	39.7	28.9	28.1	61.6	33.5	44.5	55.2	29.7	40.6	69.5
Volume/Cap:	0.15	0.53	0.40	0.61	0.65	0.28	0.46	0.61	0.06	0.61	0.46	0.08
Delay/Veh:	53.4	57.1	33.8	45.8	45.8	18.8	38.9	34.0	20.0	45.2	33.8	12.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.4	57.1	33.8	45.8	45.8	18.8	38.9	34.0	20.0	45.2	33.8	12.9
LOS by Move:	D	E	C	D	D	B	D	C	C	D	C	B
HCM2k95thQ:	2	7	14	18	19	11	14	24	2	18	16	3
Note: Queue reported is the number of cars per lane.												

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #1117: Caputo Drive and Tennant Avenue



Street Name:	Caputo Drive						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 23 Jan 2018 <<												
Base Vol:	0	0	0	0	0	15	0	636	0	0	826	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	15	0	636	0	0	826	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	15	0	636	0	0	826	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	15	0	636	0	0	826	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	15	0	636	0	0	826	57
Critical Gap Module:												
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx						6.9	xxxxx xxxx xxxxx xxxxx xxxx xxxxx					
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx						3.3	xxxxx xxxx xxxxx xxxxx xxxx xxxxx					
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxxx	xxxx	xxxx	413	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	594	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	594	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx						11.2	xxxxxx xxxx xxxxx xxxxx xxxx xxxxx					
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx						xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx						xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx					11.2	xxxxxx			xxxxxx		
ApproachLOS:	*					B	*			*		

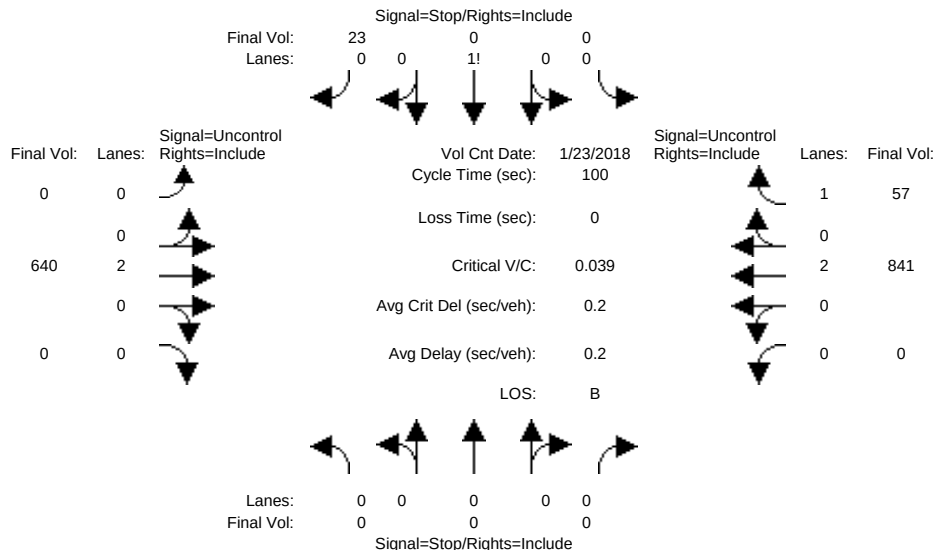
Note: Queue reported is the number of cars per lane.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing+Project AM

Intersection #1117: Caputo Drive and Tennant Avenue



Street Name:	Caputo Drive						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 23 Jan 2018 <<												
Base Vol:	0	0	0	0	0	15	0	636	0	0	826	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	15	0	636	0	0	826	57
Added Vol:	0	0	0	0	0	8	0	4	0	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	23	0	640	0	0	841	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	23	0	640	0	0	841	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	0	0	0	23	0	640	0	0	841	57
Critical Gap Module:												
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxxx						6.9	xxxxx xxxx xxxxx xxxxx xxxxx					
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxxx						3.3	xxxxx xxxx xxxxx xxxxx xxxxx					
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxxx	xxxx	xxxx	421	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	587	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	587	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxxx						11.4	xxxxxx xxxx xxxxx xxxxx xxxxx					
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx						xxxxxx	xxxxx xxxx xxxxx xxxxx xxxxx					
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx						xxxxxx	xxxxx xxxx xxxxx xxxxx xxxxx					
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx					11.4	xxxxxx			xxxxxx		
ApproachLOS:	*					B	*			*		

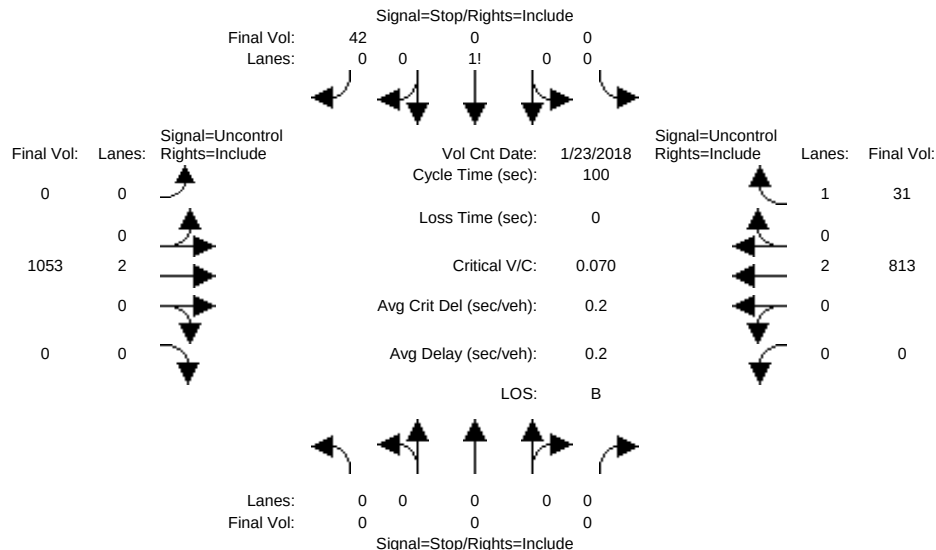
Note: Queue reported is the number of cars per lane.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #1117: Caputo Drive and Tennant Avenue



Street Name: Caputo Drive Tennant Avenue

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module: >> Count Date: 23 Jan 2018 <<

Base Vol:	0	0	0	0	0	42	0	1053	0	0	813	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	42	0	1053	0	0	813	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	42	0	1053	0	0	813	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	42	0	1053	0	0	813	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	0	0	0	42	0	1053	0	0	813	31

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	407	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	600	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	600	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx					11.5	xxxxxx					xxxxxx
ApproachLOS:	*					B	*					*

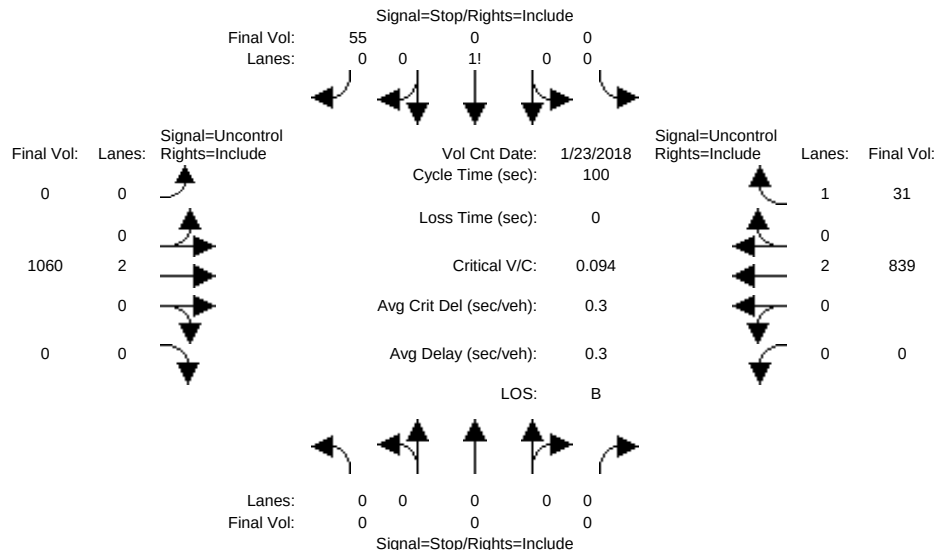
Note: Queue reported is the number of cars per lane.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

Zip Thru Car Wash
Morgan Hill, CA
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing+Project PM

Intersection #1117: Caputo Drive and Tennant Avenue



Street Name:	Caputo Drive						Tennant Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 23 Jan 2018 <<												
Base Vol:	0	0	0	0	0	42	0	1053	0	0	813	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	42	0	1053	0	0	813	31
Added Vol:	0	0	0	0	0	13	0	7	0	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	55	0	1060	0	0	839	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	55	0	1060	0	0	839	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	55	0	1060	0	0	839	31
Critical Gap Module:												
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxxx						6.9	xxxxx xxxx xxxxx xxxxx xxxxx xxxxx					
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxxx						3.3	xxxxx xxxx xxxxx xxxxx xxxxx xxxxx					
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxxx	xxxx	xxxx	420	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	588	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	588	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxxx						11.8	xxxxxx xxxx xxxxx xxxxx xxxxx xxxxx					
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx						xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx						xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx					11.8	xxxxxx			xxxxxx		
ApproachLOS:	*					B	*			*		

Note: Queue reported is the number of cars per lane.

Attachment: Initial Study (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

**MITIGATION MONITORING AND REPORTING PROGRAM
ZIP THRU EXPRESS CAR WASH PROJECT (CAPUTO-HUANG)
MORGAN HILL, CALIFORNIA**

Prepared for the:



Community Development Department
17575 Peak Avenue
Morgan Hill, CA 95037
408.778.6480

Prepared by:

Raney Planning & Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834

March 2018

Attachment: MMRP (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The City of Morgan Hill, as Lead Agency under the California Environmental Quality Act (CEQA) and State CEQA Guidelines, has prepared the Final Mitigated Negative Declaration (MND) for the Zip Thru Express Car Wash Project (Caputo-Huang) (Project). When a lead agency makes findings on significant effects identified in an MND, it must also adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval (Public Resources Code [PRC] Section 21081.6[a]; State CEQA Guidelines Sections 15091[d], 15097).

