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JUN 03 2015
DIVISION OF WATER QUALITY

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.☐ New Discharger 2.☒ Existing Discharger: WDID# 2000U000044 3.☐ Change of Information: WDID # _____ 4.☐ Change of ownership or responsibility: WDID# _____

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

A. Name Pacific Gas and Electric Company		Owner/Operator Type (Check One) 1.☐ City 2.☐ County 3.☐ State 4.☐ Gov. Combo 5.☒ Private	
B. Mailing Address 3401 Crow Canyon Road, Attn. Vault Dewatering Program Manager			
C. City San Ramon	D. County Contra Costa	E. State CA	F. Zip Code 94583
G. Contact Person Jeremy Laurin	H. Title Sr. Environmental Scientist	I. Phone 925-719-4466	
J. Email Address jeremy.laurin@pge.com			

☐ **Additional Owners** _____

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

Send to: ☐ **Owner/Operator** ☐ **Other**	A. Name		B. Title	
	C. Mailing Address			
D. City		E. County	F. State	G. Zip Code

IV. RECEIVING WATER INFORMATION

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.

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

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:

Not all PG&E vaults are in areas that allow for land discharge. If PG&E needs to discharge vault water to land, the appropriate Regional Water Quality Control Board will be contacted.

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: Pacific Gas and Electric Company		B. Contact Person: Jeremy Laurin	
C. Street Address Where PLAN is Located: 3401 Crow Canyon Road		D. Title of Contact Person: Senior Environmental Scientist	
E. City: San Ramon	F. County: Contra Costa	G. State: CA	H. Zip Code: 94583
I. Phone: 925-719-4466	J. Email Address: Jeremy.Laurin@pge.com		

IX. DESCRIPTION OF DISCHARGE(S)

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

Discharges and potential pollutants are characterized and described in the attached Pollution Prevention Plan.

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: Mariano Mandler

B. Signature: _____ C. Date: 6/1/2015

D. Title: Senior Director, Environmental Management and Programs

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 #:**	

Pacific Gas and Electric Company

Utility Vault Discharge Pollution Prevention Plan

Region 2: San Francisco Bay Area

WDID# 2000U000044

Prepared in Compliance with the National Pollutant Discharge Elimination System General Permit for Discharges from Utility Vaults and Underground Structures

Water Quality Order No. 2014-0174-DWQ

General Permit No. CAG990002

6/1/2015

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I. INTRODUCTION

Pacific Gas and Electric Company (PG&E), incorporated in California in 1905, is one of the largest combination natural gas and electric utilities in the United States. The company provides natural gas and electric service to approximately 14 million people throughout a 70,000-square-mile service area in northern and central California. The service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east.

Within its service territory, PG&E regularly inspects and maintains equipment housed in vaults or underground structures. This pollution prevention plan (PLAN) has been prepared in accordance with the California State Water Resources Control Board's (SWRCB) National Pollution Discharge Elimination System (NPDES) General Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (Order No. 2014-0174-DWQ, NPDES No. CAG990002) to address short-term intermittent discharges to surface waters from utility vaults and underground structures.

This PLAN addresses dewatering activities from utility vaults and underground structures in the following region:

Name of covered region covered under this plan:

San Francisco Bay Area Regional Water Quality Control Board

A. Overview

The SWRCB has authority under the federal Water Pollution Control Act of 1972, known as the Clean Water Act (CWA), to prohibit the discharge of pollutants to waters of the United States from any point source unless that discharge is in compliance with a NPDES permit. In 1989 the United States Environmental Protection Agency (US EPA) Region 9 granted the state of California the authority to issue general NPDES permits. As a result, the SWRCB issued a General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (General Permit). The General Permit requires all covered dischargers to implement Best Management Practices (BMPs) to ensure that discharges will not cause a violation of water quality standards.

Under the General Permit, utility companies are required to prepare a PLAN, which contains BMPs for discharges from utility vaults and underground structures to surface waters during short-term intermittent discharges to surface waters.

B. Contact Information

Primary Contact: Jeremy Laurin
PG&E
Vault Dewatering Program Manager
3401 Crow Canyon Road
San Ramon, California 94583
Contra Costa County
jeremy.laurin@pge.com

(925) 415-2489

Secondary Contact: Daniel Sanchez
PG&E
Manager, Water Quality and Hazardous Materials Programs
3401 Crow Canyon Road
San Ramon, California 94583
Contra Costa County
daniel.sanchez@pge.com

(925) 244-3628

C. Location of PLAN:

Pacific Gas and Electric Company
Safety, Health and Environment
3401 Crow Canyon Road
San Ramon, California 94583

PG&E Intranet: **Vault Dewatering Program**

http://pgeweb/sharedservices/environmental/SS/Discharge/Pages/default.aspx

II. Utility Vault Pollution Prevention Plan Certification and Signature

In compliance with the General Permit, Water Quality Order No. 2014-0174-DWQ, NPDES Permit No. CAG990002 for discharges from utility vaults and underground structures, PG&E's Pollution Prevention Team (PPT) issues the following certification statement:

Certification Statement

"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" [40 CFR §122.22(d)].

6/1/2015

Mariano Mandler

Date

Senior Director
Environmental Management and Programs
Pacific Gas and Electric Company

III. PROVISIONS OF THE PLAN

A. Purpose of the PLAN

This PLAN is designed to prevent or control the discharge of pollutants as a result of vault dewatering activities. Components of the PLAN include PLAN Administration and Training, Evaluation of Potential Pollutant Sources, Pollution Assessment, a Drainage Map, Discharge Procedures, Pollution Control Measures, Waste Disposal Procedures, Annual PLAN Review and Revisions, Annual Monitoring and Reporting Program, and Additional Monitoring Requirements.

This PLAN describes the activities taken to comply with the requirements in the General Permit, and is intended to evaluate potential pollutant sources and how to best utilize appropriate BMPs during dewatering activities including:

1. PG&E's vault dewatering operating procedures to prevent and control pollutant concentrations in the discharge and ensure that they do not violate water quality objectives for receiving waters.
2. The commitment of PG&E to ensure that proper evaluation and control measures are in place to reduce pollutants in discharges.

B. Plan Requirements and Updates

The PLAN is designed to comply with Best Practicable Treatment Control Technology, Best Available Technology Economically Achievable and/or Best Conventional Pollutant Control Technology (BPT/BAT/BCT) to ensure compliance with water quality standards. The PLAN will be amended whenever there is a change in operation or maintenance, or when such amendment is necessary to ensure compliance with BPT/BAT/BCT and discharge limits. In addition, the PLAN must be amended if it is in violation of any conditions of the General Permit or has not achieved the general objective of controlling pollutants in discharges to surface waters. An amended PLAN will be submitted to the appropriate Regional Water Quality Control Board (RWQCB) and to the SWRCB. The amended PLAN shall be certified in accordance with the signatory requirements set forth in the General Permit.

C. General Site Location Map, Including Surface Water Drainage Maps

The maps shown in Attachment II outline the essential features of the distribution system for the service area within the boundary for the San Francisco Bay Regional Water Board. These maps show corresponding surface waters to which water may, potentially, be discharged. In addition, the maps include the ASBS boundaries, MS4 discharge points to the ASBS, and major roadways.

IV. PLAN ADMINISTRATION

A. Pollution Prevention Team (PPT)

The PPT consists of a group of PG&E employees who are responsible for developing, implementing, maintaining, evaluating, revising, and certifying this PLAN. The group is headed by Mariano Mandler, Senior Director of Environmental Management and Programs. A 24-hour contact number for environmental emergencies, including vault discharge related emergencies has been established and is 1-800-874-4043.

Responsibilities of the PPT

1. Certify that the Vault Dewatering Program is in compliance with the General Permit;
2. Solicit input from employees who utilize the BMPs in the field, document any issues or areas that need clarification or would require additional training;
3. Maintain records of completed VDR forms from each dewatering event, review the forms for proper reporting, review for issues that would require changes to the PLAN, and use the completed forms to document dewatering trends by region;
4. Facilitate employee pollution prevention awareness and education through training program(s);
5. Make recommendations for use of better BPT/BAT/BCT based upon benchmarking and employee solicited information and ensure that the PLAN will be updated if changes are required and provide additional training for any new BPT/BAT/BCT;
6. Complete all annual monitoring and reporting required by the General Permit on or before May 1 each year, to allow time for review and submittal by June 1 of each year; and,
7. Annually, representatives from each Title category within the PPT will meet to review collected data, utilized BMP's and [if needed], revise the PLAN to address any issues, for submittal by June 1 of each year.

