

ATTACHMENT E – NOTICE OF INTENT

**ORDER WQ 2014-0174-DWQ
GENERAL PERMIT NO. CAG990002**

**STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND
STRUCTURES TO WATERS OF THE UNITED STATES**

I. NOTICE OF INTENT STATUS (See Instructions)

MARK ONLY ONE ITEM	1. <input checked="" type="checkbox"/> New Discharger	2. <input type="checkbox"/> Existing Discharger
	3. <input type="checkbox"/> Change of Information: WDID # _____	
	4. <input type="checkbox"/> Change of ownership or responsibility: WDID# _____	

II. OWNER/OPERATOR (If additional owners/operators are involved, provide the information in a supplemental page.)

A. Name Santa Clara Valley Transportation Authority		Owner/Operator Type (Check One)		
		1. <input type="checkbox"/> City	2. <input type="checkbox"/> County	3. <input type="checkbox"/> State
		4. <input checked="" type="checkbox"/> Gov. Combo	5. <input type="checkbox"/> Private	
B. Mailing Address 3331 N 1st Street				
C. City San Jose	D. County Santa Clara	E. State CA	F. Zip Code 95134	
G. Contact Person Tracy Casimiro	H. Title Environmental Health and Safety Supervisor	I. Phone (408) 321-5969		
J. Email Address tracy.casimiro@vta.org				

Additional Owners _____

III. BILLING ADDRESS (Enter information only if different from II. above)

Send to: <input type="checkbox"/> Owner/Operator <input type="checkbox"/> Other	A. Name	B. Title		
	C. Mailing Address			
D. City	E. County	F. State	G. Zip Code	

IV. RECEIVING WATER INFORMATION

<p>A. Attach a project map(s) that shows (1) the service area within the a specific Regional Water Board boundary and maps of(2) the corresponding major surface water(s) bodies and watersheds to which utility vault or underground structure water may be discharged. Map features must also include ASBS boundaries, MS4 discharge points to the ASBS, and major roadways. See attached.</p>
<p>B. Regional Water Quality Control Board(s) where discharge sites are located List the Water Board Regions where discharge of wastewater is proposed, i.e. Region(s) 1, 2, 3, 4, 5, 6, 7, 8, or 9: Region 2</p>

V. LAND DISPOSAL/RECLAMATION

The State Water Resources Control Board's water rights authority encourages the disposal of wastewater on land or re-use of wastewater where practical. You must evaluate and rule out this alternative prior to any discharge to surface water under this Order.

Is land disposal/reclamation feasible for all sites? Yes No

Is land disposal/reclamation applicable to a portion of the total number of sites? Yes No

If **Yes** to one or both questions, you should contact the Regional Water Board. This Order does not apply if there is no discharge to surface waters. If **No** to either or both questions, explain:

VI. VERIFICATION

Have you contacted the appropriate Regional Water Board or verified in accordance with the appropriate Basin Plan that the proposed discharge will not violate prohibitions or orders of that Regional Water Board? Yes No

VII. TYPE OF UTILITY VAULT OR UNDERGROUND STRUCTURE (Check All That Apply)

Electric Natural Gas Telecommunications Other: _____

VIII. POLLUTION PREVENTION PLAN CONTACT INFORMATION

Each Discharger is required to provide a copy of their PLAN with their completed NOI. The PLAN requirements are provided in Section VII.C.3 of the Order. In the space below, provide the contact information for the person responsible for the development of the PLAN.

A. Company Name Santa Clara Valley Transportation Authority		B. Contact Person Tracy Casimiro	
C. Street Address Where PLAN is Located 3331 N. 1st Street		D. Title of Contact Person Environmental Health and Safety Supervisor	
E. City San Jose	F. County Santa Clara	G. State CA	H. Zip Code 95134
I. Phone (408) 321-5969		J. Email Address tracy.casimiro@vta.org	

IX. DESCRIPTION OF DISCHARGE(S)

Describe the discharge(s) proposed. List any potential pollutants in the discharge. Attach additional sheets if needed.

The discharge is from water that collects in electrical substructures that serve VTA's at-grade light rail lines. Potential pollutants include suspended solids, oil, and grease carried by stormwater/irrigation water runoff infiltrating the structure.

The discharge locations from vaults are directed into ballasted track ways along the light rail right-of-ways. Dewatering in the ballasted tracks has been determined as a BMP to discharge into a pervious surface that is erosion resistant. At vault locations where track is not ballasted or on city streets, only water that has been visually determined as clean is allowed to be discharged into city storm drains.

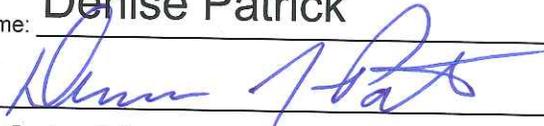
X. REMINDERS

- A. Have you included service territory/watershed map(s) with this submittal? Yes No
Separate maps must be submitted for each Regional Water Board where a proposed discharge will occur.
- B. Have you included payment of the filing fee (for first-time enrollees only) with this submittal? Yes No N/A
- C. Have you included your PLAN? Yes No

XI. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."

A. Printed Name: Denise Patrick

B. Signature: 

C. Date: 11/7/2016

D. Title: Safety Manager

PLEASE SUBMIT THE NOI, FIRST ANNUAL FEE, PLAN, AND MAP
TO THE FOLLOWING ADDRESS:

UTILITY VAULTS NOI
NPDES UNIT
DIVISION OF WATER QUALITY
STATE WATER RESOURCES CONTROL BOARD
P.O. BOX 100
SACRAMENTO, CA 95812-0100

STATE USE ONLY

WDID:	Regional Board Office	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:	

**INSTRUCTIONS FOR COMPLETING A NOTICE OF INTENT
ORDER WQ 2014-0174-DWQ
GENERAL PERMIT NO. CAG990002**

**STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND
STRUCTURES TO WATERS OF THE UNITED STATES**

These instructions are intended to help you, the Discharger, complete the NOI form for General Permit No. CAG990002. **Please print clearly or type when completing the NOI form and service territory/watershed map(s). Illegible applications will not be processed.** For any field, if more space is needed, submit a supplementary page or letter with the NOI.