This document represents the mitigation monitoring and reporting program (MMRP) prepared by the City of Morgan Hill for the Project. This MMRP includes all measures required to reduce potentially significant environmental impacts to a less-than-significant level. In addition, the MMRP identifies the timing of implementation; the agency responsible for implementing the mitigation; and the agency responsible for monitoring the mitigation. The mitigation measures, timing, and responsibility are summarized in Table 1, and the full text of the mitigation measures follows. The implementation and monitoring of the mitigation measures, in conjunction with the implementation of the City's Standard Measures required for such projects, will ensure the reduction of potentially significant environmental effects to less-than-significant levels.

This MMRP has been prepared by the City of Morgan Hill, with technical assistance from Raney Planning & Management, Inc., an environmental consulting firm. Questions should be directed to Emily Foley, Contract Planner, at the City of Morgan Hill.

Contact Information:

City of Morgan Hill
Community Development Department
17575 Peak Avenue
Morgan Hill, CA 95037
408.778.6480

Attachment: MMRP (1716 : UP2017-0015: Caputo-Huang- Conditional Use Permit)

TABLE 1. MITIGATION MONITORING AND REPORTING PROGRAM – SUMMARY OF MITIGATION MEASURES

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility¹	Timing of Implementation
Prior to Construction			
BIO-1: A pre-construction survey shall be conducted by a qualified Burrowing Owl biologist no more than 30 days prior to initiation of any ground disturbing (construction) activity to assure take avoidance of burrowing owls. The survey shall consist of a habitat assessment, burrow survey, owl survey, and completion of a written report. The written report shall be submitted to the Community Development Department. If owls are observed during the preconstruction survey, no impacts to the owls or their habitat will be allowed during the nesting season (February 1 to August 31).	Project Applicant with Construction Contractor	City of Morgan Hill Community Development Department	No more than 30 days prior to initiation of any ground disturbing (construction) activity
During Construction			
BIO-2: Should burrowing owls be found on the site during the breeding season (February 1 through August 31), exclusion zones, with a 250-foot radius from occupied burrows, shall be established. All development-related activities shall occur outside of the exclusion area until the young have fledged.	Project Applicant with Construction Contractor and City of Morgan Hill	City of Morgan Hill – Community Development Department	If burrowing owls are found on the site during the breeding season (February 1 through August 31)
BIO-3: If pre-construction surveys are conducted during the non-breeding season (September 1 through January 31) and burrowing owls are observed on the site, the owls may be relocated upon approval by the California Department of Fish and Wildlife, in accordance with the Burrowing Owl Mitigation Plan.	Project Applicant with Construction Contractor	City of Morgan Hill Community Development Department	If burrowing owls are found on the site during the non-breeding season (September 1 through January 31)
NOI-1 During construction activities associated with the proposed project, all internal combustion engines used at the project site shall be equipped with a type of muffler recommended by the vehicle manufacturer. All equipment shall be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components. In addition, the project applicant shall comply with the following:	Project Applicant with Construction Contractor	City of Morgan Hill Community Development Department	During construction activities

TABLE 1. MITIGATION MONITORING AND REPORTING PROGRAM – SUMMARY OF MITIGATION MEASURES

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility¹	Timing of Implementation
- Noise-generating construction activities shall be limited to the daytime hours of 7:00 AM to 8:00 PM Monday through Friday and from 9:00 AM to 6:00 PM Saturday, consistent with Chapter 8.28 of the Morgan Hill Municipal Code; - All diesel-powered equipment shall be located more than 200 feet from any noise-sensitive use if the equipment is to operate for more than several hours per day; and - Mobile equipment (haul trucks, concrete trucks, etc.) shall avoid local streets near residences and other noise-sensitive uses to the maximum extent feasible. Furthermore, subject to equipment availability and cost considerations, the project applicant shall implement the following: - Earth Removal: Scrapers shall be used as much as possible for earth removal, rather than the noisier loaders and hauling trucks. - Backfilling: Backhoes shall be used for backfilling, as such equipment is less costly and quieter than either dozers or loaders. - Ground Preparation: Graders shall be used rather than dozers for final grading. - Building Construction: Power saws shall be shielded or enclosed where practical to decrease noise emissions. Nail guns shall be used where possible as they are less noisy than manual hammering. - Generators, Compressors, and Other Stationary Equipment: The project applicant shall ensure that generators, compressors and other stationary equipment that are housed in			

TABLE 1. MITIGATION MONITORING AND REPORTING PROGRAM – SUMMARY OF MITIGATION MEASURES

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility¹	Timing of Implementation
acoustical enclosures are used rather than equipment housed in weather enclosures or not housed in enclosures at all. Acoustical enclosures are often available with rented equipment. The equipment shall be placed as far from sensitive receptors as feasible. • The project applicant shall provide a noise disturbance coordinator with a phone line and voicemail/answering machine. Signs with the noise disturbance coordinators contact information shall be posted on the project site at a highly visible location. • Vehicle paths within the project site shall be graded smooth, as rough roads and paths can cause significant noise and vibration from trucks (particularly empty trucks) rolling over rough surfaces.			
¹ The City of Morgan Hill may hire a qualified contractor to conduct mitigation monitoring.			

BIOLOGICAL RESOURCES

The project's construction-related activities, including site preparation and grading, could have potentially significant effects on burrowing owls. Implementation of the following measures would reduce such potentially significant effects to less-than-significant levels.

- MM BIO-1:** A pre-construction survey shall be conducted by a qualified Burrowing Owl biologist no more than 30 days prior to initiation of any ground disturbing (construction) activity to assure take avoidance of burrowing owls. The survey shall consist of a habitat assessment, burrow survey, owl survey, and completion of a written report. The written report shall be submitted to the Community Development Department. If owls are observed during the preconstruction survey, no impacts to the owls or their habitat will be allowed during the nesting season (February 1 to August 31).
- MM BIO-2:** Should burrowing owls be found on the site during the breeding season (February 1 through August 31), exclusion zones, with a 250-foot radius from occupied burrows, shall be established. All development-related activities shall occur outside of the exclusion area until the young have fledged.
- MM BIO-3:** If pre-construction surveys are conducted during the non-breeding season (September 1 through January 31) and burrowing owls are observed on the site, the owls may be relocated upon approval by the California Department of Fish and Wildlife, in accordance with the Burrowing Owl Mitigation Plan.

NOISE

The proposed project would result in a temporary or periodic increase in ambient noise levels in the project vicinity during construction. Implementation of the following mitigation measure would ensure potentially significant impacts related to such would be reduced to less-than-significant levels.

- MM NOI-1:** During construction activities associated with the proposed project, all internal combustion engines used at the project site shall be equipped with a type of muffler recommended by the vehicle manufacturer. All equipment shall be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components. In addition, the project applicant shall comply with the following:
- Noise-generating construction activities shall be limited to the daytime hours of 7:00 AM to 8:00 PM Monday through Friday and from 9:00 AM to 6:00 PM Saturday, consistent with Chapter 8.28 of the Morgan Hill Municipal Code;
 - All diesel-powered equipment shall be located more than 200 feet from any noise-sensitive use if the equipment is to operate for more than several hours per day; and

- Mobile equipment (haul trucks, concrete trucks, etc.) shall avoid local streets near residences and other noise-sensitive uses to the maximum extent feasible.

Furthermore, subject to equipment availability and cost considerations, the project applicant shall implement the following:

- Earth Removal: Scrapers shall be used as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
- Backfilling: Backhoes shall be used for backfilling, as such equipment is less costly and quieter than either dozers or loaders.
- Ground Preparation: Graders shall be used rather than dozers for final grading.
- Building Construction: Power saws shall be shielded or enclosed where practical to decrease noise emissions. Nail guns shall be used where possible as they are less noisy than manual hammering.
- Generators, Compressors, and Other Stationary Equipment: The project applicant shall ensure that generators, compressors and other stationary equipment that are housed in acoustical enclosures are used rather than equipment housed in weather enclosures or not housed in enclosures at all. Acoustical enclosures are often available with rented equipment. The equipment shall be placed as far from sensitive receptors as feasible.
- The project applicant shall provide a noise disturbance coordinator with a phone line and voicemail/answering machine. Signs with the noise disturbance coordinators contact information shall be posted on the project site at a highly visible location.
- Vehicle paths within the project site shall be graded smooth, as rough roads and paths can cause significant noise and vibration from trucks (particularly empty trucks) rolling over rough surfaces

FINDING

The City of Morgan Hill Community Development Director hereby finds that the proposed project could have a significant effect on the environment; however, there would not be a significant effect in this case because mitigation measures summarized above and described in the MND are included in the project.

Jennifer Carman
Community Development Director

Date: _____



PLANNING COMMISSION STAFF REPORT

MEETING DATE: April 24, 2018

PREPARED BY: John Baty, Principal Planner/Development Services
 APPROVED BY: Jennifer Carman, Community Development Director

ZA2016-0006: ZONING CODE UPDATE AND ZONING MAP AMENDMENTS

RECOMMENDATION(S)

1. Discuss and Consider comments on the Zoning Code Update and Zoning Map Amendments; and
2. Adopt a Resolution recommending City Council consider the Addendum to the Morgan Hill 2035 Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) and approval of ZA2016-0006: Zoning Code Update

BACKGROUND:

The Planning Commission opened the public hearing on the Zoning Code Update at the March 27, 2018 Planning Commission meeting to hear public testimony and continued the hearing to April 10, 2018 where several comments received from the public were discussed and considered. The Commission provided specific recommendations on those comments discussed at the April 10, 2018 hearing and continued the hearing to April 24, 2018 to discuss and consider any remaining comments before making a recommendation on the Zoning Code Update and Zoning Map Amendments to the City Council.

Exhibit C in the attached draft Planning Commission Resolution includes Planning Commission recommendations on the comments discussed and considered at the April 10, 2018 hearing and placeholders for additional recommendations from the April 24, 2018 Planning Commission hearing, including recommendations in response to comments received from the Morgan Hill Hotel Coalition and 900 Lightpost Way.

Previous staff reports and attachments, including comments received and initial staff responses, are available through the previous Planning Commission meeting agendas.

ANALYSIS:

Responses to the primary comments, summarized from the Morgan Hill Hotel Coalition and 900 Lightpost Way comment letters (attached for reference), are included below with each comment numbered and shown in *italicized text*. Staff responses are provided below each comment.