Members of the Pollution Prevention Team (PPT)	
Title	**Role**
Director of Environmental Management and Programs (DE)	Certifies that the elements of the PLAN are being implemented and are in compliance with the General Permit (through information provided by the Water Quality Manager and through the Annual Certification and Compliance Report), and signs the PLANs and NOIs.
Water Quality Manager (WQM)	Provides oversight and ensures that all necessary reports and documentation are completed and reviewed. Provides oversight to the Vault Dewatering Program Manager, signs Annual Monitoring Report and the Annual Certification and Compliance Report, and provides quarterly updates regarding program findings and compliance to the DE.
Vault Dewatering Program Manager (VDPM)	Responsible for coordinating the overall compliance activities associated with the General Permit. Provides guidance to the S-EFS and VDEC and oversees the Annual Monitoring Program, the Annual Certification and Compliance Report, benchmarking activities, and the training program. Maintains the database of Vault Discharge Record (VDR) forms (for completing trend analyses and review of program documentation), maintains a complete list of significant spills and releases for internal documentation annually, the Vault Dewatering PG&E internal webpage, updates task reminders in the internal compliance database, and updates and provides the training program to employees who conduct vault dewatering as necessary (tailboards, online training, etc.). Solicits feedback from the S-EFS and the PPT by phone or email, coordinates, schedules, and leads the annual PPT meeting, and provides quarterly updates to the WQM regarding program activities and compliance.
Vault Dewatering Environmental Consultant (VDEC)	Responsible for coordinating the Annual Monitoring Program (PG&E representative or third party contractor). The VDEC is to collect all required samples, write the Annual Report, and the Annual Certification and Compliance Report. All reports are to be submitted to the VDPM for review. Also maintains a complete database of historical sampling data. Provides updates during the sampling activities to the VDPM regarding program activities, any sampling inconsistencies and compliance.
Environmental Field Specialist Supervisors (S-EFS)	The role of the Environmental Field Specialist Supervisor is to provide guidance to the EFS, semi-annually provide feedback regarding PG&E's Vault Dewatering Program to the VDPM, and certifies that the EFS employees are in compliance with the program and have completed the required training.
Environmental Field Specialists (EFS)	The role of the EFS is to understand the vault program and the General Permit requirements, know where source documents and forms are located, know and communicate the Dewatering Procedure (Procedure 2202P-01) to impacted organizations, and provide annual (or as requested) tailboards to impacted employees. In addition, the EFS will conduct an annual compliance field spot check of PG&E field staff during a dewatering event in each RWQCB area. They will fill-out and mail/fax the survey form to the VDPM for each field spot check. The original form will be given to their EFS Supervisor.
Division OM&C Director (D-OM&C)	Responsible for ensuring that appropriate gas and electric personnel are trained in utility vault Dewatering Procedures (Procedure 2202P-01). The Division Operation, Maintenance, & Construction (OM&C) Director shall also understand the vault program and be familiar with the General Permit

	requirements.
Division OM&C Manager (M-OM&C)	Responsible for ensuring that appropriate Supervisors and Field Crew members are trained in utility vault Dewatering Procedures (Procedure 2202P-01). The Division Operation, Maintenance, & Construction (OM&C) Manager shall also understand the vault program and be familiar with the General Permit requirements.
Field Crew Supervisor (S-FC)	Responsible for ensuring that the Field Crew is trained in utility Vault Dewatering Procedures (Procedure 2202P-01). The S-FC shall also understand the vault program and be familiar with the General Permit requirements to be able to provide oversight to the Field Crew.
Field Crews (FC)	Responsible for implementing the Utility Vault Dewatering Procedures (Procedure 2202P-01) when performing any work in a vault which requires dewatering.

B. Employee Training

PG&E's environmental training program provides BMP and Procedure training to all personnel that are responsible for implementing the PLAN. The BMPs addressed during the training include housekeeping, preventative maintenance, spill prevention and response, vault integrity inspections, vault water inspection practices, determination of when to discharge versus containerize, sediment and erosion control, management of runoff, and hazardous materials management. This training is provided under the environmental compliance program and is provided annually to all personnel that periodically dewater vaults for all of the affected PG&E lines of business. Additional training will be provided on an as-needed basis or whenever a change to PG&E standard vault dewatering work procedures is made.

Training in Utility Vault Dewatering Procedures will be provided by the Vault Dewatering Program Manager. Once trained by the VDPM, D-OM&C, M-OM&C, S-FC, S-EFS and/or the EFS may provide training out to FCs. The Division OM&C Director will ensure that appropriate electric and gas personnel are trained in these procedures. Records of training roster/evaluations are to be scanned and emailed to the PG&E Learning academy (pgeacademy@pge.com), as the Academy maintains record of training completion for all employees, with the original form maintained at the employee's First Line Supervisor's headquarters.

V. Identification of Potential Pollutant Sources and Evaluation of Contaminant Risk

This PLAN provides a description of potential sources that may add significant amounts of pollutants to discharges. This PLAN identifies all activities and materials that may potentially be significant pollutant sources.

A. Description of Potential Pollutant Sources

Electrical equipment contained within vaults may contain mineral or other insulating oils (that in some cases may contain PCBs). In addition, because some vaults may be located in populated areas there is the potential of a contaminant migrating from the outside environment into the vaults through cracks. Additionally, water that collects in vaults or underground structures may be an accumulation of storm water runoff, irrigation runoff, and/or groundwater intrusion. Due to site-specific condition, a variety of pollutants may enter the vault from the outside environment. Examples of these potential pollutants are listed below:

- Lubricants, oils, rust, paints, PCBs, and other substances used in the business practice;
- Copper may be present due to a core of copper contained in most cables that may be released into vaults and manholes when repair work is done and when waste generated from repair work is not removed completely;
- Lead may be present due to lead shielding on some cables that can cause metallic lead to be released during repair work when waste generated from such work is not removed completely; lead may also be residually present as a result of leaded gasoline previously used in motor vehicles;
- Zinc may be present as many of the fillings on electrical equipment and cables are galvanized;
- Contaminants that are predominately caused by a person illegally or improperly managing hazardous materials and these include oil, greases, and corrosives;
- Pollutants such as motor vehicle fluids (motor oil, antifreeze, brake fluid, etc.) and pollutants located in the roadways such as asphalt tar may run off roads with storm water and enter the vaults;
- Suspended solids from dirt, mud, and other debris may enter vaults with storm water; and,
- Sewage that may intrude from septic or sewage systems may also enter vaults.

B. Contamination Risk Assessment

PG&E utility substructures generally do not contain materials that if exposed to precipitation would pose a threat to water quality. Utility vaults that PG&E manages contain submersible

electrical equipment, which may contain mineral or insulating oils. In some cases, the mineral or insulating oils may contain polychlorinated biphenyls (PCBs). However, as these oils and oil filled equipment have been [and are continuing to be] systematically replaced, equipment of this type represent a very small percentage of all of PG&E's equipment. To avoid discharges from any equipment potentially containing PCB's, PG&E requires that water from any vaults containing equipment from prior to January 1, 1985 be containerized and hauled offsite for disposal if there is any noticeable oil or sheen.

Equipment containing hazardous materials are routinely inspected and maintained in accordance with other regulatory requirements. Much of this equipment is monitored remotely so any failures would alarm operations and a crew would respond to investigate and address any problems.

PG&E has developed a vault inspection procedure to visually characterize water prior to discharge. These procedures are presented in detail in the following section. In general, the procedures consist of a checklist of observable conditions for indicators of contamination, which also includes information on how to properly discharge vault water once characterized. These procedures will be implemented during vault sampling and vault discharge activities.

Based on the visual characterization procedures, if the vault water can be discharged, personnel are required to filter the discharged water through a Filter Sock. Procedures for connecting, using, and disposing of the Filter Sock are provided in Section VII and also provided internally within PG&E's Vault Discharge Training Procedure (2202-P01) and additionally within the Vault Discharge Field Guide, included as Attachment III.

Any waste generated at a vault site is transported to a PG&E facility where the determination of classification of the waste is made. If it is determined hazardous, it is managed as hazardous waste and disposed at an authorized facility. If it is not hazardous, it is discarded to the appropriate facility. Any questions or assistance with this characterization process will occur by the local EFS.

VI. DISCHARGE PROCEDURES

PG&E must dewater subsurface vaults and underground structures to protect equipment or for safety reasons prior to performing repair, maintenance, and/or installation of equipment. Water collected in these vaults or underground structures is either manually pumped from vaults or automatically discharged when equipped with an automatic sump pump (automatic sump pump discharges are addressed in VII-C). The volume of water in vaults varies greatly and is dependent on factors such as groundwater seepage and local rainfall. Consequently, the duration of water pumping may vary from a few minutes to several hours depending on the amount of water in the vault and the size of the pump used. When clean vault water is discharged into a municipal storm water system (MS4), PG&E shall comply with the notification requirements of the MS4. If the MS4 permit does not state a notification threshold for vault discharges, PG&E will notify the MS4 when a discharge exceeds 10,000 gallons.