Send the completed and signed form, filing fee, PLAN, supporting documentation, and map(s) to the State Water Resources Control Board (State Water Board). Submit one permit application to cover all discharges within the boundaries of a Regional Water Quality Control Board (Regional Water Board). If the proposed discharges occur in more than one Water Board Region, submit a permit application for each Regional Water Board where a discharge will occur. Only one annual fee is required.

If the requirements in this Order conflict with the requirements of the Homeland Security Act and any other federal law that pertains to security in the United States, the Homeland Security Act and any other federal law that pertains to security in the United States shall take precedence. However, the Discharger must provide justification, including appropriate statutory citations, to the Regional Water Board regarding redacted information within any submittal. Coverage under this General Permit may be unavailable if nonredacted information is insufficient to demonstrate eligibility and compliance.

Section I – Notice of Intent Status

Indicate whether this request is for first time coverage, re-enrollment, or a change of information for a utility already covered under this Order. For a change of information or ownership, please supply the eleven-digit Waste Discharge Identification (WDID) number for the utility.

Section II – Owner/Operator

- A. Name** – Enter the name of the owner/operator. Check the appropriate box for which type of agency best describes the owner/operator. "Gov. Combo." is an abbreviation for "Government Combination" for a joint powers agency created by two or more government agencies. Private businesses should check the "Private" box.
- B. Mailing Address** – Enter the street number and name where correspondence should be sent (P.O. Box is acceptable).
- C. City** – Enter the city that applies to the mailing address given.
- D. County** – Enter the county that applies to the mailing address given.
- E. State** – Enter the state that applies to the mailing address given.

- F. **Zip Code** – Enter the zip code that applies to the mailing address given.
 - G. **Contact Person** – Enter the name (first and last) of the contact person.
 - H. **Title** – Enter the contact person's title.
 - I. **Telephone** – Enter the daytime telephone number of the contact person.
 - J. **Email Address** – Enter the email address of the contact person.
- Additional Owners** - Please check this box if there is more than one owner/operator and provide the requested information.

Section III – Billing Address

Send To: - Check the appropriate box and enter the information **only** if it is different from section II. above.

Name – Enter the name (first and last) of the person who will be responsible for the billing.

A. Title – Enter the title of the person responsible for the billing.

B. Mailing Address – Enter the street number and name where the billing should be sent (P.O. Box is acceptable).

C. City – Enter the city that applies to the billing address.

D. County – Enter the county that applies to the billing address.

E. State – Enter the state that applies to the billing address.

F. Zip Code – Enter the zip code that applies to the billing address.

Section IV – Receiving Water Information

- A. Attach a project map(s) that shows (1) the service area within the specific Regional Water Board boundary and maps of (2) the corresponding major surface water(s) bodies and watersheds to which utility vault or underground structure water may be discharged. Map features must also include ASBS boundaries, MS4 discharge points to the ASBS, and major roadways. Submit separate map(s) for each Regional Water Board where a discharge is proposed. If applying for coverage in the Central Valley Region, send two additional copies of the required map and if applying for coverage under Lahontan Region, send one additional copy of the required map.
- B. List all Regional Water Board numbers where utility vault discharges are proposed. Regional Water Board boundaries are defined in section 13200 of the California Water Code. The boundaries can also be found on our website at http://www.waterboards.ca.gov/waterboards_map.shtml.

C. The numbers with corresponding Regional Water Board names are shown below:

Regional Water Board Number	Regional Water Board Name
1	North Coast
2	San Francisco Bay
3	Central Coast
4	Los Angeles
5	Central Valley (Includes Sacramento, Fresno, and Redding Offices)
6	Lahontan (Includes South Lake Tahoe and Victorville Offices)
7	Colorado River Basin
8	Santa Ana
9	San Diego

Section V – Land Disposal/Reclamation

Check “YES” if land disposal and/or reclamation is/are feasible. If you check “YES,” contact the appropriate Regional Water Board. Your discharge may not be covered under the NPDES Program. If you checked “NO,” explain in the space provided the reason why these alternatives are not feasible.

Section VI – Verification

Indicate by checking “YES” or “NO” whether verification has been done to determine if the discharge(s) are in compliance with prohibitions or orders of the Regional Water Board.

Section VII – Type

Check the appropriate box(s) to indicate the type of utility for which you are seeking coverage.

Section VIII – Pollution Prevention Plan (PLAN) Contact Information

Each Discharger is required to provide a copy of their PLAN with their completed NOI. The PLAN requirements are provided in section VII.C.3 of the Order. The following contact information must be provided for the person responsible for the development of the PLAN.

- A. **Company Name** – Enter the legal name of the company applying for coverage.
- B. **Contact Person** – List the company contact person responsible for preparation and implementation of the PLAN.
- C. **Street Address Where the PLAN is Located** - Indicate the street number and name where you will keep the PLAN for reference and review by personnel.
- D. **Title of Contact Person** – Enter the official company title of the contact person.
- E. **City** – Enter the city where the PLAN will be kept.
- F. **County** – Enter the county where the PLAN will be kept.

- G. **State** – Enter the state where the PLAN will be kept.
- H. **Zip Code** – Enter the city zip code where the PLAN will be kept.
- I. **Telephone** – Enter the daytime telephone number of the contact person.
- J. **Email Address** – Enter the email address of the contact person.

Section IX- Description of Discharge

Describe the types of operations that occur and potential pollutants that may be found in the discharge.

Section X – Reminders

- A. If you have included service territory/watershed map(s) with your NOI submittal, check the “YES” box. If not included, check “NO.” **NOTE: Map(s) of the proposed service territory to be covered must be received before you can obtain coverage under this Order.** Submit separate service territory/watershed map(s) for each Regional Water Board where a discharge is proposed. If applying for coverage in the Central Valley Region, send two additional copies of the required map and if applying for coverage under Lahontan Region, send one additional copy of the required map.