Morgan Hill Hotel Coalition

Comment 1

Initially, we note that the Proposed Zoning Scheme appears to amend the zoning code of the City to allow hotel/motel use in every type of commercial zoning district within the City. In attempting to give effect to this change, the Proposed Zoning Scheme either adds hotel/motel use to each type of commercial district that did not previously allow such use, or else it seeks to eliminate zoning districts such as CO "Administrative Office", which currently do not allow hotel/motel use.

Response 1

The table below shows a comparison of the permitting requirements for hotel and motel uses in existing zoning districts and their corresponding proposed zoning district.

Hotels and Motels

Existing / Proposed Zoning District	Existing Permitting	Proposed Permitting
CC-R / MU-N	C*	C
CL-R / MU-F	C	C
CO / n/a	C*	n/a
CN / CN	C*	C
CG / CG	C	A
HC / CH	P	P
CS / CS	C	A
n/a / CI	n/a	P
SRL-A / SRL-A	C*	-
SRL-B / SRL-B	C	C

"-" = Not permitted. "P" = Permitted.

"A" = Administrative Use Permit. "C" = Conditional Use Permit.

"n/a" = district does not exist in current or proposed Zoning Code.

"C*" In existing zoning districts where hotels and motels are not specifically listed as permitted or conditional uses (CC-R, CO, CN, SRL-A) the existing Zoning Code gives the Planning Commission the discretion, with the issuance a Conditional Use Permit (CUP), to allow any other use which the Planning Commission finds to be of a similar nature to the permitted and conditional uses specified for a particular zoning district.

Comment 2

Additionally, as mentioned above, we believe that the Proposed Zoning Scheme itself is largely inconsistent with the City and Neighborhood Form (Land Use) element of the

General Plan, and that therefore, the Proposed Zoning Scheme, or a significant portion thereof, may potentially be legally invalid.

*The inconsistency between the General Plan and the Proposed Zoning Scheme is plain, straightforward, and unmistakable. On page CNF-13 of the General Plan, the City and Neighborhood Form Element states, in pertinent part, as follows: ...This designation is intended to allow a wide range of **retail businesses, administrative and executive office uses, and professional services**, either in stand-alone buildings or as part of shopping centers. [Emphasis Added].*

However, the Proposed Zoning Scheme would allow a myriad of land uses other than just retail, office, and professional services, on parcels that are designated as “Commercial” under the General Plan. And, for that reason, the Proposed Zoning Scheme is legally invalid.

Response 2

The General Plan Land Use Map designates the general distribution of basic land uses, including housing, business, industry, open space, and public facilities within the City’s planning area. The General Plan Land Use designations include descriptions of typical or primary uses that are allowable within the established parameters of density for residential uses (dwelling units per acre) and intensity for non-residential uses (floor area ratio FAR). The General Plan Land Use designation descriptions are not intended to include an exhaustive list of every type of use that may be allowable within that designation.

The General Plan is implemented (i.e., carried out on a day-to-day basis) by the specific rules (e.g., allowed uses, permitting requirements, development standards, etc.) established for each zoning district in the City’s Zoning Code.

A zoning district may be found consistent with an underlying General Plan Land Use designation when: A) the specific uses that are allowed in the zoning district are captured within the basic land uses contemplated in the corresponding General Plan Land Use designation; and, B) the specific development standards of the zoning district are within the basic parameters of development (density or intensity of use) established for the corresponding General Plan Land Use designation.

Comment 3

We also note that the very purpose of the “Commercial” land use designation, as defined in the General Plan, which is to “allow a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers”, appears to have been largely ignored in the text of the Proposed Zoning Scheme. For example, as noted earlier in this letter, the Proposed Zoning Scheme, without explanation, seeks to eliminate the currently existing CO (“Administrative Office”) zoning district. The CO district is entirely consistent with the General Plan. In fact, even though Policy CNF-15.5 of the General Plan Policy CNF-15.5 of the General Plan specifically encourages “Administrative Office” and “Executive Office” uses, neither Administrative office nor Executive office, is even included in the

list of contemplated commercial land uses described in Section 18.124.00 [sic] of the Proposed Zoning Scheme.”

Response 3

Section 18.124.040.O Professional Offices. Defined as, “a place of employment occupied by businesses providing professional, executive, management, or administrative services. Includes offices for accountants, architects, advertising agencies, insurance agents, attorneys...” are permitted by right in all of the Commercial zoning districts (CN, CG, CH, and CS).

The existing CO Administrative Office Zoning District was/is proposed to be eliminated in part because the Planning Commission determined that the stated purpose of the district, “to provide an area wherein professional, general commercial offices, and limited personal services may develop in close relationship with each other outside of other commercial districts” could be achieved using other, less restrictive commercial zoning districts such as CN Neighborhood Commercial or CG General Commercial. These other commercial districts, if applied to existing CO zoned development, could allow the introduction of limited retail and/or personal service uses in neighborhoods where these uses currently don’t exist.

Staff is supportive of retaining the existing CO Administrative Office Zoning District and clarify that hotels and motels (lodging uses) are not permitted in the CO District. If the CO Zoning District is retained, the Planning Commission should consider whether the existing CO zoned properties should retain their existing zoning or be changed as previously proposed.

900 Lightpost Way

Comment 1

As noted before during prior public hearing on March 27th, we recognize that Commercial -Industrial (CI) zoning gives:

- more broad spectrum of permitted business uses,*
- provides better transition between commercial and light industrial neighborhood*
- overall fits well for our building design and location that can be suitable both for commercial uses and light industrial*

Generally we are supporting the idea of rezoning to CI as long as it does not compromise our existing businesses.

Response 1

The site has a Commercial/Industrial General Plan Land Use designation and is currently zoned ML Light Industrial (proposed IL Light Industrial). The site could be rezoned to the new CI Commercial Industrial Zoning District to be more consistent with the current General Plan designation or the site could remain IL Light Industrial, which would still conform.

The existing building and uses were approved under the current ML Light Industrial Zoning District, so it may make sense to leave the current zoning in place. The property owner can, in the future, submit a Zoning Amendment application requesting to change the property from the IL Light Industrial Zoning District to the CI Commercial Industrial Zoning District.

Comment 2

Our main concern lays within proposed sizes for food production facilities and tasting room that were not in the current Zoning code.

Tasting room proposed to be restricted to 3000 s.f. or 10% whichever is less. This restriction would be understandable in areas oversaturated with wineries and tasting rooms like downtown Napa or Sonoma where such measures are necessary to support diversity of the business uses, however it does not seem to be justified in the City of Morgan Hill where to our knowledge, no other wineries except ours are present in CI or IL zoning and sprawl of wineries in industrial zone is very unlikely – considering historically low market availability/high rates of such buildings or parcels in our area and there are also very limited amount of parcels in Morgan Hill zoned CI.

We just received conditional use permit for our tasting room of aprox. 2700 s.f. on 01/09/18 (which is still fairly small as it is divided by different rooms for daily visitors, seated groups and club members area only). If Zoning code is accepted in its current reading – despite on new permit, it automatically puts us in “legal non conforming” status just 3 months later since as of right now our production area size for up to 10,000 cases with 3500 s.f. production area indoor to start with + offices/storage (total approx. 7500 s.f. not including tasting room area). With such restriction we would only be allowed 350-750 s.f. tasting room – the size of a hotel room, regardless if we were in CI or IL zoning.

Response 2

The intent behind establishing a maximum size for tasting rooms in industrial districts (3,000 square feet or 10 percent of the floor area of the primary use) is to ensure that they remain accessory to (i.e., incidental and subordinate to) the permitted primary industrial use (brewery, winery, or other alcoholic beverage production facility). The maximum size for tasting rooms in industrial districts is consistent with how the Zoning Code treats other accessory uses.

Staff is not opposed to increasing the maximum size for tasting rooms and/or other accessory uses as long as the intent behind the limitation is maintained.

A modification to the proposed Zoning Code allowing 5,000 square feet or 10 percent of the gross floor area of the building, whichever is less, when applied to the 900 Lightpost Way site (existing building 61,473 square feet), would allow up to a total of 5,000 square feet of floor area to be used for tasting room and/or other accessory uses (5,000 square feet is less than 10% of 61,473 square feet).

CEQA (California Environmental Quality Act):

An Addendum to the Environmental Impact Report (EIR) for the City of Morgan Hill's Morgan Hill 2035 Project certified on July 27, 2016 (State Clearinghouse No. 2015022074) was prepared for the Zoning Code Update project pursuant to the provisions of the State of California Environmental Quality Act (CEQA) Guidelines Section 15164.

The Addendum concludes that the proposed project will not result in any new impacts that were not already identified in the Morgan Hill 2035 EIR or any impacts of greater severity than were already addressed.

LINKS/ATTACHMENTS:

1. Planning Commission Resolution
2. Public Review Draft Zoning Code (weblink)
3. Addendum to Morgan Hill 2035 EIR (weblink)
4. Morgan Hill Hotel Coalition (weblink)
5. 900 Lightpost Way (weblink)
6. 900 Lightpost Way Attachment (weblink)
7. Chapter 18.24 Commercial Zoning Districts w/ CO Zoning
8. Existing Chapter 18.34 CO Admin. Office
9. MH Hotel Coalition Reply to Staff Response to Comments
10. Initial Response to Comments - Revised
11. Letter from San Panwala

RESOLUTION NO. 18-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL RECOMMENDING APPROVAL OF A COMPREHENSIVE UPDATE OF TITLE 18 – ZONING OF THE CITY OF MORGAN HILL MUNICIPAL CODE (FILE NO. ZA2016-0006: ZONING CODE UPDATE) INCLUDING AN AMENDMENT TO THE CITY’S OFFICIAL ZONING MAP CONSISTENT WITH THE MORGAN HILL 2035 GENERAL PLAN, AND RECOMMENDING THAT THE CITY COUNCIL CONSIDER THE ADDENDUM TO THE MORGAN HILL 2035 ENVIRONMENTAL IMPACT REPORT (EIR) IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA).