A. Standard Vault Dewatering Procedures

PG&E's Vault Dewatering Field Guide, included in Attachment III, contains step-by-step procedures that are required to be followed during each vault dewatering event. This step-by-step Field Guide is based on the internal PG&E Procedure for Vault Discharges [2202P-01], which was based on this PLAN. The Vault Discharge Report (VDR) Form is required to be filled out during each discharge event and is PG&E's record of discharge. Observations of the vault, any equipment, and the discharge will be noted on the VDR form. If any corrective action are required, they will be noted on the form and performed, or appropriate personnel will be notified for follow-up (i.e., contact EFS for assistance). The guidance includes directions and procedures for:

1. Setting up a proper Department of Transportation (DOT) work zone, if necessary;
2. Determination of air quality, if necessary;
3. Visually inspecting the vault for:
    a. Hazardous materials,
    b. Integrity of equipment,
    c. Integrity of the vault enclosure and lid,
4. Inspecting vault water for visual and odor cues prior to determining how to discharge;
    a. Visually inspecting the surface of the water for:
        - Floating materials – Are there particulates floating,
        - Oil-like sheen – Is a sheen visible on the surface of the sample;, and
        - Age of equipment (manufacture date is pre-1985). Oil-containing equipment manufactured prior to 1985 may contain PCBs. Discharge of water with an oil-sheen from equipment manufactured prior to January 1, 1985 is not allowed without laboratory testing;
    b. Collecting sample of water with a bailer (while wearing gloves – either disposable, powder free, nitrile or latex)
    c. Decanting the vault water to a sample container and letting it sit for 5 minutes
    d. After 5 minutes, inspecting the sample for the following conditions:
        - Clarity/Turbidity – How does the sample appear:
            - Clear,

        - Cloudy,
        - Discolored, or
        - Opaque to light
    - Odor – Is there and unusual odor:
        - gasoline,
        - solvent,
        - or sewage,
    - Suspended particles or sediment:
        - Visible particles suspended in the water;
    - Settled materials – Are particles visible in the bottom of the container (e.g., asphalt particles),

5. Discharging through a filter sock or containerizing vault water based upon the conditions noted above;
6. Submitting vault water samples to a lab for testing, if containerizing;
7. If discharge through a filter sock is appropriate, utilizing the Discharge Use Tracker located on the filter sock to associate the filter sock to the VDR form and to track the number of uses for each filter;
8. Monitoring discharged vault water and using appropriate storm water BMPs to prevent sediment transport and/or erosion;
9. Whenever there is a discharge to an MS4, PG&E shall comply with the notification requirements of the MS4. If the MS4 permit does not state a notification threshold for vault discharges, PG&E will notify the MS4 when a discharge exceeds 10,000 gallons. EFS personnel must be contacted to assist with this notification (800-874-4043);
10. All discharged vault water must pass through a filter sock, however no water discharged under this permit is to be treated. Any vault water unfit to be discharged is to be containerized and managed appropriately.

PG&E has also prepared a vault dewatering process decision flow chart that is to be used by PG&E field staff to assist [in conjunction with the Field Guide – Attachment III] with determining whether or not discharge from a vault is allowed. This form is located on the back-side of the VDR form will be provided to PG&E Field Crew staff along with the VDR form for use in the field.

B. Scheduled Discharges

PG&E does not regularly schedule discharges from underground structures, but if a scheduled discharge should occur, practices outlined in this PLAN would be followed.

C. Un-scheduled Discharges

The majority of discharges from underground vaults and structures are unscheduled and occur during regular maintenance activities of equipment stored in vaults. Water accumulates over time and is dewatered as necessary for maintenance or equipment repair, either manually or automatically. The frequency of discharge is dependent on the rate and volume of water entering the structure. Unscheduled discharges would be controlled utilizing practices described in this PLAN. Only those waters, that on-site water evaluation procedures have determined to be appropriate for discharge, can be discharged in compliance with the General Permit.

D. Emergency Operations and Automated Critical Discharges

i. Emergency Operations

In emergency situations involving an imminent threat to human life, serious property damage, and/or in cases of natural disaster or catastrophic events, field supervisors have the authority to take whatever action is necessary to mitigate the immediate threat including the discharge of untested water. PG&E shall notify the Regional Water Board and State Water Board of any non-compliance discharges as a result of any emergency operations.

ii. Automated Critical Discharges

Some of PG&E's vaults are equipped with automated sump pumps (ASPs). ASPs are implemented when needed to avoid endangerment to human health, public safety, or the environment or to reestablish essential public service.

Evaluation of need and installation of ASPs will be performed as directed by Utility Bulletin TD-2999B-028 '*Vault Discharge Compliance: Installation of Automated Sump Pumps within Vaults*', which can be found as an attachment of internal Vault Dewatering Procedure ENV-2202P-01. Due to the 'flow-thru' nature of vaults containing ASPs, contaminant intrusion is unlikely and not expected. While contaminant intrusion is unlikely, in the event of equipment failure or oil-contamination outside of PG&Es control, an oil-water shut-off switch is required to be installed any time an ASP is installed. This shut-off switch is PG&E's BMP to prevent the discharge of oil-contaminants to surface waters.

E. Spills and Leaks

In the event of an accidental release, PG&E field technicians are properly trained and equipped with materials needed to immediately deal with a spill or leak of a hazardous substance. If a leak or spill is of significant size, PG&E would engage one of its emergency response vendors. In addition, PG&E field technicians must contact their EFS representative to report any such incidents (800-874-4043). Furthermore, spills will be reported by the EFS to appropriate local agencies, such as the fire department or Unified Program Agency (UPA), to assist in cleanup. A spill containing a reportable quantity of oil or other hazardous material will be reported to the

State Office of Emergency Services at (800) 852-7550, and the National Response Center (within 24-hours) at (800) 424-8802.

After an incident, the PG&E employee will provide a description of the incident, along with other information describing the quality and quantity of discharges, time of occurrence, mode of dumping, responsible parties, date and time of incident, weather conditions, duration and cause of spill/leak/discharge, response procedures, and resulting environmental problems in a PG&E incident report. Additionally, all internal reporting procedures will be followed including reporting the incident in the PG&E Environmental Management System database for tracking.

Records of spills or leaks of hazardous pollutants a result of activities covered under the vault dewatering General Permit will be recorded on the VDR form, reported as above and retained at the Program Office. This PLAN will be amended if needed to address future releases.

F. Discharge Documentation

Any water discharged under this procedure must be documented. The PG&E employee must complete the Vault Discharge Report (VDR) form, attached hereto, during each discharge event.

All completed forms will be either:

Emailed to:
vaultdischarge@pge.com

or

Mailed to:
Vault Dewatering Program Manager
3401 Crow Canyon Road
San Ramon, California 94583

If scanned, the original hardcopy document will be kept at the representative's office until the form is reviewed, deemed complete and centrally filed by the Vault Discharge Program Manager. VDR forms received in hard copy at the PG&E Vault Dewatering Program Manager's office will be filed alongside the digital forms, and all VDR records will be kept on file for a minimum of five years and will be made available for review to inspectors from the RWQCBs or Municipal Waste Water Inspectors upon request. In addition, challenges, issues, or general comments on the VDR forms will be discussed by the PPT and PLAN revisions will be made if needed. The PPT will make any necessary changes to the PLAN and resubmit the PLAN to the governing resource agencies.

VII. POLLUTION CONTROL MEASURES

This PLAN includes BMPs developed specifically for pollution control during the dewatering of vaults. The appropriateness and priorities of BMPs in this PLAN reflect identified potential sources of pollutants at the vaults. The description of wastewater management controls shall address the following components, including a schedule for implementing such controls.

A. Good Housekeeping

The following good housekeeping measures shall be implemented during a vault discharge event:

1. Ensure the discharge area and area surrounding the vault are cleaned prior to discharge;
2. Ensure that any contained materials are properly stored so as not to flow to or be washed into a storm drain system, surface waters, or ground water;
3. Ensure that the discharge path, from discharge point to storm drain, is clean and free of sediment and any hazardous materials prior to discharging;
4. When vault water is characterized as appropriate for discharge, all vault water is passed through a filter sock to remove any potential low-level sediment and/or oil from the discharge; and,
5. Following vault water discharge, scrape and/or sweep up any debris or residues remaining in the bottom of the vault and transport it back to an authorized facility for characterization and appropriate disposal.