The map showing the service area within a specific Regional Water Board boundary and, showing the corresponding major surface water bodies and watersheds to which vault water may be discharged. Map features must also include service territory boundaries, Regional Water Board boundary, ASBS boundaries, MS4 discharge points to the ASBS, and major roadways.

- B. Check “YES” if you have included the annual fee with your submittal. Check “NO” if you have not included payment. **NOTE: Payment of this fee must be received before you can obtain coverage under this Order.** Existing dischargers will be invoiced on their existing schedule and do not need to submit a fee with the initial renewal application. You will be invoiced annually and payment is required to continue coverage.
- C. Check “YES” if you have included the PLAN. Otherwise, check “NO.” **NOTE: You must submit the PLAN to the State Water Board and appropriate Regional Water Board(s) to obtain coverage under this Order.**

Section XI – Certification

All NOIs shall be signed and certified as follows:

For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated

facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.

For a municipality, State, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA).

- A. Printed Name** – Print your name legibly. The person responsible (in accordance with the signatory requirements described above and in section V.B of the Standard Provisions (Attachment B)) must fill out this section.
- B. Signature** – Provide a signature of name printed above.
- C. Date** – Indicate the date signed.
- D. Title** – Include the professional title of the person signing the NOI.



Santa Clara Valley Transportation Authority

Pollution Prevention Plan for Vault Water Discharges

Compliance Plan for California State Water Resources Control Board
General National Pollutant Discharge Elimination System Permit for
Discharges from Utility Vaults and Underground Structures to Waters of the
United States

Order 2014-0174-DWQ

General Permit No. CAG990002

Regional Water Quality Control Board 2, San Francisco Bay Area

August 2016

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Signature

11/2/16

Date

Rufus Francis, Director Systems Safety and Security

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1.0 Introduction

This Plan describes the approach of Santa Clara Valley Transportation Authority (VTA) will take for compliance with the requirements of State Water Resource Control Board (SWRCB) Order No. 2014-0174-DWQ. This Plan includes procedures for evaluating potential pollutant sources and conditions at a vault or underground structure (and the discharge path to the nearest storm drain or surface water) and prescribes the appropriate measures that will be implemented to prevent or control the discharge of pollutants.

VTA currently operates **four light rail lines** at grades that utilize electrical power conveyed through underground conduits and vaults and overhead catenary lines. These rail lines are shown in Appendix A and is also attached to the NOI. None of these lines discharge to an Area of Special Biological Significance (ASBS).

2.0 Pollution Prevention

2.1 Pollution Prevention Team

The individuals listed below serve as members of the Pollution Prevention Team, and will be responsible for assisting in implementation of this Plan, conducting annual evaluations, and revisions to the Plan.

Program Owner: System, Safety and Security Department

Program Manager: EHS Supervisor for the Plan's management, updates, training, and annual compliance sampling

Copies of this Plan will be kept at the following locations:

- Environmental Health and Safety at 3331 N 1st St, San Jose, CA 95134

2.2 Identification of Potential Pollutant Source

Electrical vaults are generally not a source of water. Water may collect in vaults due to infiltration of storm water runoff, irrigation runoff, and/or groundwater. Due to these differing water sources, a variety of pollutants could potentially be found in the water. Examples are listed below.

- Suspended Solids
 - Dirt, mud, debris, typically from storm water runoff or over irrigation
- Motor vehicle fluids such as motor oil, gasoline and diesel
 - Runoff from roads, carried by storm water
- Lubricants, oils, rust, paints
 - Sources may include surface pollutants from industrial uses, but may also originate from equipment installed in vaults
- Sewage and illegal dumping intrusion

- Sources may include failed piping in sewage systems or sewage spills, or illegal dumping

2.3 Pollution Control Measures

VTA has developed Best Management Practices (BMPs) appropriate for vault water discharge operations to reduce or eliminate potential pollutants described above. BMPs include:

- Maintain areas surrounding the utility vault and underground structure so that they are kept clean and orderly prior to dewatering activities so as to minimize the presence of pollutants in discharges.
- Prior to dewatering a utility vault or underground structure, when feasible and safe, clear sediment and debris from the areas between the vault and the storm drain catch basin.
- Use an absorbent material (e.g., absorbent pads, rags) on the water surface or utility vault or underground structure water surface prior to dewatering and discharge when oil sheen has been observed.

To minimize the introduction of pollutants and protect receiving water quality, the following provisions and procedures will be implemented during the discharge from utility vaults. Best practices used to control erosion and minimize the discharge of sediment include, but are not limited to, the following:

- When feasible and safe, sweep/clear the area surrounding the discharge point to prevent washing sediment and debris into storm drains
- If discharging to unpaved surfaces, use erosion control materials to reduce erosion
- Use a filter sock or bag to reduce oil and sediment discharge

2.4 Procedures for Discharges from Utility Vaults and Underground Structures and Use of Best Management Practices

VTA has developed a series of processes for personnel assessing water quality and pumping vaults prior to discharge. This process allows trained personnel to make a preliminary determination of the quality of water to be disposed, and indicate which pollution control measures should be used when discharging the water. The procedures include visual inspection for evidence of, or the potential for, pollutants to be present in the discharge. This process is included as Appendix B. Key concepts are as follows:

- Preparing the site
- Visual determination of water
- Removing oil and water from underground structures
- If a vacuum tanker is required

Discharge locations from vaults are directed in ballasted track ways along the light rail right-of-ways. Dewatering in the ballasted tracks has been determined as a BMP to discharge into a pervious surface that is erosion resistant. At vault locations where track

is not ballasted or on city streets, water will be visually inspected prior to discharge into city storm drains.

During evacuation of vaults during emergency situations, the same procedures will be followed. Any deviation from the procedures during emergency situations will be documented in the Annual Report.