WHEREAS, the City of Morgan Hill’s Zoning Code, Title 18 of the City’s Municipal Code, has not been comprehensively updated since it was adopted in 1981; and

WHEREAS, in 2013 the City began the Morgan Hill 2035 Project, which included a comprehensive update of the City’s General Plan, Residential Development Control System (RDCS), and Zoning Code; and

WHEREAS, in November 2016 Morgan Hill voters approved an update of the City’s long-standing residential growth control program. The RDCS is codified in Title 18, Chapter 18.78 of the Municipal Code; and

WHEREAS, on July 27, 2016 the City Council adopted the Morgan Hill 2035 General Plan, which is the City’s primary policy document governing local land use and development. The General Plan includes a Land Use Map and designations that identify uses and development intensities along with basic policies to guide development and conservation decisions in Morgan Hill through the year 2035; and

WHEREAS, Morgan Hill’s Zoning Code, codified as Title 18 in the City of Morgan Hill’s Municipal Code, is one of the primary tools for implementing the General Plan with detailed land use and development regulations. The Zoning Code establishes a Zoning Map with zoning districts that apply to all properties in the City. The Zoning Code identifies exactly which land uses are allowed in each zoning district and establishes the permitted building heights, minimum setbacks, and other development standards for each district. In addition to development standards, the Zoning Code identifies permitting requirements for different land uses and types of development, and the process by which the City reviews permit applications and administers the requirements of the Zoning Code; and

WHEREAS, the Zoning Code Update portion of the Morgan Hill 2035 Project began with a series of stakeholder, staff, Planning Commission, and City Council meetings in late 2015 to assess the strengths and weaknesses of the City’s existing Zoning Code, and in 2016 and 2017 to

Resolution No. 18-XX

Page No. 2

discuss the general approach for the Zoning Code Update process; and

WHEREAS, the Planning Commission and City Council identified four goals to guide the Zoning Code Update process: A. Implement and achieve consistency with the Morgan Hill 2035 General Plan; B. Create a user-friendly code for applicants, staff, and City officials; C. Modernize terminology and requirements to reflect current practices; and D. Improve regulations to effectively address land use and development issues; and

WHEREAS, after a Public Review Draft Zoning Code (Initial Draft) was published on August 8, 2017, the Planning Commission held a series of four public workshops on August 29, September 19, October 3, and November 28, 2017 to provide, receive, and discuss comments and proposed edits to the Initial Draft; and

WHEREAS, on January 17, 2018 a Joint City Council/Planning Commission Study Session was held for the Planning Commission and staff to receive feedback/direction from the City Council on several policy questions related to the Zoning Code Update. The Planning Commission concluded, and the City Council agreed, that the policy questions discussed at the Study Session, while important for future consideration, did not warrant extending the Zoning Code Update process beyond the targeted spring 2018 adoption hearings; and

WHEREAS, a Public Review Draft Final Zoning Code (Final Draft) was published on March 7, 2018 addressing comments and incorporating edits received during the review of the Initial Draft; and

WHEREAS, although several existing zoning district names are proposed to be changed to better reflect their intent and match the district's corresponding General Plan Land Use designation, less than one-percent of the approximately 12,865 parcels within the existing City Limits are included in the proposed Zoning Map Amendment. The Zoning Map Amendment (Exhibit B) changes the zoning district for 41 sites (approximately 100 parcels) to a zoning district that is consistent, or more consistent, with the site's Morgan Hill 2035 General Plan Land Use designation; and

WHEREAS, an Addendum to the Environmental Impact Report (EIR) for the City of Morgan Hill's Morgan Hill 2035 Project certified on July 27, 2016 (State Clearinghouse No. 2015022074) was prepared for the Zoning Code Update project pursuant to the provisions of the State of California Environmental Quality Act (CEQA) Guidelines Section 15164, and the Addendum concludes that the proposed project will not result in any new impacts that were not already identified in the Morgan Hill 2035 EIR or any impacts of greater severity than were already addressed; and

WHEREAS, the Zoning Code Update and associated Zoning Map Amendments complies with the City's Morgan Hill 2035 General Plan as required by Government Code Section 65860; and

WHEREAS, testimony received at a duly-noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process; and

WHEREAS, the Zoning Code Update, including Zoning Map Amendments, was considered by the Planning Commission at their regular meeting of March 27, 2018, April 10, 2018, and April 24, 2018 at which time the Planning Commission recommended approval of application ZA2016-0006: Zoning Code Update; and

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The proposed Zoning Code Update and associated Zoning Map Amendment is consistent with the Morgan Hill 2035 General Plan.

SECTION 2. The Zoning Code Update and associated Zoning Map Amendment is required in order to serve the public convenience, necessity, and general welfare as provided in Section 18.62.050 of the Municipal Code.

SECTION 3. The Planning Commission has evaluated the Public Review Draft Final Zoning Code (Exhibit A) and associated Zoning Map Amendments (Exhibit B) to be consistent with the four goals identified for the Zoning Code Update.

SECTION 4. The Planning Commission recommends that the City Council consider the Addendum to the Morgan Hill 2035 Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) and approve ZA2016-0006: Zoning Code Update and Zoning Map Amendments with additional Planning Commission recommended changes and clarifications listed in Exhibit C.

PASSED AND ADOPTED THIS 10th DAY OF APRIL 2018, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

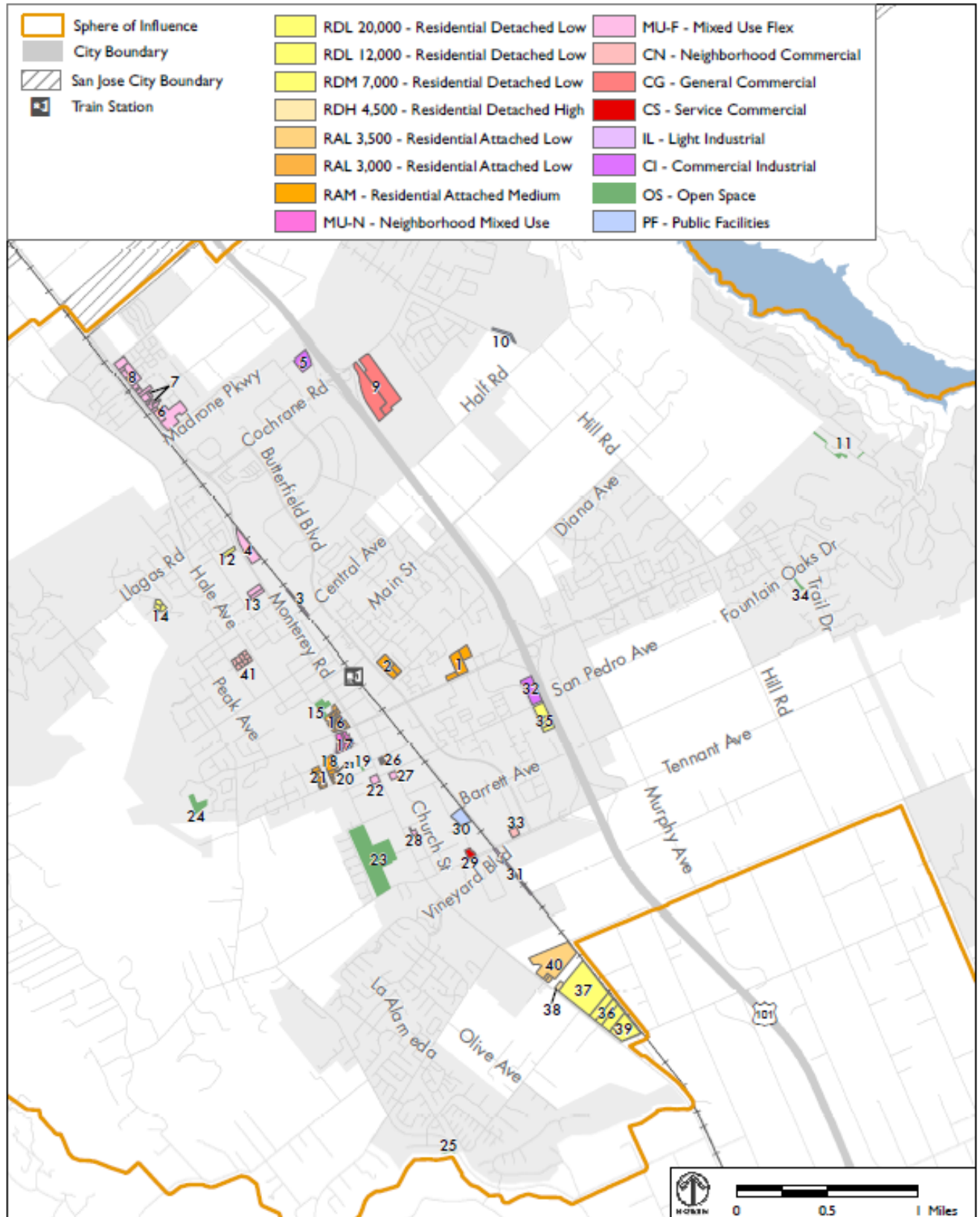
JOHN McKAY, Chair

Date: _____

Resolution No. 18-XX
Page No. 4

Exhibit A – Public Review Draft Final Zoning Code

Attachment: Planning Commission Resolution [Revision 1] (1739 : Zoning Code Update)

Exhibit B – Zoning Map Amendment

PARCELS WITH A PROPOSED ZONING CHANGE

Map ID	APNs	Existing Zoning	Proposed Zoning
1	72602008, 72602012, 72602016	R2 3,000	RAM
2	72612001, 72612004	R2 3,500	RAM
3	72624001	R2 3,500	IL
4	72625006	ML	MU-F
5	72633027	ML	IL
6	72636002, 72636003, 72636004, 72636007, 72636008, 72636009, 72636059 ^A	CG	MU-F
7	72636010, 72641015	R1 7,000	MU-F
8	72641018, 72641020, 72641021, 72641042, 72641065, 72642001, 72642002, 72642003, 72642010, 72642012	CS	MU-F
9	72831014, 72831016 ^B	CO	CG
10	72834001	R1 20,000	PF
11	72905027, 72906030	R1 12,000	OS
12	76411002	R2 3,500	RDM 7,000
13	76412006, 76412007	CG	MU-F
14	76431040, 76431041, 76431042	RE 40,000	RDL 20,000
15	76708008, 76708009, 76708010, 76708011	RE 100,000	OS
16	76708013, 76708018, 76708019, 76708020, 76708021, 76708024, 76708025, 76708026, 76708027, 76708028, 76708029, 76708035, 76708036, 76708037, 76708038, 76708039, 76708040, 76708041, 76708042, 76708043, 76708047	D-R3	RAL 3,000
17	76709015, 76709016, 76709017, 76709018, 76709019	R3 (CU)	MU-N
18	76709027	R3 2,000	RAM
19	76710008	R1 7,000	OS
20	76711007, 76711010, 76711011, 76711012	R2 3,500	RAM
21	76711045, 76711046, 76711047, 76711048, 76711050, 76711052, 76711053, 76711056	R2 3,500	RAM
22	76717051	CG	MU-F
23	76718048	PF	OS
24	77307033	R1 20,000	OS
25	77902022	RE 40,000	OS
26	81701008, 81701009, 81701010	R2 3,500	MU-F
27	81702001	R2 3,500	MU-F
28	81703011	R2 3,500	MU-F
29	81705041	ML	CN
30	81705082	ML	PF
31	81706054	PF	IL