B. Preventative Maintenance

PG&E has Standard Operating Practices (SOP's) that address inspections, equipment testing, preventive maintenance and routine maintenance. These SOP's require that inspection, equipment testing, and preventive maintenance are preformed following a specified schedule. The inspection/maintenance schedule minimizes the likelihood of having undetected equipment leaks or failures that could impact water contained within the vault. Any discrepancies discovered during an inspection are resolved or acted on according to the conditions identified. Maintaining the integrity of the equipment and system are a priority.

C. Discharge Procedures

PG&E's Vault Dewatering Procedures, discussed in Section VII, describes the procedures to be followed during each vault dewatering event. In addition, the following BMPs should be implemented during discharges to minimize the discharge of pollutants and protect receiving water quality:

i. Filter Sock

Whenever a vault is discharged, PG&E will utilize a filter sock to remove potential contaminants from the discharge including low-levels of oil and sediment. The filter sock will be connected via the designed connectors, so that all discharged vault water passes through the Sock.

ii. Sediment and Erosion Controls

PG&E will employ appropriate soil erosion prevention methods during discharge of water from underground vaults. These methods may include, but are not limited to, the use of overflow pipes to channel water to street storm drains, splash blocks, and fiber rolls or filtering gravel bags to slow the flow and provide additional filtering of the discharged water.

iii. Management of Runoff

PG&E employs maintenance practices and inspections to minimize the source of pollutants. Discharges from vaults are managed to minimize erosion and minimize the potential of encountering contaminants after discharge from the vaults. These measures include cleaning and/or sweeping the flow path of discharged water, using a filter sock to filter and slow the flow of discharged water, using overflow piping to direct water directly to the storm drain, and using filtering gravel bags or fiber rolls to slow the flow of water to prevent erosion and sediment transport when water cannot be discharged directly to a storm drain.

D. Pollution Control and Waste Disposal Procedures

Electrical equipment contained within vaults may contain mineral or insulating oils, and possibly PCBs, depending on the age of the equipment in the vault. Any hazardous materials within vaults are contained in equipment or may enter from the outside environment through perforations and cracks in the vault structure. Existing control measures and management practices are in place to ensure only appropriate discharges occur.

Prior to any discharge, a vault is inspected to determine the integrity of the equipment. Additionally, before any water is discharged, it is checked for cloudiness, discoloration, unusual odors (gasoline, solvent, or sewage odors), soil particles (suspended sediment) or turbidity, asphalt tar, visible floating material, or oil sheen (including potential PCB content of oil) as described on the VDR form. If any of these items are present, they must be addressed before the water may be removed from the vault. Identified hazardous waste water may not be discharged to storm water drain system, but is to be containerized and disposed of appropriately. All containerized water has to be characterized. The waste characterization shall be coordinated with the EFS. Following characterization, the contained vault water will be properly disposed of offsite. All discharge activities are attended and managed by qualified and trained employees to ensure that no spills, excess soil erosion, or pollutants enter the environment as a result of the discharge activity.

In case of an unexpected release, appropriate agencies are notified and the potential release is addressed either through a third party contractor or directly by a PG&E crew. Spill response equipment is available on crew trucks and additional supplies are located at PG&E facilities. All internal spill response procedures are followed and spills are reported to necessary agencies if required.

E. Record Keeping and Internal Reporting Procedures

The PLAN and a copy of the General Permit (Attachment) are available for all employees to view on PG&E intranet on the Safety, Health and Environment web page for Discharge of Water from Vaults and Underground Structures, (http://pgeweb/sharedservices/environmental/SS/Discharge/Pages/default.aspx).

Per requirements in the General Permit, PG&E shall report any noncompliance that may endanger health or the environment to the appropriate RWQCB. This information must be provided orally within 24 hours. A written submission shall also be provided within 5 days of the time the discharger has become aware of the incident. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. Contact the EFS personnel to assist (800-874-4043).

All PG&E internal reporting requirements will be followed.

All records and reports pertaining to PG&E's Vault Dewatering Program will be retained for a period of five (5) years.

VIII. ANNUAL PLAN EVALUATION AND REVISION

The operations of the utility are strictly regulated; meaning operations of the utility vaults and the equipment they house require a comprehensive inspection and maintenance program. This in turn ensures the integrity of equipment and the maintenance system. Inspections performed during discharges will determine the effectiveness of the BMPs. Any ineffective practices will be evaluated and will be revised appropriately.

A. PLAN Evaluation

This PLAN and associated company procedures and documents relating to the Vault Discharge Program will be evaluated a minimum of annually. The evaluation of the program will include a Field Spot-Check, a Data Evaluation, as well as internal feedback received throughout the year. The findings of the evaluations will be reported within the Annual Report.

i. Field Spot-Checks

At the direction of the VDPM, an EFS representative will conduct a spot-check field survey during vault dewatering events in each RWQCB region at least once per year. The purpose of the field spot-check is to certify that the BMPs used in the field are adequate and appropriate, that the field technicians are well trained, and that field vault dewatering practices/procedures are in compliance with PG&E's PLAN and the General Permit covering vault dewatering activities.

If during a field spot-check, deficiencies are noted, the EFS will report back to the VDPM and an evaluation of if the PLAN needs to be altered or if additional training is needed.

ii. Annual Monitoring Data Evaluation

Annual monitoring will occur as directed per Section IX of this PLAN. If the analytical results from any of the annual monitoring events exceeds one or more of the Numeric Action Levels (NALs) listed in the table below, then PG&E's VDPM will investigate the potential cause of the exceedance(s).

This investigation will include an assessment of the potential source(s) of the pollutant and unless it is determined that the cause(s) of the NAL exceedance was beyond PG&E's control and not a result of inadequate PLAN implementation, procedures, or BMPs, the PLAN will be revised to address and correct for the identified source(s) in future discharges. Revisions to the PLAN may include the implementation of new or revised BMPs or procedures. Results of the investigation, including any PLAN revisions, will be documented in the Annual Report.

Numeric Action Levels for Pollutants of Concern[1]

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

[1]Additional NALs may be added in the future based on the results of the discharge Characterization Study. If additional NALs are added, this PLAN will be revised.

iii. PLAN Revision Reporting

The results of the PLAN evaluation and any revisions to the PLAN will be provided in the Annual Report. All records related to the PLAN evaluation, including personnel conducting the evaluation, evaluation paperwork, and actions taken to revise the PLAN will be retained by PG&E for a period of 5 years.

IX. Annual Monitoring and Reporting Program

An annual monitoring and reporting program is required under this General Permit and by Title 40 of the Code of Federal Regulations (CFR) section 122.48. California Water Code sections 13267 and 13383 also authorize the RWQCB to require technical and monitoring reports. Those sampling and analysis plans establish monitoring and reporting requirements, which implement federal and California regulations. All sampling will be conducted in accordance with the Monitoring and Reporting Program identified in Attachment C of the General Permit.

Currently, PG&E's discharges from utility vaults and underground structures meet the requirements for annual monitoring for re-enrollees under the General Permit.

Annual Monitoring

Annually (during the wet season, October-April), the monitoring program requires a minimum of five representative utility vault or underground structure samples from each RWQCB jurisdiction be collected and sampled.

The General Permit identifies two types of utility vaults and underground structures, dry and wet vaults/structures. Dry structures are designed to be water tight to prevent intrusion of water where sensitive systems may be used. Dry structures often contain switchgears, computers, and electronics that are sensitive to heat and moisture. Wet structures are more common and typically include manholes and hand holes containing utility facilities including cables, cable connections, and gas valves.

PG&E has identified four (4) types of wet discharge structures within its service area into which water intrusion can occur resulting from penetration of subterranean seepage, storm water inflow, base seepage, and containment drainage which are covered by this sampling and analysis plan under this General Permit. These structures include:

1. Vault:

   Is an underground enclosure/structure that is typically 6 feet x 4 feet x 6 feet or greater in size, containing electrical or gas equipment.
2. Pull/Switch Box:

   Is an underground enclosure typically smaller than a vault with only switch gear or wires in an open conduit passing through boxes which interconnect wiring circuits.
3. Substation Vault:

   Is a vault or pull box associated with the basement of an enclosed substation facility.
4. Automatic Sump-Pumped Vault:

   Is a vault equipped with an automated sump-pump, as discussed in section VI.D.II of this PLAN.

To ensure representative sample collection, at least one sample from each of these wet discharge structures will be collected annually within each RWQCB that PG&E holds Permit coverage. Once all four wet structure types are sampled, the additional 5th sample will occur from a standard 'vault', as systematically, it is the most common wet structure type. If one of the identified general wet structure types does not exist within a RWQCB Region, or if all vaults of that type within a Region are dry, additional samples will be collected from the remaining structure types to collect a minimum of 5-representative samples.