3.0 Employee Training

VTA has developed a training program to ensure that all personnel responsible for implementing the procedures and BMPs identified in the Plan are properly trained. The training addresses topics such as:

- Good housekeeping
- Pollution control procedures
- Material management practices
- Evaluation of the quality of the water prior to a non-emergency discharge from a utility vault or underground structure
- Dewatering procedures
- Environmental Health and Safety (EH&S) contact information
- Spill response
- Discussion of number of vaults evacuated since the last training and any issues

Training of staff will take place annually from 2016 till the expiration of General Permit No. CAG990002, unless an Annual Plan Evaluation finds additional training is needed.

4.0 Annual Plan Evaluation and Revision

VTA will conduct an overall evaluation of the effectiveness of this Plan, training, and BMPs to control discharge of pollutants during a discharge event, and revise or replace this Plan as necessary to address procedures and BMPs found to not be effective in minimizing the discharge of pollutants.

The evaluation will use results of the annual monitoring at the five representative sites to compare against Numeric Action Levels (NALs) listed in Table 1 below. If a parameter is exceeded, VTA will evaluate the potential cause(s) of the NAL exceedance(s). This evaluation will include an assessment of potential source(s) of the pollutant and whether the procedures and BMPs contained in the Plan need to be revised to address the identified source(s) in future discharges. Additional NALs may be added in the future based on the results of the Discharge Characterization Study.

Table 1. Numeric Action Levels for Pollutants of Concern

Parameter	Units	Numeric Action Levels	
		Minimum Daily	Maximum Daily
Oil and Grease	mg/L	---	25
pH	Standard Units	6.0	9.0
Total Petroleum Hydrocarbons-Diesel Range Organics	mg/L	---	2
Total Petroleum Hydrocarbons-Gasoline Range Organics	µg/L	---	5
Total Suspended Solids	mg/L	---	400

If the Plan revisions are necessary, VTA will revise the Plan and implement revised/additional BMPs, and document the progress of their implementation and effectiveness in the Annual Report. If the Annual Plan Evaluation determines the cause(s) of an NAL exceedance was beyond VTA's control and not a result of inadequate Plan implementation, procedures or BMPs, then revisions to the Plan are not required. If this is the case, VTA will provide explanation detailing when this situation occurs in the Annual Report. VTA will provide the results of the Annual Plan Evaluation and any revisions to the Plan in the Annual Report.

5.0 Other Special Provisions

VTA will dispose of solids removed from liquid wastes in accordance with applicable federal, state and local laws, regulations, and ordinances.

If VTA determines that its utility vault or underground structure is causing or contributing to vector problems, it will coordinate with a vector control agency to address the problem.

If VTA is required to submit a Self-Monitoring Report (SMR) and monitors any pollutant more frequently than required by 2014-0174-DWQ, the results of this monitoring will be included in the calculation and reporting of the data submitted in the SMR or sludge reporting form specified by the State Water Board.

6.0 Annual Reports

VTA will submit an Annual Report (for the period from May 1 through April 30) no later than June 1st of each year. Annual Reports will be addressed to the Regional Water Board Executive Officer and contain, at a minimum, the following information:

1. An executive summary that includes a discussion of compliance and/or violation(s) of 2014-0174-DWQ and an evaluation of the Plan
2. A summary of monitoring data generated
3. A summary of relevant field observations

4. A map showing the location of each annual sampling discharge location
5. A list of all annual sampling discharge locations with location information (i.e., City/County and street address and/or latitude/longitude), the date when each discharge was sampled, and the estimated volume of utility vault water discharged
6. A description of the sample collection, sample analysis, and quality control procedures
7. Tabulated sampling results indicating the monitored discharge location, collection date, name of constituent/parameter and its concentration detected, minimum detection levels and method detection limits for each constituent analysis, and a comparison with numeric action levels
8. An estimate of the volume of each discharge from a utility vault or underground structure in gallons, and include methods and assumptions used to calculate the estimate

The cover letter to the Annual Report will report violations of the permit, exceedances of the NALs, discuss corrective actions taken or planned, and provide a time schedule for corrective actions, if necessary.

7.0 General Monitoring Requirements

VTA will identify at least five representative utility vaults or underground structures per year for the annual routine pollutant monitoring for parameters in Table 2. If there are less than five discharges in a given year, every effort will be made to sample each discharge event.

Depending on where the vault water typically accumulates, VTA will select vaults within a range of surrounding land use types (industrial, commercial, and residential areas) to represent a cross section of typical vault discharges. Samples will be collected at the point of discharge from the utility vault following the implementation vault dewatering procedures and applying BMPs. Samples and measurements will be representative of the volume and nature of the monitored discharge.

If VTA monitors any pollutant more frequently than required by this Order approved under 40 CFR part 136, or as specified in this Order or by the State Water Boards, the results of the monitoring will be included in VTA's Annual Report.

Table 2. Annual Discharge Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Petroleum Hydrocarbons - Diesel Range Organics	µg/L	Grab	1/Year	Per 40 CFR part 136
Total Petroleum Hydrocarbons - Gasoline Range Organics	µg/L	Grab	1/Year	Per 40 CFR part 136
Oil and Grease	mg/L	Grab	1/Year	Per 40 CFR part 136
pH	Standard Units	Grab	1/Year	Per 40 CFR part 136
Total Suspended Solids	mg/L	Grab	1/Year	Per 40 CFR part 136

The five sampling points selected are shown in Table 3. These vaults were selected as a representative sample because they typically have water in them. The sampling points have been mapped in Appendix C.