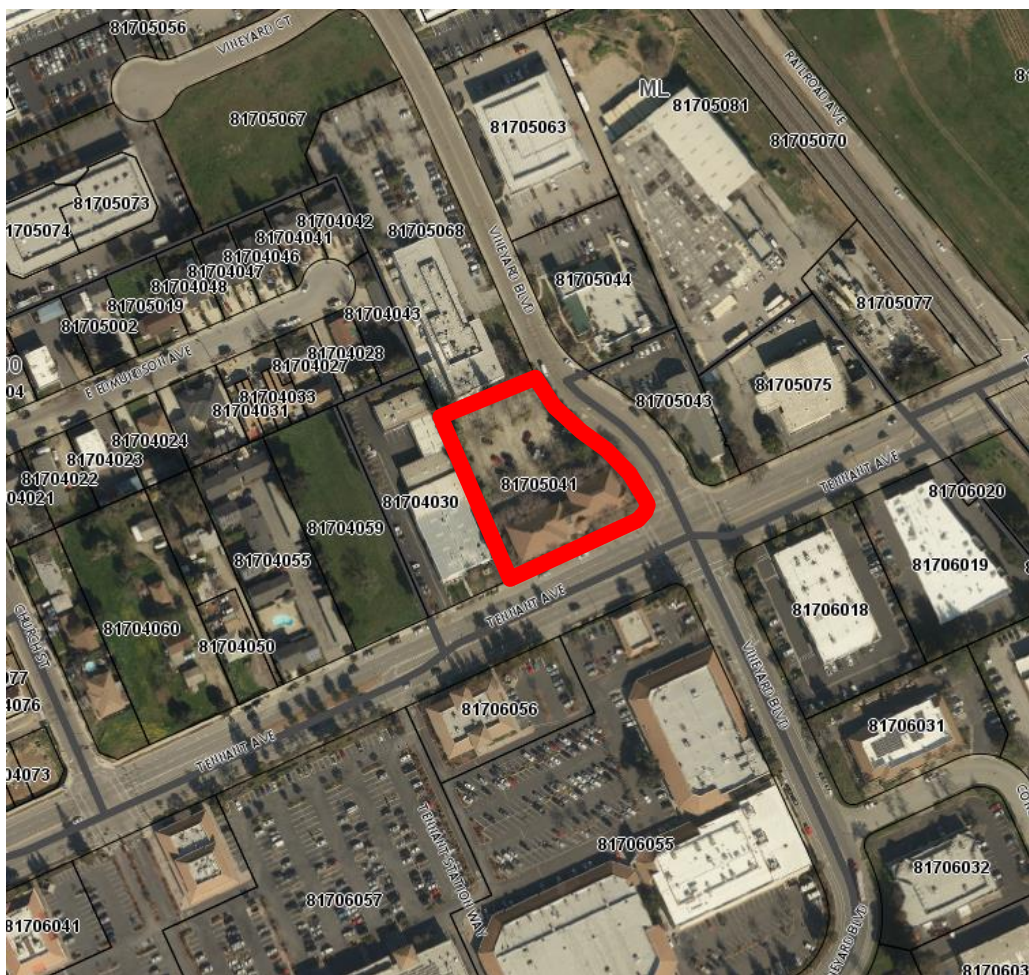
PARCELS WITH A PROPOSED ZONING CHANGE

Map ID	APNs	Existing Zoning	Proposed Zoning
32	81711073	MO	CI
33	81729027	CO	CN
34	81750081	R1 7,000	OS
35	81760024, 81760025, 81760028, 81760029, 81760030	RE 40,000	RDL 20,000
36	82506012, 82506013, 82506014, 82506015	RE 100,000	RDL 12,000
37	82506016	RE 100,000	RDM 7,000
38	82506017	RE 100,000	RDH 4,500
39	82506023, 82506024, 82506025	RE 100,000	RDL 12,000
40	82506026	RE 100,000	RAL 3,500
41	76419016, 76419017, 76419018, 76419019, 76419020, 76419021, 76419022, 76419023, 76419024	CO	CN
Notes:			
A. Parcel 72636059 includes two different zoning changes. The portions along Monterey Road and Madrone Parkway will be changed from existing zoning CG and R1 7,000 to MU-F Mixed Use Flex. The interior of the site will be changed from existing zoning R1 7,000 to RAL 3,500.			
B. Zoning on Parcels 72831014 and 72831016 will only be changed on the southerly portion of the parcels. The portion along Cochrane Road that is currently zoned PUD will remain PUD. The southerly half with existing zoning CO will be changed to CG.			

Exhibit C – Additional Planning Commission Recommendations

Recommendations Based on Community Feedback

1. **APN 817-05-041 (275 Tennant Avenue)**, which includes an existing multi-tenant professional office building, the Planning Commission recommends changing the Zoning District from the existing ML Light Industrial to the CG General Commercial Zoning District, consistent with the site's Commercial General Plan Land Use designation.



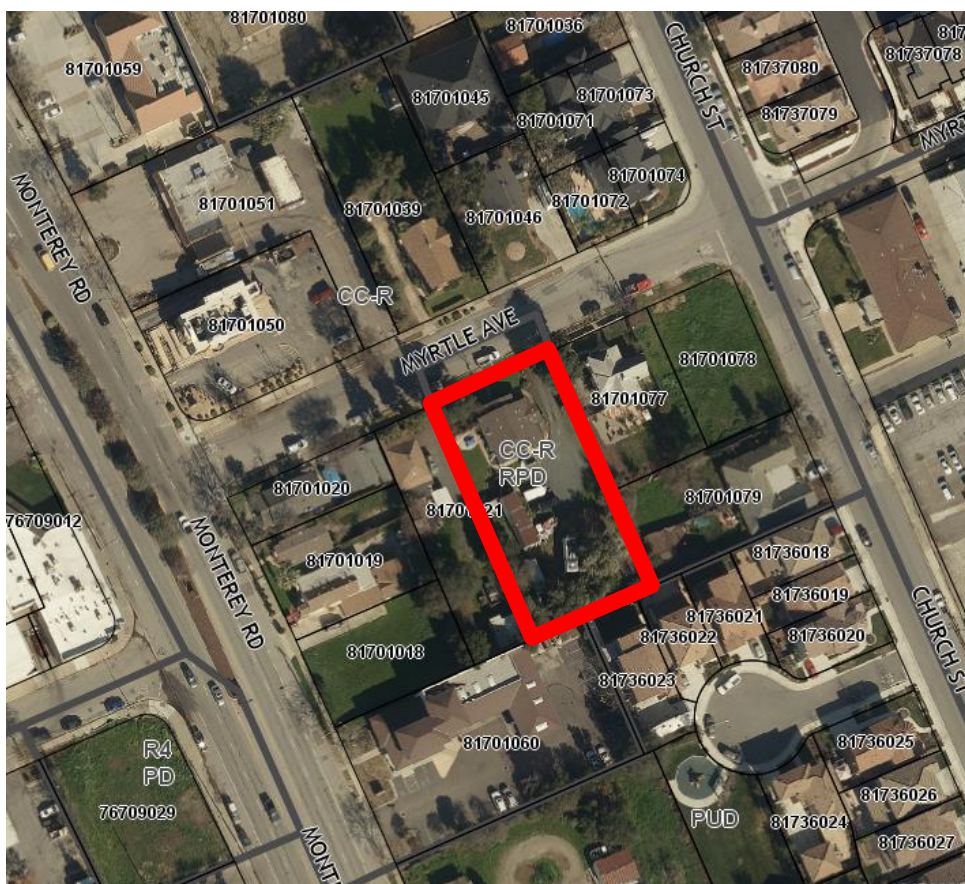
Resolution No. 18-XX
Page No. 9

2. <Insert Planning Commission recommendations in response to Morgan Hill Hotel Coalition comments>

3. **APN 767-08-025 (70 W. 5th Street)** is part of a larger area within the Downtown that had its General Plan Land Use designation changed as part of the Morgan Hill 2035 General Plan Update process from Residential Attached Medium to Residential Attached Low. The existing D-R3 Downtown Medium Density Zoning District that is applied to this property/area is not consistent with the Residential Attached Low General Plan designation. As such, the City is obligated to change the Zoning District to be consistent with the General Plan. In this case either the RAL 3,000 or RAL 3,500 Zoning District would be consistent. Staff and the Planning Commission recommend the existing D-R3 Zoning District be changed to the RAL 3,000 Zoning District.



4. **Section 18.108.070 Minor Exceptions.** Staff and the Planning Commission recommend adding minimum lot width to the list of permitted exceptions allowing up to a 10% reduction in required lot width for the purposes of facilitating the subdivision of an existing infill lot of record from one to two lots. Lot width would be removed from the list of excluded modifications.
5. **APN 726-33-027 (900 Lightpost Way).** <Insert recommendations>
6. **APN 817-01-022 (50 Myrtle Avenue).** Staff and Planning Commission support the removal of an existing Residential Planned Development (RPD) Overlay from the site leaving the underlying conventional MU-N Mixed Use Neighborhood Zoning District, which matches the MU-N Zoning District on the adjacent properties to the west (same property owner) and east (different property owners).



7. **Section 18.12.050 – Floor Area and Floor Area Ratio.** The Planning Commission supported not including front-facing covered porches that are 50 or less enclosed in the calculation of floor area to encourage front porches in residential developments.