All collected samples will be monitored for oil and grease; total petroleum hydrocarbons (TPH) as diesel and gasoline; benzene, ethyl benzene, toluene, and xylene (BTEX); total suspended solids (TSS); and pH, using test procedures specified in 40 CFR section 136.

Annual Reporting and Record Retention

Annual reports will be submitted to the appropriate Regional Water Quality Control Board no later than June 1st each year. Annual reports will include all records required by the General Permit including records of all monitoring information with the date, exact place (i.e., City/County and street address and/or latitude/longitude), and time of sampling or measurements; the individual(s) who performed the sampling or measurements; the date(s) analyses were performed; the individual(s) who performed the analyses; the analytical techniques or methods used; and the results of such analyses. Annual Reports will also include an evaluation of the BMPs used for discharge and a discussion of the Annual Evaluation, highlighted in Section VIII of this PLAN. Each RWQCB annual report will be signed in accordance with the signatory requirements of this General Permit.

All records and reports pertaining to PG&E's Vault Dewatering Program will be retained for a period of five (5) years at the Vault Dewatering Program Manager's office. This period may be extended by request of the representative RWQCB.

X. Special Studies and Additional Monitoring Requirements

A. Discharge Characterization Study

The General Permit requires each discharger to development and implement a two-year Characterization Study to collect sufficient data to identify the priority pollutants present and their concentrations in utility vault and underground structure discharge. Within eight months of the effective date of the General Permit, PG&E will develop and submit a monitoring, sampling and analysis plan (monitoring plan), which describes the specific approach for completing the Phase I and Phase II requirements of the Characterization Study as described in Attachment G of the General Permit.

PG&E will identify five representative utility vaults or underground structures per RWQCB jurisdiction to be monitored during the Characterization Study. Samples will be collected and handled following PG&E standard operating procedures and analyzed using U.S. Environmental Protection Agency approved analytical methods. Phase I Characterization Study monitoring will be conducted during the first rainy season (October to March) following final approval of the monitoring plan; Phase II monitoring will be conducted during the second rainy season following final approval of the monitoring plan.

PG&E will provide a Phase I and Phase II monitoring report to the State Water Board no later than four years following the effective date of this General Permit. The monitoring report will include the locations and descriptions of each utility vault or underground structure sampled, all analytical results, and all field forms associated with the Characterization Study.

A group of dischargers (Coalition) may develop a coordinated Characterization Study to maximize the efforts of all dischargers. PG&E is exploring the potential of joining a Coalition to complete the Characterization Study. If formed, Coalitions shall comply with the same conditions and schedule described in Attachment G of the General Permit.

B. ASBS Monitoring

The California Ocean Plan prohibits waste from being discharged to an Area of Special Biological Significance (ASBS) unless subject to the General Exception approved by State Water Board Resolution 2012-0012. The General Exception allows NPDES permitting authority to authorize non-storm water discharges to a Municipal Separate Storm Sewer System (MS4) that discharges directly to an ASBS. The General Permit has established an ASBS Monitoring Study for the evaluation and authorization of the discharge of non-storm water from utility vaults and underground structures to MS4s that have direct discharge to an ASBS. Dischargers who discharge to a MS4 which in turn discharges directly to an ASBS must conduct the ASBS Monitoring Study within each particular ASBS that intersects their service territory.

Within four months of the effective date of the General Permit, PG&E will Identify MS4s within each service area with the potential to receive discharges from utility vaults and underground structures. PG&E will then determine if the identified MS4s discharge to an ASBS. If it is found through the evaluation that no discharges occur to MS4s that subsequently discharge to an ASBS, then an ASBS Monitoring Study is not required.

An ASBS Monitoring Study will be developed within eight months of the effective date of the General Permit if it is determined that any of PG&E's vaults or underground structures

discharge to a MS4 that outfall to an ASBS. The ASBS Monitoring Study will commence during the first rainy season (October to March) following the final approval of the ASBS Monitoring Study work plan. A total of five representative wet vaults or underground structures will be sampled during two of the four rainy seasons during the ASBS Monitoring Study period. An overview of the samples and analytics required by a CA Certified Laboratory are included in Appendix G, Section IV of the Permit and include:

- Oil and Grease;
- Total Suspended Solids (TSS);
- Bacteria Indicator;
- Metals listed in the California Ocean Plan Table 1;
- Polynuclear Aromatic Hydrocarbons (PAHs);
- Current Use Pesticides (Pyrethroids and Organophosphate Pesticides); and,
- Nutrients (Ammonia, Nitrate, and Phosphates).

A final ASBS Monitoring Study Report will be submitted to the State Water Board no later than four years following the effective date of the General Permit. The final ASBS Monitoring Study Report will contain a map and description of the vault locations sampled, estimated discharge volumes, a description of the sampling and analysis procedures, and the water quality monitoring results of the five representative utility vaults sampled.

XI. Attachment I: Notice of Intent (NOI) and Authorization Documentation

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.☐ New Discharger 2.☒ Existing Discharger: WDID# 2000U000044 3.☐ Change of Information: WDID # _____ 4.☐ Change of ownership or responsibility: WDID# _____

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

A. Name Pacific Gas and Electric Company		Owner/Operator Type (Check One) 1.☐ City 2.☐ County 3.☐ State 4.☐ Gov. Combo 5.☒ Private	
B. Mailing Address 3401 Crow Canyon Road, Attn. Vault Dewatering Program Manager			
C. City San Ramon	D. County Contra Costa	E. State CA	F. Zip Code 94583
G. Contact Person Jeremy Laurin	H. Title Sr. Environmental Scientist	I. Phone 925-719-4466	
J. Email Address jeremy.laurin@pge.com			

☐ **Additional Owners** _____

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

Send to: ☐ **Owner/Operator** ☐ **Other**	A. Name	B. Title	
	C. Mailing Address		
D. City	E. County	F. State	G. Zip Code

IV. RECEIVING WATER INFORMATION

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.

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

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:

Not all PG&E vaults are in areas that allow for land discharge. If PG&E needs to discharge vault water to land, the appropriate Regional Water Quality Control Board will be contacted.

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: Pacific Gas and Electric Company		B. Contact Person: Jeremy Laurin	
C. Street Address Where PLAN is Located: 3401 Crow Canyon Road		D. Title of Contact Person: Senior Environmental Scientist	
E. City: San Ramon	F. County: Contra Costa	G. State: CA	H. Zip Code: 94583
I. Phone: 925-719-4466	J. Email Address: Jeremy.Laurin@pge.com		

IX. DESCRIPTION OF DISCHARGE(S)

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

Discharges and potential pollutants are characterized and described in the attached Pollution Prevention Plan.