Table 3. Vault Sampling Points

Sample	Name	Location	Latitude	Longitude
1	Sub 4 Brokaw	Near intersection of E. Brokaw Rd. and 1st Street	37.372638	-121.917713
2	Sub 11 at Levi's	Great America LRT platform and by Levi's Stadium	37.403567	-121.973531
3	Fair Oaks LRT Platform	Fair Oaks LRT Platform	37.402851	-122.00991
4	74 Java Drive	Vault 74 On Java Dr. between Geneva Dr. and Crossman Ave	37.409322	-122.011483
5	Sub 2 1st Tasman	Near intersection of First St. and W Tasman Dr.	37.408842	-121.944141

7.1 Sampling

7.1.1 Sample Collection Procedures

Samples will be collected, maintained and shipped in accordance with the requirements in the following section. To maintain sample integrity and prevent cross-contamination, sample collection personnel will follow the protocols below and in Appendix E.

- Collect samples for laboratory analysis only in analytical laboratory-provided sample containers
- Wear clean, powder-free nitrile gloves when collecting samples
- Change gloves whenever something not known to be clean has been touched
- Dispose of gloves after filling bottles at a given location

All sampling equipment to be reused will be washed with a phosphate-free soap, and rinsed with distilled water. If the equipment is not reused right away, it will be wrapped in foil. The wash and rinse water will be collected and disposed of in the sanitary sewer.

Other sampling protocols to be followed:

- Any laboratory provided sample container will be discarded if exposed to a contaminant
- Smoking will not take place during sampling
- All non-necessary vehicle engines will be shut off during sampling
- No eating or drinking during sampling
- Prior to the collection of the first sample of the day, the pH meter will be calibrated using manufacturer's instructions, using 3-point calibration solutions no older than one year

For pumped samples, all necessary BMPs will be in place, and the pumped water will be collected in sterile, laboratory grade amber glass bottles. Laboratory-supplied sample bottles will be used if no preservatives required. Sample bottles will be filled in the following order:

- Volatiles
- Semi-volatiles (including O&G, pesticides and dioxins)
- Metals
- Suspended Solids
- Any other analyses
- Extra volume collected for a field pH measurement

Extra care will be taken to avoid overfilling any bottles containing preservative.

7.1.2 Sample Handling

- As the sample bottles are filled, the bottle will be properly labeled with the lab-provided labels
- If necessary, bubble wrapped bags will be used to protect bottles from breakage during transit
- Sample containers will be placed into an ice chilled cooler
- Sampling Forms will be filled out completely
- The sample will be recorded on the Chain of Custody (COC) from Accutest

- The COC will be kept in a plastic bag in the cooler with the samples, and the sampler will stay with the cooler until relinquishing to laboratory staff or courier

All samples for laboratory analysis must be maintained between 32-42.8 °F (0-6 °C) during delivery to the laboratory. Samples must be kept on ice from sample collection through delivery to the laboratory. If the samples are shipped to a laboratory, custody seals will be placed on the cooler.

7.1.3 Sample Documentation Procedures

All original data documented on sample bottle identification labels, sampling form, and COCs will be recorded using waterproof ink. If an error is made on a document, sampling personnel will make corrections by drawing a line through the error, initialing and dating, and entering the correct information. The erroneous information will not be obliterated.

Sample documentation procedures include the following:

- **Sample Bottle Identification Labels:** Sampling personnel will attach an identification label to each sample bottle. Sample identification will uniquely identify each sample location.
- **Field Sampling Form:** Sampling personnel will complete the Sampling Form for each sampling location, as appropriate.
- **Chain of Custody:** Sampling personnel will complete the COC for each sampling event for which samples are collected for laboratory analysis. The sampler will sign the COC when the samples are turned over to laboratory staff or courier. (Refer to Appendix F)

7.1.4 Quality Assurance and Quality Control

A Quality Assurance and Quality Control (QA/QC) plan will be implemented to ensure that analytical data can be used with confidence. QA/QC procedures to be initiated include the following:

- Field forms
- Clean sampling techniques
- COCs
- Collection of QA/QC Samples

Field Forms

The purpose of field forms is to record sampling information and field observations form information to be included in the field log include the date and time of water quality sample collection, sampling personnel, sample identification, and types of samples that were collected. Field observations should be noted in the field log for any abnormalities at the sampling location (color, odor, BMPs, etc.). Field measurements for pH should also be recorded in the field log. The field sampling form can be found in Appendix D.

Clean Sampling Techniques

Clean sampling techniques involve the use of certified clean containers for sample collection and clean powder-free nitrile gloves during sample collection and handling. Adoption of a clean sampling approach will minimize the chance of field contamination and questionable data results.

Chain of Custody

The sample COC is an important documentation step that tracks samples from collection through analysis to ensure the validity of the sample. Sample COC procedures include the following:

- Proper labeling of samples
- Use of COC forms for all samples
- Prompt sample delivery to the analytical laboratory within 12 hours of obtaining sample

QA/QC Samples

QA/QC samples provide an indication of the accuracy and precision of the sample collection; sample handling; field measurements; and analytical laboratory methods. The following types of QA/QC will be conducted for this project:

- Field Duplicates at a frequency of 10 percent, or one every 10 samples
- Equipment Blanks will be collected at the discretion of the lead sampler
- Field Blanks will be collected at the discretion of the lead sampler
- Trip Blanks will be collected at the discretion of the lead sampler

7.2 Discharge Characterization Study

In addition to the Annual Sampling that will take place, VTA will collect samples for a Discharge Characterization Study consistent with the requirements contained in Attachment G of the Utility Vault General Permit.

The Discharge Characterization Study will report the following:

- Rationale for the selection of each of five vaults to be studied. Type of underground structure, type of receiving water, and type of land use will be factored in
- Sample selected vaults during the 2016- 2017 Rainy Season
- Sample selected vaults again during the 2017-2018 or 2018-2019 Rainy Season
- The final report for the Discharge Characterization Study will be submitted no later than December 31, 2019

Samples will be analyzed for the following:

- VOCs
- SVOCs
- Metals (Method 6020)
- Arsenic (Method 1632)
- Cadmium and Lead (Method 1638)
- Mercury (Method 1669)
- Hexavalent chromium (Method 7199)
- Pesticides
- PCBs
- Dioxins
- Cyanide
- Asbestos
- Hardness of CaCO₃
- pH

The same sampling procedures used for the Annual Sampling will also be used for the Discharge Characterization Study. The final report will include a comparison of sampling results against the criteria listed in Attachment G of the Vault Water Discharge General Permit.