8. **APN 817-60-024, -025, -028, -029, and -030 (East side of Nina Lane, south of San Pedro Avenue, west of Highway 101).** The Planning Commission supports rezoning this area from the existing RE 40,000 Zoning District to the RDL 20,000 Zoning District consistent with the site's Residential Detached Low (RDL) General Plan designation. The site could be rezoned to the RDL 12,000 Zoning District or remain zoned RE 1 (the equivalent of RE 40,000) and still be considered consistent with the RDL General Plan designation.



Other Recommendations

- A.
- B.
- C.

Chapter 18.24 – COMMERCIAL ZONING DISTRICTS

Sections:

18.24.010 – Purpose of the Commercial Zoning Districts

18.24.020 – Land Use Regulations

18.24.030 – Development Standards

18.24.010– Purpose of the Commercial Zoning Districts

► *Note: The existing Theme Unit Development and Administrative Office commercial zoning districts have been eliminated. The name of the existing Highway Commercial (HC) zoning district is changed to Highway Commercial (CH).*

A. General. The purpose of the commercial zoning districts is to provide locations for a variety of commercial uses to meet the need of residents, visitors, and workers in Morgan Hill. Development within the commercial zoning districts is attractively designed to enhance Morgan Hill's unique character and economic prosperity. Commercial uses are clustered and concentrated to utilize land resources efficiently and support a balanced transportation system. Employment uses accommodate a diversity of jobs that contribute to a dynamic local economy.

B. Specific.

1. **Administrative Office (CO).** The purpose of the CO zoning district is to provide an area wherein professional, general commercial offices, and limited personal services may develop in close relationship with each other outside of other commercial districts.

1.2. **Neighborhood Commercial (CN).** The purpose of the CN zoning district is to provide a location for retail, office, and service uses to serve residents living in surrounding neighborhoods.

2.3. **General Commercial (CG).** The purpose of the CG zoning district is to provide a location for a broad range of commercial and employment uses to serve Morgan Hill residents, workers, and visitors.

3.4. **Highway Commercial (CH).** The purpose of the CH zoning district is to provide areas adjacent to the freeway that can accommodate highway and tourist oriented uses, and uses and uses which require the high visibility of thoroughfare locations.

4.5. **Service Commercial (CS).** The purpose of the CS zoning district is to provide an area for commercial services that may be inappropriate in neighborhood or pedestrian-oriented shopping areas, and which generally require automotive access for customer convenience, servicing of vehicles or equipment, loading or unloading, or parking of commercial service vehicles.

18.24.020 – Land Use Regulations

► *Note: The following changes have been made to existing commercial zoning district land use regulations:*

CN zoning district: Allow small residential care facilities with CUP, allow cultural institutions with a CUP, allow schools with a CUP, allows social services with a CUP, allows banks and financial institutions by-right, allows business support services by-right, allows cinemas and theatres with a CUP, allows indoor commercial recreation with a CUP, allows bars and nightclubs with CUP, allows wine tasting with a CUP, allows vehicle washing with CUP, allows indoor vehicle sales with a CUP, allows reverse vending machines with CUP.

CG zoning district: Allow colleges and trade schools with CUP, allow community assembly with CUP, allow cultural institutions with a CUP, require AUP for day care centers, allow schools with a CUP, allows social services with a CUP, allows animal boarding and veterinarian clinics with a CUP, allows business support services by-right, allows cinemas and theatres with a CUP, allows bars and nightclubs with CUP, allows wine tasting with a CUP, allows funeral parlors with a CUP, allows home improvement centers with a CUP, allows plant nurseries with a CUP, allows large commodity retail with CUP, allows vehicle washing with CUP, allows parking lots and structures as a primary use with CUP, allows indoor vehicle sales with a CUP, allows reverse vending machines with CUP.

CH zoning district: Allow banks and financial institutions by-right, allows business support services by-right, allows vehicle rentals by-right, allows reverse vending machines with CUP.

CS zoning district: Allow social services with a CUP, allows business support services by-right, allows funeral parlors with a CUP, allows large commodity retail with CUP, allows towing and impound with a CUP, allows vehicle rentals by-right, allows vehicle washing with CUP, allows construction and material yards with a CUP. Allows research and development with a CUP, allows warehousing and distribution with a CUP, allows Freight/Truck Terminals and Warehouses with a CUP, allows reverse vending machines with CUP, allows recycling collection facilities with CUP.

A. Permitted Land Uses. Table 18.24-1 identifies land uses permitted in the commercial zoning districts.

TABLE 18.24-1 PERMITTED LAND USES IN THE COMMERCIAL ZONING DISTRICTS

Key	Zoning District					Additional Regulations
	CO	CN	CG	CH	CS	
P Permitted Use						
A Administrative Use Permit required						
C Conditional Use Permit required						
- Use not allowed						
Residential Uses						
Caretaker Quarters	-	-	C	-	C	
Nursing Homes and Long-Term Care	C	C	C	-	-	
Residential Care Facilities	-	C	-	-	-	

Key P Permitted Use A Administrative Use Permit required C Conditional Use Permit required - Use not allowed	Zoning District					Additional Regulations
	<u>CO</u>	CN	CG	CH	CS	
Public and Quasi-Public Uses						
Colleges and Trade Schools	=	C	C	-	-	
Community Assembly	<u>C</u>	C	C	-	-	
Cultural Institutions	<u>C</u>	C	C	-	<u>C-</u>	
Day Care Centers		C	A	-	C	
Government Offices		P	P	-	C	
<u>Instructional Services</u>	<u>P</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	
Medical Offices and Clinics	<u>P</u>	P	P	<u>A-</u>	C	
Schools, Public and Private	<u>C</u>	C	C	-	-	
Social Services	<u>C</u>	C	C	-	C	
Commercial Uses						
Animal-Related Uses						
Animal Boarding	=	C	C	-	C	
Veterinarian Clinics and Hospitals	=	<u>A</u> <u>C</u>	<u>A</u> <u>C</u>	<u>A-</u>	P	
Banks and Financial Institutions	<u>P</u>	P	P	P	P	
Business Support Services	<u>P</u>	P	P	P	P	
Cinemas and Theatres	=	<u>A</u> <u>C</u>	<u>A</u> <u>C</u>	<u>A-</u>	<u>A-</u>	
Commercial Recreation, Indoor						
≤ <u>153</u> ,000 sq. ft.	<u>C</u>	P	P	P	P	
> <u>153</u> ,000 sq. ft.	=	C	C	C	C	
Drive-Through and Drive-In Facilities	<u>C</u>	C	C	C	C	18.92.040
Eating and Drinking Uses						
Bars and Nightclubs	=	C	C	-	-	
Restaurants, Fast Food	=	C	P	P	C	
Restaurants, Sit-Down	=	C	P	P	C	
Tasting Rooms	=	C	A	P	<u>C-</u>	
Funeral Parlors and Mortuaries	=	-	C	-	C	
Lodging Facilities						
Hotels and Motels	=	<u>C-</u>	<u>A</u> <u>C</u>	P	<u>A</u> <u>C</u>	
Mini-Storage	=	-	C	-	C	
Personal Services	<u>P</u>	P	P	-	C	
Plant Nurseries	=	-	C	-	P	
Professional Offices	<u>P</u>	P	P	<u>P-</u>	<u>P</u> <u>C</u>	
Retail Uses						
Convenience Markets	=	C	C	C	C	

Key P Permitted Use A Administrative Use Permit required C Conditional Use Permit required – Use not allowed	Zoning District					Additional Regulations
	CO	CN	CG	CH	CS	
General Retail	=	P	P	P	C	
Home Improvement Centers	=	-	P	-	P	
Large Commodity Retail	=	-	C	-	C	
Vehicle-Related Uses						
Fuel and Service Stations	=	C	C	C	C	
Towing and Impound	=	-	-	-	C	
Vehicle Rentals	=	C [2]-	-C [2]	P	P	
Vehicle Repair and Maintenance, Minor	=	-	C	-	P	
Vehicle Sales and Leasing	=	C [1]	C [1]	P	P	
Vehicle Washing	=	C	C	C	C	
Wholesaling	=	-	C	-	P	
Industrial Uses						
Construction and Material Yards	=	-	-	-	C	
<u>Food and Beverage Production</u>						
<u>< 5,000 sq. ft. [3]</u>	=	A	A	A	A	
<u>5,000 sq. ft. to 10,000 sq. ft. [3]</u>	=	A	A	C	A	
<u>> 10,000 sq. ft.</u>	=	=	C	=	C	
Research and Development	=	-	-	-	C	
Warehousing and Distribution, Large and Small	=	-	-	-	C	
Transportation, Communication, and Utility Uses						
Freight Terminals and Transfer	=	-	-	C	-	
Light Fleet-Based Services	=	C	C	-	C	
Parking Lots and Structures	=	-	C	-	C	
Recycling Facilities						
Reverse Vending Machine	=	C	C	C	C	
Recycling Collection Facility	=	-	-	-	C	
Transportation Terminals		-	-	-	C	
Utilities, Major	=	-	C	-	C	
Wireless Communications Facilities		See Chapter 18.96				
Other Uses						
Accessory Uses		See Chapter 18.44				
Temporary Uses		See Section 18.92.140150				

Notes:

[1] Allowed only when conducted entirely within an enclosed building without outdoor storage and display of vehicles.

[2] Vehicles stored outdoors must be fully screened from public view.

[3] On-site wholesale or retail sales required.

- B. Additional Permits.** In addition to permits identified in Table 18.24-1, development projects in the commercial zoning districts may also require a Design Permit pursuant to Section 18.108.040 (Design Permits). ~~—~~ Modifications to a historic resource may require a Historic Alteration pursuant to Chapter 18.60 (Historic Resources).
- C. Outdoor Uses and Storage.** In the commercial zoning districts, all uses shall be conducted wholly within a completely enclosed building except as follows:
1. In the CS zoning district, outdoor storage associated with any permitted use is allowed with a Conditional Use Permit.
 2. In the CG zoning district, outdoor storage and display associated with a Home Improvement Center is allowed with a Conditional Use Permit.