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: Mariano Mandler

B. Signature: _____ C. Date: 6/1/2015

D. Title: Senior Director, Environmental Management and Programs

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

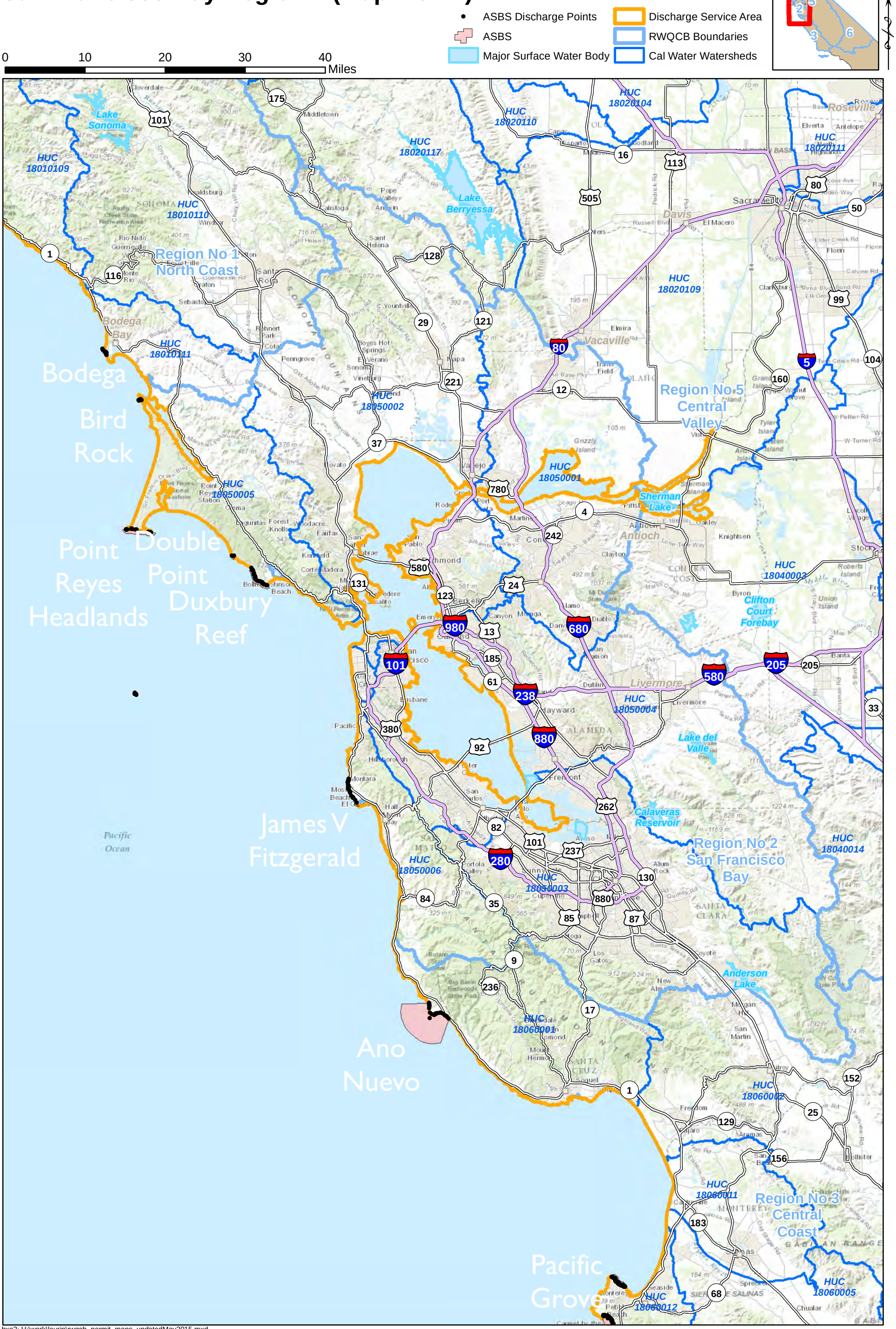
STATE USE ONLY

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

XII. ATTACHMENT III: DRAINAGE MAPS

California Regional WaterQuality Control Board

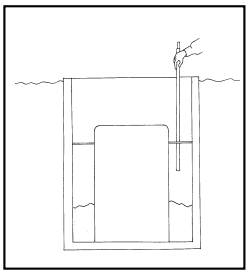
San Francisco Bay Region 2 (Map 1 of 1)



bxo2: H:\work\laurin\rwqcb_permit_maps_updatedMay2015.mxd

XIII. ATTACHMENT IIII: PG&E VAULT DEWATERING FIELD GUIDE

This Field Guide follows conditions listed in PG&E's Pollution Prevention Plan and also PG&E's Utility Procedure ENV 2202P-01. All materials for the Vault Discharge program can be found on the PG&E intranet site: http://pgeweb/sharedservices/environmental/SS/Discharge/Pages/default.aspx.
M&S codes are provided in relevant sections, and are summarized in a reference table at the end of this Field Guide.

Step	SAFETY
1	• Address all applicable PG&E safety precautions and requirements • Use appropriate lifting techniques, in particular when lifting used filter socks • Wear appropriate PPE, including: ➢ Protective gloves when collecting a sample of vault content ➢ Protective gloves and safety glasses when handling used filter socks
	VISUAL VAULT CONTENT INSPECTION
2	Set up Department of Transportation (DOT) work zone, if warranted, and determine the quality of the atmosphere within the vault or underground enclosure using approved PG&E protocols (Safety, Health and Claims (SH&C) Procedure 232, Pre-Entry Procedures: Air Testing Requirements, Prior to Entering Utility Enclosures, Manholes or Vaults). Once the atmosphere is determined to be safe, continue with the next steps for inspecting vault water using visual cues prior to determining how to discharge vault contents.
3	Check for an automated sump-pump (ASP). If there is an ASP, then complete the following: ✓ Note ASP condition on Vault Discharge Record (VDR) form ✓ Continue with following standard discharge procedures in Step 4 of this Field Guide.
4	• Visually inspect the integrity of the vault and the integrity of any equipment within the vault. • Using the Vault Discharge Decision Flow Chart on the VDR form, visually inspect vault water for the following: ➢ Presence of an oil layer ➢ Heavy oil sheen ➢ Light oil sheen with potential for PCBs If hazardous materials (including oil layer, heavy oil sheen, or light oil sheen with potential for PCBs) are present or suspected OR equipment and/or vault are not intact, then do <u>ALL</u> of the following: ✓ Note condition on the VDR form ✓ Notify appropriate personnel ✓ Take required corrective actions ✓ Coordinate containerization and hauling of vault water ✓ Proceed to Step 13 of this Field Guide • If vault water has no oil layer/sheen or light sheen with no PCB potential, then proceed to Step 5 of this Field Guide.
	WATER SAMPLE COLLECTION
5	While wearing protective gloves, collect a sample of the vault water, as follows: • Slowly dip a clear plastic bailer (or equivalent) below the surface of the water, bringing up at least 1 cup (8 ounces) of vault water • Decant water from the bailer to a clean sample container. Examples of appropriate sample containers include: ➢ Quart mason jars ➢ Canning jars that are new or have been washed with soap and rinsed twice with drinking water ➢ Clear, clean plastic jars  Equipment List Item: Bailer — M&S Code: M49-0076 Item: Sample jar — M&S Code: M49-0075

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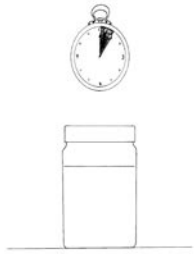
WATER SAMPLE OBSERVATIONS

- Allow water in sample container to settle, undisturbed for a minimum of 5 minutes.
- After 5 minutes, observe the liquid sample in full light and use the VDR form to determine if the water:
  - Is cloudy or opaque
  - Is discolored
  - Contains soil particles (suspended sediment)
  - Contains asphalt tar
  - Contains sewage
  - Has unusual or chemical odors (for example, gasoline, solvent, or sewage)
- Fill in appropriate checkboxes on the VDR form.



7

DISCHARGE METHOD DETERMINATION

- The jars shown below illustrate a succession of potential vault liquid sample conditions that may be encountered. Using the VDR form, determine if the vault liquid sample falls within the GREEN or RED indicator zone. REMEMBER to record results on the VDR form!
- Green Zone: Discharge vault water through a filter sock if ALL of the following are true:
  - Vault liquids are deemed appropriate for discharge, per the VDR form.
  - There is a storm drain inlet or surface waterway relatively close to the vault (within discharge distance).
- Red Zone: Containerize vault liquids for offsite disposal if ANY of the following are true:
  - Vault liquids look similar to the indicator sample jar shown below for the red zone.
  - Vault water is deemed inappropriate for discharge, per the VDR form.
  - There is no storm drain inlet or surface waterway within discharge distance of the vault.
- Contact your supervisor or local EFS if the discharge method cannot be determined.
- Note that vault liquids may NOT be discharged to land or sanitary sewer under the Vault Dewatering Permit.

GREEN
DISCHARGE USING FILTER SOCK

RED
CONTAINERIZE/
CHARACTERIZE AND HAUL

CLEAN | **LOW LEVEL OF CONTAMINATION** | **CONTAMINATED**

8 — DISCHARGE OF VAULT LIQUIDS THROUGH FILTER SOCK – GREEN ZONE

Follow this discharge procedure <u>only</u> when vault contents meet Green Zone characterization, per the VDR form.

- Place sticker from the filter sock 'Discharge Use Tracker' label onto the VDR form. However, note that:
  - ✓ If there are no stickers left on the filter sock, it may not be used. Properly dispose of the filter sock and use a new one (see Section 11 of this Field Guide).
  - ✓ If filling out the VDR form electronically, still remove the sticker from the filter sock and enter the sticker code into the correct field on the VDR form.
  - ✓ The filter sock may be used until (a) it is full (i.e., when discharge slows substantially); (b) when it has been used 3 times, for small filter sock in bucket; or (c) when it has been used 8 times, for larger, 8-foot filter socks. Numbers of uses will be tracked by the stickers that are attached to the filter.