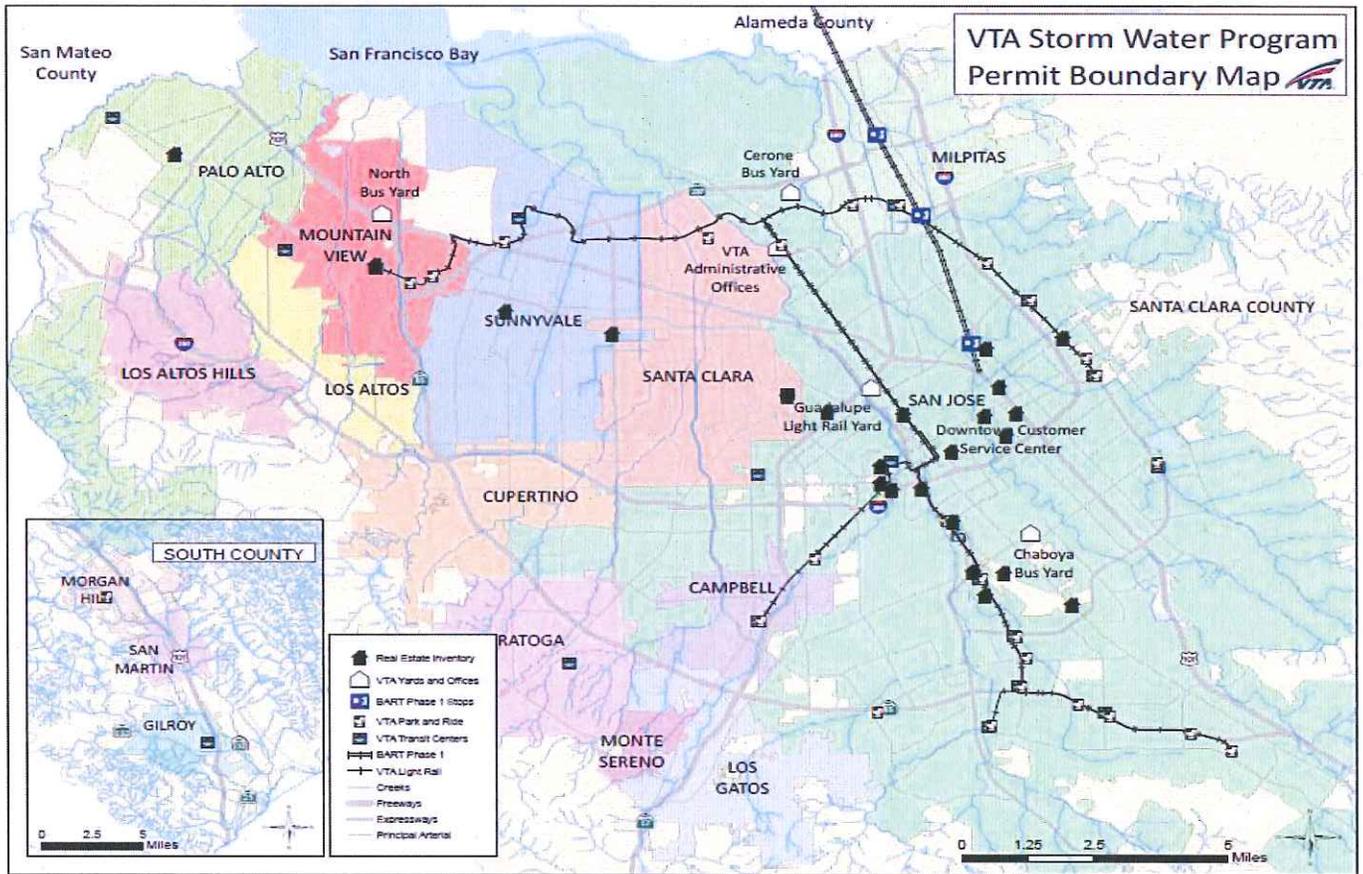
8.0 Recordkeeping

VTA will retain records of the following records of compliance information for a period of five years:

1. The date, place, and time of site inspections, sampling, visual observation, and/or measurement
2. The individual(s) who performed the site inspections, sampling, visual observations, and/or measurements
3. The size and/or volume of vault
4. Flow measurements (if required) and duration of discharge
5. The estimated volume discharged
6. The date and time of the sample analyses and calibration of field instruments
7. The name and contact information for the laboratory, utility staff, or wholesaler who performed the analyses
8. The analytical results of the sample analyses
9. Annual Reports

These records will be kept with Environmental Health and Safety at 3331 N 1st St, San Jose, CA 95134

Appendix A: VTA's Permit Boundary – Light Rail Service Area



Appendix B: Vault Dewatering Procedures

Vault Water Handling Procedures

Santa Clara Valley Transportation Authority

Date: May, 2016

Preparing the Site

1. If debris is present, the area between the vault and the receiving storm drain catch basin is swept.
2. The vault cover is opened.

Visual Determination of Water

1. Upon discovery of water in the vault, a clear container is used to take a grab sample from the vault. The sample will be visually observed to evaluate the solids and layers of liquid present in the vault.
2. An extendable pole sampler is used to obtain a grab sample of the water in the manhole. The clear container is attached at the end of the pole sampler and dipped onto the water surface. The container should be filled with water so that it is representative of the water in the vault and raised to the surface.
3. The water in the container is visually inspected and compared to photos of samples below to determine dewatering procedures:



OK to pump
storm drain inlet

Use filter sock

Call EHS for assistance to
pump vault out by a contractor

4. If the water is consistent with the first photo, water can be pumped directly into the storm drain. The second two photos will require filtration/use of a filter sock on the discharge hose.
5. If there is oil floating on the top of the water, the section below is used for instruction.