18.24.030– Development Standards

- *Note: The following changes are made to existing development standards for the mixed use zoning districts:*
- All zoning districts: New residential transition standards, deletes minimum cul-de-sac lot width, increases street side setback to match front setback.*
- CN zoning district: Deletes minimum zoning district area, deletes limitation to one quadrant of an intersection.*

- A. General.** Table 18.24-2 identifies development standards that apply in the commercial zoning districts.

TABLE 18.24-2: DEVELOPMENT STANDARDS IN THE COMMERCIAL ZONING DISTRICTS

	CO	CN	CG	CH	CS	Additional Standards
Site Requirements						
Lot Area, Minimum	<u>6,000 sq. ft.</u>	10,000 sq. ft.	10,000 sq. ft.	20,000 sq. ft.	10,000 sq. ft.	
Lot Width, Minimum	<u>60 ft.</u>	100 ft.	100 ft.	70 ft.	100 ft.	
Lot Depth, Minimum	<u>100 ft.</u>	100 ft.	100 ft.	125 ft.	100 ft.	
Building Coverage, Maximum	<u>50%</u>	50%	50%	40%	50%	
Structure Requirements						
Setbacks, Minimum						18.56.030, 050 & 060
Front	<u>20 ft.</u>	25 ft.	25 ft.	40 ft.	25 ft.	
Rear	<u>20 ft.</u>	20 ft.	20 ft.	20 ft.	20 ft.	
Interior Side	<u>10 ft.</u>	0 ft.	0 ft.	0 ft.	0 ft.	
Street Side	<u>15 ft.</u>	15 ft.	15 ft.	<u>1520</u> ft.	<u>1525</u> ft.	
Height, Maximum	<u>3 stories or 30 ft., whichever is less</u>	2 ½ stories and or 30 ft., <u>whichever is less</u>	3 stories and or 35 ft., <u>whichever is less</u>	3 stories and or 35 ft., <u>whichever is less</u>	3 stories and or 35 ft., <u>whichever is less</u>	<u>18.24.030.B</u> ; 18.56.020

B. Hotel Height in the CH Zoning District.

1. With the issuance of a Design Permit, the Planning Commission may allow a hotel with a maximum height of up to 65 feet on parcels in the CH zoning district directly adjacent to Highway 101.
2. To approve the Design Permit, the Planning Commission must find that the project incorporates enhanced building design features that mitigate any adverse aesthetic impacts that may result from the increased building height.

B.C. Residential Transition Standards. Where a property zoned in a commercial zoning district abuts a residential zoning district, projects shall comply with increased setbacks, upper story stepbacks, and landscaping standards as specified in Section 18.92.130 (Residential Transition Standards).

Existing Zoning

Chapter 18.34 - CO ADMINISTRATIVE OFFICE DISTRICT

Sections:

18.34.010 - Purpose of district.

The CO administrative office district is intended to provide an area wherein professional, general commercial offices and limited personal services may develop in close relationship with each other outside of other commercial districts. Nothing in this chapter shall be construed to permit or encourage retail sales except as provided in this chapter.

(Ord. 559 § A (part), 1981)

18.34.020 - Permitted uses.

The following uses shall be permitted in the CO administrative office district:

- A. Computer and data processing services;
- B. Consumer credit reporting agencies;
- C. Detective and protective services;
- D. Educational services;
- E. Financial, insurance and real estate services;
- F. General offices for business and manufacturing firms;
- G. Health services, exclusive of hospitals;
- H. Legal services;
- I. Mailing, reproduction, commercial art, photography and stenographic services;
- J. Management, consulting and public relations services;
- K. Microfilm recording and developing services;
- L. Miscellaneous services;
- M. Personnel supply services;
- N. Photofinishing laboratories;
- O. Social services, except residential care;
- P. Travel agencies.

(Ord. 559 § A (part), 1981)

18.34.030 - Conditional uses.

The following uses may be conditionally allowed in the CO administrative office district, subject to issuance of a conditional use permit in accordance with Chapter 18.54 of this title:

- A. Commercial recreation;
- B. Hospitals;
- C. Drive-in establishments;

Existing Zoning

- D. Any other use which the planning commission finds will be similar in nature, operation and function to the permitted uses and conditional uses specified in this chapter for the CO zoning district.

(Ord. 1215 N.S. § 31, 1995; Ord. 1055 N.S. § C (part), 1991; Ord. 846 N.S. § 1 (part), 1987; Ord. 559 § A (part), 1981)

18.34.040 - Site development standards.

- A. The following site development standards shall apply in the CO administrative office district:
1. Minimum lot area, six thousand square feet;
 2. Minimum lot width, sixty feet;
 3. Minimum lot depth, one hundred feet;
 4. Maximum building coverage, fifty percent;
 5. Minimum setbacks:
 - a. Front, twenty feet,
 - b. Rear, twenty feet,
 - c. Side, ten feet;
 6. Maximum height, three stories or thirty-five feet.
- B. On any portion of a site in the CO district which abuts a lot in any residential zoning district, a solid wall or fence of six feet in height shall be constructed and maintained along the common lot line. The minimum interior yard shall be planted and maintained as a landscaped screen.
- C. All uses, whether permitted or conditional, shall be conducted in such a manner so as to avoid any nuisance, hazard or commonly recognized offensive condition or characteristic, as established by the performance standards of Chapter 18.48 of this title.
- D. Side Street Side Yard. A side yard along the side street lot line of a corner lot shall have a width of not less than fifteen feet or one-half the required depth of the front yard, whichever is greater.
- E. Cul-de-sac lot width, minimum of forty feet as measured along the front property line.

(Ord. 899 N.S. §§ 6 (part), 22 (part), 1989; Ord. 559 § A (part), 1981)

18.34.050 - Additional required conditions.

- A. Design permit approval by the community development director shall be required of all uses situated on sensitive sites, as defined in Chapter 18.74 of this title.
- B. Where any lot in the administrative office district abuts residentially zoned property, a twenty-five-foot minimum setback shall apply.

(Ord. 1495 N.S. § 18, 2001; Ord. 1111 N.S. § 21, 1992; Ord. 559 § A (part), 1981)

(Ord. No. 1935 N.S., § 4(Exh. B), 6-3-2009)

April 19, 2018

Via Email: John.Baty@MorganHill.ca.gov
– Original by Hand Delivery

Mr. John Baty, Principal Planner
City of Morgan Hill
Development Services Center
17575 Peak Avenue
Morgan Hill, CA 95037

Re: Our Client – The Morgan Hill Hotel Coalition, an Unincorporated Association
Reply to Zoning Code Update – Response to Comments
Morgan Hill Planning Commission – Meeting Date 04/10/2018 – Agenda Item No. 2

Dear Mr. Baty:

As you are aware, this law office represents the Morgan Hill Hotel Coalition, an unincorporated association (the “**Hotel Coalition**”). We have now had the opportunity to review Planning Staff’s response (the “**Staff Response**”) to the written comments previously submitted by this office on behalf of the Hotel Coalition, as well as Planning Staff’s responses to written comments that were individually submitted by some of the hoteliers concerning the Draft Final Zoning Code (the “**Proposed Zoning Scheme**”), which was circulated for comment by the City of Morgan Hill (the “**City**”) on March 7, 2018. We believe that the Staff Response is non-responsive, misleading, and incomplete, and, accordingly, needs to be corrected.

Following are specific examples of statements in the Staff Response which the Hotel Coalition may be incomplete or misleading; however, this is not intended to be a complete or exhaustive list of such mis-statements, and the Hotel Coalition expressly reserves the right to supplement this list with further comments to Staff Response should the Hotel Coalition, or any of its constituent members, deem it necessary or appropriate to do so in the future:

1. Item 2.b. of the Staff Response states, in pertinent part, as follows: “The following table compares current and proposed permitting requirements for hotel and motel uses in existing and proposed zoning districts.”

Discussion:

The table included in the Staff Response does not include all of the current commercial zoning districts. Most notably, the table fails to include the current CO (“Administrative Office”) District, which does not permit hotel use.

Mr. John Baty, Principal Planner
 City of Morgan Hill
 Development Services Center
 April 19, 2018
 Page 2

Necessary Correction: Please revise the table to include all currently available commercial zoning districts.

2. Item 2.b. of the Staff Response also states, in pertinent part, as follows:

“The Commercial/Industrial General Plan Land Use designations states specifically, “this designation would allow office, research, and development, light industrial uses, and similar uses, and would also allow amenities such as retail services, restaurants and lodging...”

Discussion (i):

The above purported reference to the General Plan is incomplete and misleading, because it relates to “Commercial/Industrial” properties, which makes it entirely irrelevant to a discussion of “Commercial” properties, and because the quotation entirely omits a portion of the statute which materially changes the purpose and meaning of the text.

The complete sentence, which was only partially quoted in the Staff Response appears on Page CNF-14 of the General Plan, and states, in pertinent part, is as follows:

“[NON-RESIDENTIAL DESIGNATIONS] * * * *[Image of LIGHT BLUE BAR denoting Commercial/Industrial color coding on the General Plan Land Use Map]* Commercial/Industrial. * * * “Specifically, this designation would allow office, research and development, light industrial uses, and similar uses, and would also allow amenities, such as retail services, restaurants, and lodging *to support the primary job-generating uses within business park settings.*” *(Emphasis Added)*

Discussion (ii):

The vast majority of public comments from hoteliers, including my own letter to you dated March 23, 2018, addressed issues arising from the proposed elimination of certain “Commercial” zoning districts, together with proposed changes in the permitted uses within certain “Commercial” zoning districts; however, the Staff Response to those comments instead (mis-)quotes a section

Mr. John Baty, Principal Planner
 City of Morgan Hill
 Development Services Center
 April 19, 2018
 Page 3

of the General Plan relating to “Commercial/Industrial” districts. Accordingly, the above described portion of the Staff Response is out of context, irrelevant, and entirely misleading. As cited in my letter to you dated March 23, 2018.

Accordingly, the relevant text from the City and Neighborhood Form/Land Use Element of the General Plan relating to “Commercial” properties (as opposed to “Commercial/Industrial” properties) is found on page CNF-13 of the General Plan, and states, in pertinent part, as follows:

“NON-RESIDENTIAL DESIGNATIONS [1] *[Image of RED BAR denoting Commercial color coding on the General Plan Land Use Map]* Commercial. * * * This designation is intended to allow a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers.”