Equipment List		
Item	M&S Code	Maximum Uses
Filter Sock (2-inch female connector 8-foot sock in poly bag)	M561460	8
Filter Sock (3-inch female connector 8-foot sock in poly bag)	M561461	8
Filter Sock (2-inch female connector 5-foot sock in bucket)	M561462	3

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- Discharge Startup
  - ✓ Inspect pumping system components to ensure proper operation and absence of leaks.
  - ✓ Review vault dewatering best management practices (BMPs), and ensure erosion control measures are in place and the discharge area is free of debris.
  - ✓ Connect the filter sock to the pump hose using the quick connect fitting and place filter sock flat on the ground as close to the storm drain inlet or waterway as possible.
  - ✓ Lower the pump into the vault, placing the pump in the middle of the water column.
  - ✓ Set hydraulic pump to low pressure setting. **The filter sock was designed for 100 gallons per minute at a maximum of 10 psi.**
  - ✓ Turn on pump and begin discharging vault water through the filter sock.
  - ✓ If necessary to dewater more quickly, multiple filter socks and/or pumps may be used; however BMPs must be adequate to prevent erosion.
  - ✓ If the filter sock becomes clogged it can become over-pressurized and disconnect from the hose connector. To prevent this from occurring, stop pumps when flows slow substantially or if no water is discharging through the filter sock.
  - ✓ If more than one filter sock is used, make sure to place stickers from Discharge Use Tracker for all filter socks on the VDR form.

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- After discharge is complete:
  - ✓ Disconnect hose from the pump and roll it toward the filter sock to force any remaining water through the sock.
  - ✓ Disconnect the hose from the filter sock and attach the end cap onto the filter sock intake.
  - ✓ Roll up used filter sock and place it in poly bag; or place small filter sock back in its bucket until it is reused or disposed of. If the filter does not fit in the provided bucket, it should be transported in a container or large plastic bag to prevent leakage.
  - ✓ If the filter sock is filled with sediment, it will be very heavy and difficult to lift. Use appropriate lifting techniques when lifting used filter socks.
  - ✓ Do <u>not</u> hang used filter socks over fences tailgates, or other public areas to allow them to dry, as they may become punctured, ripped or torn which would compromise the integrity of the filter sock.

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- Disposal of used filter socks:
  - ✓ Once in the service yard, dispose of used filter sock if:
    - ➢ The filter sock is not reusable due to all of the Discharge Use Tracker stickers having been used, or
    - ➢ The filter sock is full.
  - ✓ Dispose of the used sock by placing it in a 55-gallon drum labeled as containing oil-contaminated solids.
  - ✓ Used filter socks are considered a Non-RCRA Hazardous Waste and final disposal will take place during the regularly scheduled milk run pick-up.

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SPECIAL CONDITIONS

- Discharges to a Municipal Separate Storm Sewer System (MS4) > 10,000 gallons
  - ✓ Whenever there is a discharge of more than 10,000 gallons to a municipal separate storm sewer system, the discharger shall contact the appropriate local agency within 24-hours. EFS personnel must be contacted to assist with this notification. EFS after-hours contact number: 800-874-4043.
- Treatment of vault water
  - ✓ No vault water to be discharged will be treated to settle out sediment or other constituents. Any vault water unfit to be discharged through the filter sock is managed as described in Step 13 of this Field Guide.

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VAULT LIQUID CONTAINERIZATION AND CHARACTERIZATION – RED ZONE

- When vault contents require containerization and characterization, per the VDR form, or when discharge to a storm drain or waterway is not feasible:
  - ✓ Contact the EFS to arrange for proper containment and disposal
  - ✓ Note observations and actions on the VDR form
- Containerization
  - ✓ Pump vault water into vacuum truck or into containers (example: 55 gallon drums)
  - ✓ Label containers "Lab Test Pending." Include vault location, container number, date and name of the responsible individual.
  - ✓ Return drums to the local Service Center for proper disposal.
  - ✓ Fill out VDR form when containerizing.
  - ✓ Retain samples of the containerized vault content used to substantiate condition of the discharged water for the entire time of the characterization operation. If the sample leads to containerizing the vault water, the sampled water should also be poured into the container holding the vault water.
- Characterization
  - ✓ Containerized vault water must be characterized. Contact the EFS to coordinate testing.
  - ✓ Once sample results are received, dispose of materials properly.

Equipment List	
Item	M&S Code
55-gallon drums	M55-1008
Drum labels	M62-1335

	RECORDKEEPING – VDR FORM
14	The VDR form must be filled out during each discharge event and sent to the Vault Dewatering Program Manager for records retention. Forms can be completed digitally and emailed to the Vault Discharge Program Manager; or scanned and emailed. • If completing the form by hand and mailing the form: ✓ Send original hard copy of the VDR form to: Vault Discharge Program Manager 3401 Crow Canyon Road San Ramon, CA 94583 • If completing the form by hand, scanning and emailing the form: ✓ Send scanned VDR form via email to vaultdischarge@pge.com ✓ Keep original hard copy in representative's office until the form is reviewed, deemed complete and centrally filed by the Vault Discharge Program Manager. • If completing the form digitally and emailing the form: ✓ Send digital form to vaultdischarge@pge.com

Table 1. References: Material Codes for Vault Dewatering and Discharge Materials

Equipment	M&S Code
Bailer	M49-0076
Sample jar	M49-0075
Filter Sock (2-inch female connector 8-foot sock in poly bag)	M561460
Filter Sock (3-inch female connector 8-foot sock in poly bag)	M561461
Filter Sock (2-inch female connector 5-foot sock in bucket)	M561462
55-Gallon Drums	M55-1008
Drum Labels	M62-1335

XIV. Attachment IV: SWRCB Utility Vault General Permit

STATE WATER RESOURCES CONTROL BOARD

1001 I Street, Sacramento, California 95814
http://www.waterboards.ca.gov/water_issues/programs/npdes/utilityvaults.shtml

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

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

A Discharger that is described in Table 1 below, has complied with the requirements for coverage under this Order, and has received a Notice of Applicability is authorized to discharge on the date of the Notice of Applicability.

Table 1. Discharger Information

Dischargers	Utility companies with short-term intermittent discharges from utility vaults and underground structures to waters of the United States that do not cause, do not have the reasonable potential to cause, or do not contribute to an in-stream excursion above any applicable state or federal water quality objectives/criteria.

Table 2. Administrative Information

This Order was adopted by the State Water Resources Control Board (hereinafter State Water Board) on:	**October 21, 2014**
This Order shall become effective on:	**July 1, 2015**
This Order shall expire on:	**June 29, 2020**
The United States Environmental Protection Agency (U.S. EPA) and the State Water Board have classified this discharge as a **minor** discharge.	

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on October 21, 2014

AYE: Vice Chair Frances Spivy-Weber
Board Member Tam M. Doduc
Board Member Steven Moore
Board Member Dorene D'Adamo

NAY: None

ABSENT: Chair Felicia Marcus

ABSTAIN: None

Jeanine Townsend

Jeanine Townsend
Clerk to the Board

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I. DISCHARGE INFORMATION

Utility companies supply essential public services that are necessary for day-to-day living and/or operations. Utilities eligible to obtain coverage under this Order include, but are not limited to, suppliers of natural gas, electricity, internet, cable television, and telephone services. However, water, sewer, and storm drainage utilities are not eligible for coverage under this Order. Utility vaults and underground structures are used to house a wide range of utility facilities including transformers, meters, filters, pressure regulators, and valves with or without actuators. Utility vaults and underground structures can be either wet or dry. Wet structures, which make up the vast majority of the structures, include manholes and hand holes containing utility components including cables, cable connections, and signal enhancers. Dry structures are sealed tightly and are usually air-conditioned since these contain switchgears, computers, and electronics that are sensitive to heat and moisture.

Water collects in utility vaults and underground structures from a variety of potential sources which include, but are not limited to, storm water runoff and surface water drainage, groundwater infiltration, and infiltration from nearby wet utility structures (e.g., water from sewer or water line breaks and leaks). Water in utility vaults and underground structures may contain pollutants associated with one or more sources of water as well as pollutants originating from within the confines of the utility vaults or underground structures. The typical constituents found in utility vault and underground structure discharges are oil and grease, petroleum hydrocarbons, and total suspended solids. For safety reasons, utility companies must dewater utility vaults and underground structures prior to performing any repair, maintenance, and/or installation of equipment. When the amount of water in the utility vaults or underground structures interferes with the safety and quality of the work to be done, water must be pumped out.

Utility companies with short-term intermittent discharges from utility vaults and underground structures to waters of the United States that do not cause, have the reasonable potential to cause, or contribute to an in-stream excursion above any applicable state or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water are authorized to discharge in accordance with the conditions set forth in this Order. This Order requires utility companies to develop a pollution prevention plan (PLAN) that incorporates measures to meet this requirement.

Due to the large number of utility vaults and underground structures operated by each utility company (Discharger), there is no single “facility.” For the purpose of this Order, the term “site” will be used when referring to a vault or underground structure and the term “Discharger” will be used when referring to the utility company.