Removing Oil and Water from Underground Structures

1. If there is an oily sheen upon opening the vault, it is an indication there may be contamination in the structure.
2. If there are only small amounts of oil on the surface, use absorbent pads or material to skim the oil from the top of the water prior to pumping.

If the water emits an unusual odor, or is colored or unusually cloudy, or oil cannot be removed with absorbent pads (last three photos), DO NOT pump the water into the street or storm drain. Contact Environmental Health and Safety (EHS) department to schedule a contractor to pump the water out into a vacuum truck.

Visual Determination of Contamination

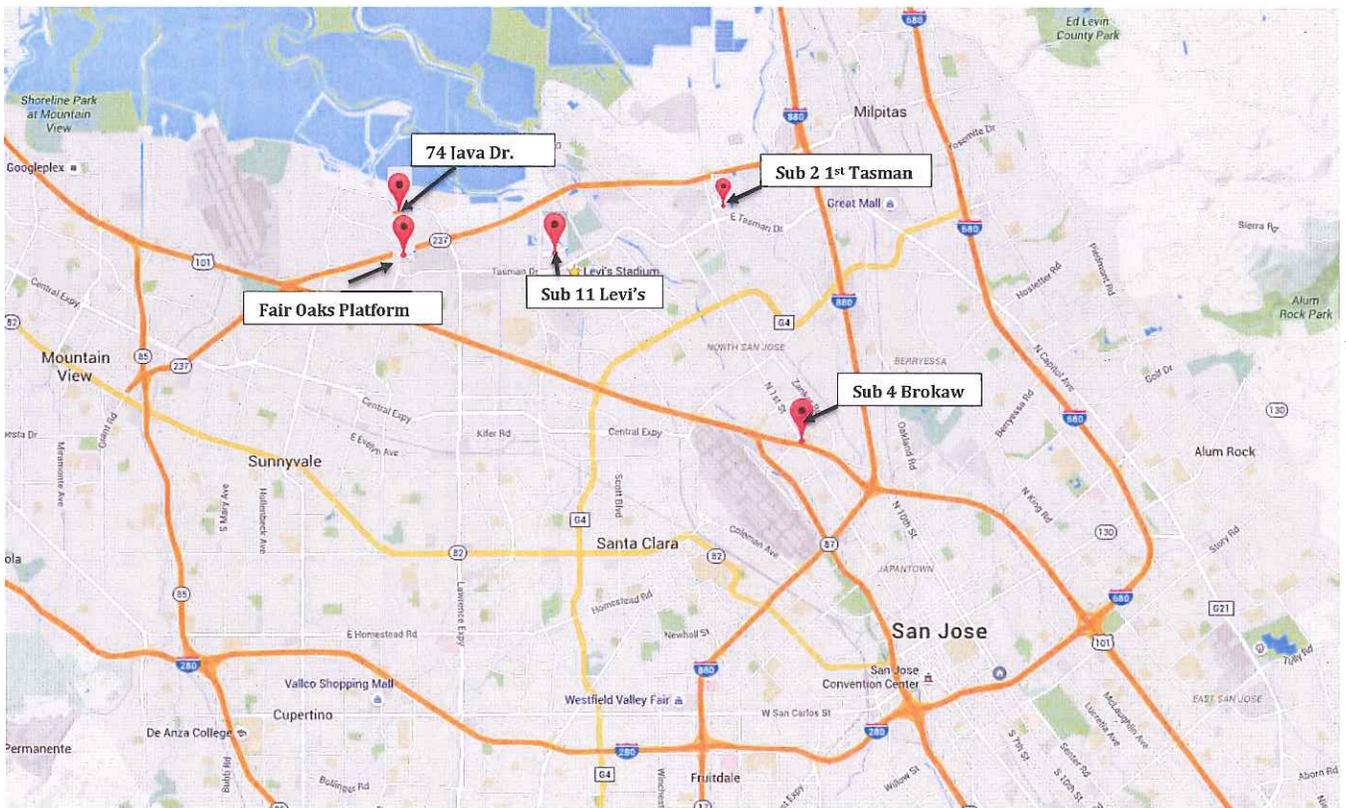
- Once a determination of the oily water is made, an evaluation of other contaminants must be made, such as for sewage, solids, vegetation, sediment, biological wastes, solvents, grease, chemicals or gasoline. If so, an EHS Specialist is called upon to assist with bringing on a contractor to evacuate the vault.

If a Vacuum Truck Is Required

To obtain a vacuum truck:

- During Normal Work Hours (7 a.m.-7:00 p.m.) - the System Safety and Security Department should be contacted at (408)-321-5500.
- During After Hours - VTA's Operation and Control Center (OCC) should be contacted at (408) 546-7608 to inform the EHS Department.

Appendix C: Map of Vault Locations



Appendix D: Sampling Form

Sampling Form

Vault Water Discharge

Santa Clara County Valley Transportation Authority

Sampler's Name:									
Vault ID	Vault Dimensions	Sample ID	Vault Location	Sample Date	Sample Time	Pump Flow rate	Discharge Location	Discharge duration	Observations on oil, grease, floatable solids, odors, turbidity, etc.
Comments:									

Appendix E: Routine Vault Water Inspection and Sampling



Routine Vault Water Inspection and Sampling

1. When using a calibrated portable instrument for pH, the sampler must ensure that all field measurements are conducted in accordance with the accompanying manufacturer's instructions. The pH meter will be calibrated using three point calibration solutions of pH 4, 7 and 10 and not older than one year from manufacturing date.
2. After opening the vault, begin noting down the following information: vault ID, location, vault size, water depth, discharge location and any applicable BMP's.
3. Before sampling, wear latex or nitrile gloves to refrain from contaminating the sample.
4. Attach a clear container on the pole sampler with Velcro. Lower the pole sampler into the water surface and withdraw a grab sample. When at a new sampling location, use a different container for the grab sample evaluation.
5. Examine the water sample in the clear container and in the vault for oil, grease, floatable solids, odors, turbidity, etc. Evaluate water conditions and indicate observations on the provided form.