Discussion (iii):

Even if the portion of the General Plan quoted above were relevant to the present discussion, which it is not, the fact that it mis-quoted the statute is of serious concern. Under the statutory language omitted by Planning Staff, the clear purpose of the General Plan provision was to allow ancillary, subordinate, retail, restaurant, and lodging uses that directly support a primary employer within the same commercial/industrial development. This type of limited accommodation of guest workers is, by its express terms, incompatible with hotel use and general tourism.

Necessary Correction:

Discussion of Commercial/Industrial General Plan designations under the City and Neighborhood Form/Land Use Element of the General Plan should be entirely deleted from the portion of the Staff Response which relates to comments from hoteliers and others which are relevant to proposed zoning districts applicable to “Commercial” land use designations in the City and Neighborhood Form/Land Use Element of the General Plan. Additionally, in order to avoid further confusion between “Commercial” and “Commercial/Industrial” land use designations in the General Plan, we suggest that staff

Mr. John Baty, Principal Planner
 City of Morgan Hill
 Development Services Center
 April 19, 2018
 Page 4

recommend that the City revert to the former General Plan designation of “Industrial” for these types of properties rather than the recently adopted name of “Commercial/Industrial”.

3. In an apparent attempt to demonstrate that certain elements of the General Plan may possibly be more encouraging of future hotel/motel development within the City than is the Neighborhood Form/Land Use Element of the General Plan, the Staff Response quotes the following provisions of the Economic Development Element of the General Plan ED-3.8, ED-4.9, and ED-4.11).

Discussion:

The language cited by Staff from the Economic Development Element of the General Plan concerning hospitality use within the City is clearly and unmistakably inconsistent with the text of the City and Neighborhood Form/Land Use Element of the General Plan, which does not contemplate hospitality uses in Commercial areas of the City, and, in Commercial/Industrial areas of the City, only permits limited lodging use, when specifically necessary and appurtenant to the employment needs of existing employers located within the same business park. Staff has therefore demonstrated that the Economic Development Element of the General Plan and the City and Neighborhood Form/Land Use Element of the General Plan are internally inconsistent. It is essential (and legally required) both that the various elements of the General Plan be consistent with each other¹ and that the Proposed Zoning Scheme be consistent with the General Plan².

¹ See Government Code Section 65300.5, which states as follows:

“In construing the provisions of this article, the Legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.”

² See Government Code Section 65300.5 (which was also cited in my letter to you dated March 23, 2018), which states, in pertinent part, as follows:

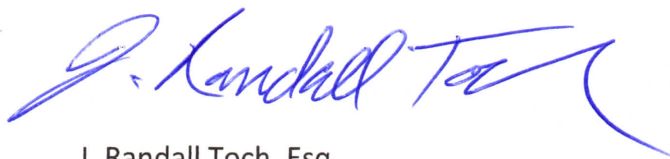
“(a) County or city zoning ordinances shall be consistent with the general plan of the county or city A zoning ordinance shall be consistent with a city or county general plan only if . . . (2) The various land uses authorized by the ordinance are compatible with the objectives, policies, general land uses, and programs specified in the plan.”

Mr. John Baty, Principal Planner
City of Morgan Hill
Development Services Center
April 19, 2018
Page 5

Necessary Correction: Staff should delete all references to inconsistent elements of the General Plan from the Staff Response and immediately convene community meetings and workshops to remedy the various deficiencies in the General Plan, which have been identified in the course of examining the proposed updates to the Zoning Scheme.

The Morgan Hill Hotel Coalition looks forward to working with Planning Staff and the Planning Commission to revise the General Plan and the Proposed Zoning Scheme in a manner consistent with California law and which is beneficial to all segments of our community. We trust that Planning Staff will issue a corrected Staff Response prior to the next meeting of the Planning Commission, and we look forward to meeting with staff and individual planning commissioners to discuss future amendments to the General Plan and the proposed Zoning Scheme that are both lawful and beneficial to our community as a whole.

Very truly yours,



J. Randall Toch, Esq.
Attorney for the Morgan Hill Hotel Coalition

cc: Client (Via Email)
Donald Larkin, Esq., City Attorney of City of Morgan Hill (Via Email)

Attachment: MH Hotel Coalition Reply to Staff Response to Comments (1739 : Zoning Code Update)

Zoning Code Update – Revised Initial Response to Comments

The following is an excerpt from the Initial Response to Comments document that was provided to the Planning Commission for the April 10, 2018 Planning Commission hearing. This excerpt includes revisions (shown in red underline text) in response to a request by the [Morgan Hill Hotel Coalition dated April 19, 2018](#).

See April 24, 2018 Planning Commission Staff Report for Responses to Comments.

2. [Morgan Hill Hotel Coalition](#) (J. Randall Toch)

2.a. [Budget Inn and Comfort Inn](#) (San K. Panwala)

2.b. [La Quinta Inn & Suites](#) (Andrew Firestone/Anna-Liza Anderson)

Where Hotels and Motels are Allowed (Existing / Proposed)

The following table compares current and proposed permitting requirements for hotel and motel uses in existing and proposed zoning districts. No change in permitting requirements are proposed for the MU-N Mixed Use Neighborhood, MU-F Mixed Use Flex, CN Neighborhood Commercial, and CH Highway Commercial Zoning Districts. In the CG General Commercial and CS Service Commercial Zoning Districts, the permitting requirement is proposed to change from a Conditional Use Permit (CUP) to an Administrative Use Permit (AUP). In the proposed new CI Commercial/Industrial Zoning District, hotels and motels are proposed to be permitted. In the SRL-A Sports Recreation & Leisure Zoning District, hotels and motels are proposed to no longer be allowable and in the SRL-B Sports Recreation & Leisure Zoning District, hotels and motels would require a CUP. The existing CO Administrative Office Zoning District is proposed to be eliminated. If the CO District is re-introduced/retained in the proposed Zoning Code, staff proposes that hotels and motels not be permitted uses.

Zoning Code Update – Response to Comments

Hotels and Motels

Existing / Proposed Zoning District	Existing Permitting	Proposed Permitting
CC-R / MU-N	C*	C
CL-R / MU-F	C	C
<u>CO / n/a</u>	<u>C*</u>	<u>n/a</u>
CN / CN	C*	C
CG / CG	C	A
HC / CH	P	P
CS / CS	C	A
n/a / CI	n/a	P
SRL-A / SRL-A	C*	-
SRL-B / SRL-B	<u>C</u>	C

“-” = Not permitted. “P” = Permitted. “A” Administrative Use Permit. “C” Conditional Use Permit.

“n/a” = does not exist in current or proposed Zoning Code.

“C*” In existing zoning districts where hotels and motels are not specifically listed as permitted or conditional uses (CC-R, CO, CN, SRL-A) the existing Zoning Code gives the Planning Commission the discretion, with the issuance a Conditional Use Permit (CUP), to allow any other use which the Planning Commission finds to be of a similar nature to the permitted and conditional uses specified for a particular zoning district.

AUP decisions are appealable to Planning Commission

CUP decisions are appealable to City Council.

General Plan Consistency

To support business and leisure travelers, the General Plan includes several policies to accommodate a variety of locations for new lodging opportunities.

The Commercial/Industrial General Plan Land Use designations states specifically, “this designation would allow office, research and development, light industrial uses, and similar uses, and would also allow amenities, such as retail services, restaurants, and **lodging** to support the primary job-generating uses within business park settings. In order to maintain an industrial character, small, suburban strip centers are discouraged in this designation, although larger big-box type developments may be allowed because they mix elements of retail commercial and warehouse forms and uses. This designation allows a maximum FAR of 0.5 for commercial uses and a maximum FAR of 0.6 for industrial uses.”

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Policy CNF-18.1 Vibrant Job Centers. Encourage land with a Commercial/Industrial designation to develop with job-generating uses with amenities that support workers and businesses, such as restaurants, lodging, fitness centers, and hair salons.

Policy ED-3.8 Dynamic Working Environments. Allow amenities, such as retail, services, restaurants, and lodging, as ancillary uses to support the primary job-generating uses within business park settings to create dynamic working environments.

Policy ED-4.9 Overnight Accommodations. Support the construction of a full range of new lodging facilities to build the local tourism industry, enhancing the City's position as a hub for wine tourism and for visitors attracted to the City's sports facilities.

Policy ED-4.11 Tourism Support Services. Actively promote development of tourist-oriented commercial, industrial, and recreational uses and facilities, including such uses as lodging, meeting and conference centers, outdoor restaurants, wine and beer tasting, and farmers' markets.

The General Plan Land Use Map designates the general distribution of basic land uses, including housing, business, industry, open space, and public facilities within the City's planning area. The General Plan Land Use designations are implemented (carried out on a day-to-day basis) by the specific rules (e.g., allowed uses, permitting requirements, development standards, etc.) established for each zoning district in the City's Zoning Code.

17380 Ringel Drive
Morgan Hill, CA 95037

April 19, 2018

The Planning Commission

Re: Proposed Zoning Code; 24-5, Hotel Height in the CH Zoning District

Dear Planning Commission:

I see that the City's proposed zoning code states that the Planning Commission may allow a hotel with a maximum height up to 65 feet on parcels in the CH zoning district directly adjacent to Highway 101. I am asking that the height limitation be limited to 50 feet.

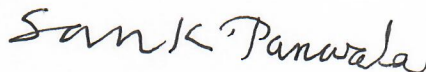
First, fifty feet allows any developer to easily build a four-story hotel. More than fifty feet isn't necessary and will create an eyesore. Although there is need to build up for residences, the same is not true for hotels.

Second, allowing developers to build new hotels to a height of 65 feet provides an unfair advantage given that established hotels were limited to a much lower height when they were built.

When I built the Comfort Inn on Condit Road next to Highway 101 in 2000, the City limited it to three stories and 35 feet. We only have 54 rooms. Essentially, developers may now build hotels under the proposed zoning code to almost twice our height, and have twice as many rooms on the same amount of land. This provides a huge competitive advantage because any new hotel would be able to generate nearly twice as much in revenue with the same investment in land. We will not be able to compete financially.

I have been a member of this community for forty years and employ an average of 15 people at the Comfort Inn. I am asking you to consider these factors in deciding the height restriction listed in 18.24.030. Thank you.

Yours,



San K. Panwala

Attachment: Letter from San Panwala (1739 : Zoning Code Update)