OK to pump
into storm
drain inlet

Use filter
sock

Call EHS for assistance to pump
vault out by a contractor

6. Confirm that vault water is suitable to pump to surface water, and that any necessary BMPs (i.e. clear water flow line of litter, attach filter sock at end of hose) are in use

(refer to figure on next page). For laboratory testing, it is necessary to collect the water sample at a point after it has been discharged from the vault (i.e., from the end of the discharge hose after filtration or other BMP's).

7. Obtain a pH reading of the grab sample as soon as practicable, but no later than 15 minutes after collecting the sample.
8. Each sampling vault will have 4 containers provided by the laboratory to test for different parameters, provided in the Table below. Label the sample bottles with the sample ID, parameter (or analyte), location, date and time of sample and initials of the person collecting the sample. Use a sharpie/waterproof pen to fill out labels on sample containers.

Test Parameter	Sampling Containers	EPA Test Method
Oil and Grease	1-L amber glass bottle with sulfuric acid preservative	EPA 1664A
TPH - Diesel	1-L amber glass bottle	EPA 8015
TPH - Gas	3 x 40 mL vials with hydrochloric acid	EPA 8260
Total Suspended Solids	250 mL propylene vial	SM 2540

9. Fill all the sample containers with the water being pumped out of the vault prior to vault water mixing with other material or flow. It is appropriate to fill sample containers with water after BMP's have been used to remove pollutants. This best represents water quality that may reach surface water after discharge.
10. Fill all the sample containers to the top with no headspace and do not overflow the containers. Take extra precaution with not overflowing the 1-L amber glass bottle with the sulfuric acid preservative.
11. Place the water samples in a cooler that has the lids tightly fastened and oriented upright.
12. Complete the chain of custody form (Accutest) for each set of samples. The Chain of Custody form shall include the Discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.
13. Complete the procedures for each sampling point for a total of five vaults. If there is not enough water in the vault to collect in the sampling containers, then the sampling event will have to be rescheduled.
14. Bring samples in cooler and chain of custody directly to the lab.

Appendix F: Accutest Chain of Custody Form

ACCUTEST LABORATORIES		2105 Lundy Ave, San Jose, CA 95131 (408) 588-0200 FAX: (408) 588-0201		FED-EX Tracking #	Bottle Order Control #														
Client / Reporting Information		Project Information		Accutest Quote #	Accutest NC Job #: C														
Company Name: Santa Clara Valley Transportation Authority Address: 3331 N. First Street City: San Jose, State: CA, Zip: 95134 Project Contact: Tracy Casimiro/Rachael Keish Phone #: (408) 592-0223 / (408) 321-5969 Samplers' Name:		Project Name: Light Rail Division Utility Vaults Street: 101 West Younger Ave. City: San Jose, State: CA, Zip: 95110 Project #: EMAIL: Rachael.Keish@svta.org / Tracy.Casimiro@svta.org Client Purchase Order #:		Requested Analysis: pH Total Suspended Solids (TSS) (SM 2540) Oil & Grease (EPA 1664) TPH-Diesel (SW846 8010B) TPH - Gas (SW846 8200B)		Matrix Codes: WW- Wastewater GW- Ground Water SW- Surface Water SO- Soil CO- Oil WP- Wipe LIQ- Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only) LAB USE ONLY													
Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	FU	haph	hexo	hosa	hove	hamb	hach	hach	PH	Total Suspended Solids (TSS) (SM 2540)	Oil & Grease (EPA 1664)	TPH-Diesel (SW846 8010B)	TPH - Gas (SW846 8200B)
	SUB 4 Brokaw				GW	4				1					X	X	X	X	X
	SUB 11 Levi's				GW	4				1					X	X	X	X	X
	Fair Oaks Platform				GW	4				1					X	X	X	X	X
	74 Java Dr.				GW	4				1					X	X	X	X	X
	SUB 2 1st Tasman				GW	4				1					X	X	X	X	X
Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks															
<input checked="" type="checkbox"/> 10 Day (Standard) <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day		Approved By/ Date: _____ <input type="checkbox"/> Commercial "A" - Results only <input checked="" type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B*" - Results, QC, and chromatograms <input type="checkbox"/> FULT1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format Provide EDF Global ID _____ Provide EDF Logcode: _____		Stormwater pH, Specific Conductance & TSS (250ml HDPE - Unpreserved) *XSTORM* Total Organic Carbon (2 x 40ml Amber Vials w/Sulfuric Acid) *TOC* Oil & Grease 1664 (1000ml Amber Glass w/Sulfuric Acid) *OG1664* Metals: 6010/200.7/245.1/200.8 (250ml HDPE w/Nitric Acid)		Bottle Requirements **List Any other Testing Parameters required under the "Requested Analysis" Section on the COC** ***NOTE: Verify Sampling Bottle Requirement with the Lab for any other Test Method NOT Specified on the COC**													
Emergency T/A data available VIA Lablink * Sample Custody must be documented below each time samples change possession, including courier delivery.						Relinquished by Sampler: _____ Date Time: _____ Relinquished by: _____ Date Time: _____ Relinquished by: _____ Date Time: _____ Relinquished by: _____ Date Time: _____		Received By: _____ Date Time: _____ Received By: _____ Date Time: _____ Received By: _____ Date Time: _____ Received By: _____ Date Time: _____		Relinquished By: _____ Date Time: _____ Relinquished By: _____ Date Time: _____ Relinquished By: _____ Date Time: _____ Relinquished By: _____ Date Time: _____		Received By: _____ Date Time: _____ Received By: _____ Date Time: _____ Received By: _____ Date Time: _____ Received By: _____ Date Time: _____		Custody Seal # _____ Appropriate Bottle / Pres. Y / N _____ Labels match Coc? Y / N _____		Headspace Y / N _____ On Ice Y / N _____ Cooler Temp. _____ °C Separate Receiving Check List used: Y / N _____			

Appendix G: Notice of Intent