II. ORDER COVERAGE AND APPLICATION REQUIREMENTS

A. Coverage

This Order is intended to cover short-term intermittent discharges of pollutants to surface waters from utility vaults and underground structures. To obtain coverage under this Order, Dischargers must meet the following criteria:

1. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an exceedance of any applicable criterion

established by the U.S. Environmental Protection Agency (U.S. EPA) pursuant to Clean Water Act (CWA) section 303. Likewise, pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an exceedance of any water quality objective adopted by the State Water Board or Regional Water Quality Control Board (Regional Water Board), including prohibitions of discharge for the receiving water.

2. The discharge does not cause acute or chronic toxicity in the receiving water.
3. This Order replaces Order 2006-0008-DWQ. However, the NPDES permit number of CAG990002 remains the same. Utility companies with utility vaults and underground structures enrolled under Order 2006-0008-DWQ must obtain coverage under this Order to continue their authorization to discharge. To obtain coverage under this Order, Dischargers must submit a complete application as provided in 40 Code of Federal Regulations (C.F.R.) section 122.28 (b)(2).

B. Discharger

A Discharger regulated under this Order includes utility companies that plan to have short-term intermittent discharges of pollutants to surface waters from utility vaults and underground structures. Utility companies include, but are not limited to, suppliers of natural gas, electricity, internet, cable TV, and telephone services.

C. Application

To obtain coverage under this Order, Dischargers must submit a complete application to the State Water Board as described below:

1. A Notice of Intent (NOI), which is provided in Attachment E, signed in accordance with the signatory requirements of the Standard Provisions in Attachment B;
2. A service territory/watershed map(s);
3. A PLAN; and
4. An application fee.[1] An application fee is required only for new Dischargers. Dischargers enrolled under Order 2006-0008-DWQ and applying for continuing coverage under this Order will be billed during the regular billing cycle.

A Discharger must submit a separate application for utility vaults and underground structures located within each Regional Water Board boundary as defined in section 13200 of the California Water Code. Each enrollment will cover all discharges occurring within the boundaries of that Regional Water Board. However, only one application fee is required for each Discharger.

The NOI must include the name, address, and telephone number of the owner or operator of the utility vaults or underground structures. The NOI must also include the type of utility, and a general description of discharges. In addition, the NOI must include a map showing (1) the service area within a specific Regional Water Board

[1] The fee for enrollment under this Order shall be based on section 2200(b)(9) of title 23, California Code of Regulations, which is available at http://www.waterboards.ca.gov/resources/fees/#npdes and is payable to the State Water Board.

boundary and (2) the corresponding major surface water bodies and watersheds to which the utility vault or underground structure water may discharge. For Dischargers that discharge to any municipal separate storm sewer system (MS4) identified in Attachment A to State Water Board Resolution 2012-0031, map features must also include any Area of Special Biological Significance (ASBS) boundaries, MS4 discharge points to the ASBS, and major roadways. The NOI form and guidance on completing the NOI are available in Attachment E to this Order. The PLAN must contain the information detailed in section VII.C.3.c of this Order.

The application, including the NOI, map(s), PLAN, and fee must be submitted to the following address:

Utility Vaults Permit NOI – NPDES Wastewater Unit
Division of Water Quality
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

State and Regional Water Board staff will review the application package for completeness and applicability under this Order. Additionally, the State Water Board's Deputy Director of the Division of Water Quality (Deputy Director) may issue a Notice of Exclusion (see section II.D below), which either terminates coverage under this Order or requires submittal of an application package for an individual permit or an alternative general permit.

Coverage under this Order will become effective when all of the following have occurred:

1. The Discharger has submitted a complete application package per the requirements in section II.C of this Order;
2. The proposed PLAN has been reviewed by State and Regional Water Board staff;
3. The PLAN has been posted on the State Water Board's website for a 30-day comment period[2] and approved by the Deputy Director; and
4. The Deputy Director has issued a Notice of Applicability. The Discharger is authorized to discharge starting on the date of the Notice of Applicability.

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

[2] See *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2nd Cir. 2005).

D. Exclusion of Coverage

The authorization to discharge under this Order is terminated upon receipt of a Notice of Exclusion (NOE) or if the appropriate Regional Water Board adopts an individual order covering the discharge, or the Discharger becomes enrolled under another general order. NOEs for existing Dischargers will include a date for the coverage termination that provides time to transition coverage to another order. An NOE provides notice that the Discharger is not eligible for coverage under this Order and provides justification for the exclusion.

E. Discharge to a Municipal Separate Storm Sewer System (MS4)

Dischargers shall comply with any notification requirements of the MS4 permit(s) of any MS4 to which they discharge and shall follow the MS4 permit's notification protocols. It is the State Water Board's intention with this requirement to encourage communication between Dischargers under this Order and local agencies responsible for MS4s to reduce misunderstandings and concerns over the types of discharges covered by this Order. This Order does not supersede the authority of the MS4 permittee to prohibit, restrict, or control storm water discharges and conditionally exempt non-storm water discharges to storm drain systems or other watercourses within its jurisdiction as allowed by state and federal law.

Discharge Prohibition B.6 of the Statewide Storm Water Permit for the State of California Department of Transportation (Order 2012-0011-DWQ; NPDES No. CAS000003) and Discharge Prohibition B.5 of the Statewide General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (Order 2013-0001-DWQ; NPDES No. CAS000004) allow discharges from utility vaults and underground structures to MS4s discharging to ASBSs when the discharges are authorized under this Order. In addition, both of these MS4 permits state that the State Water Board will require, as part of this Order, a study to characterize the discharges of utility vaults and underground structures to MS4s that discharge directly to an ASBS. Provision VII.C.2.b requires Dischargers to conduct a study to characterize representative utility vault and underground structure discharges to MS4s with a direct discharge to an ASBS. However, if a Regional Water Board determines that a specific discharge from a utility vault or underground structure alters the natural ocean water quality in the ASBS, the Regional Water Board may prohibit the discharge consistent with Prohibition IV.C of this Order.

The California Ocean Plan prohibits the direct discharge of waste to designated ASBS unless the Discharger has been granted an exception pursuant to the State Water Board's Water Quality Control Plan – Ocean Waters of California. Indirect discharges (e.g., via MS4 systems) are subject to conditions contained within the direct discharger's exception (e.g., Resolution 2012-0012, Approving Exceptions to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report or the California Department of Transportation Order No. 2012-0011-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES), Statewide Storm Water Permit, Waste Discharge Requirements (WDRS)).

F. Terminating Coverage

Dischargers shall submit a Notice of Termination or Transfer (NOTT) when coverage under this Order is no longer needed. As provided in Attachment F, an NOTT is a form that lists the waste discharge identification number and the name and address of the owner or operator of the utility company. The NOTT is signed and dated by the owner or operator of the utility company certifying that the discharges associated with NPDES Permit No. CAG990002 have been eliminated or that there has been a change in ownership. Upon submission of the NOTT to the State Water Board, the Discharger is no longer authorized to discharge wastewater associated with this Order.

G. Discharge Authorization Changes

Dischargers already covered by another existing order may elect to continue coverage under the existing order or may submit a complete application for coverage under this Order. Dischargers who submit a complete application under this Order are not required to submit an individual order application. The State or Regional Water Board may request additional information and determine that a Discharger is not eligible for coverage under this Order and must be regulated under another order. If the State or Regional Water Board issues another order, the applicability of this Order to the specified discharge is immediately terminated on the effective date of the other order.

H. Transferring Ownership

In the event of any change in control or ownership of utility vaults or underground structures presently owned or operated by the Discharger, the Discharger must notify the succeeding owner or operator of the regulatory requirements of this Order by letter, a copy of which must be immediately forwarded to the appropriate Regional Water Board office(s). The Discharger must submit an NOTT (see Attachment F) to the Regional Water Board and a copy of the NOTT to the State Water Board. The succeeding owner or operator must then submit a new application for coverage under this Order.

III. FINDINGS

The State Water Board finds:

A. Legal Authorities. This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the CWA and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from utility vaults and underground structures to waters of the United States.

B. Background and Rationale for Requirements. The State Water Board developed the requirements in this Order based on information submitted as required by the previous order (Order 2006-0008-DWQ), through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment D), which contains background information and rationale for the requirements in this Order, is hereby

incorporated into and constitutes findings for this Order. Attachments A through C and E through G are also incorporated into this Order.

C. Discharge to an MS4. As stated in section II.E above, Provision VII.C.2.b requires Dischargers to conduct a study to characterize representative utility vault and underground structure discharges to MS4s with a direct discharge to an ASBS. The State Water Board finds that these discharges through an MS4 to an ASBS are not expected to result in the MS4 discharge causing a substantial alteration of natural ocean water quality in the ASBS during the interim study period pursuant to reissuance of this Order.

D. Notification of Interested Parties. The State Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet of this Order.

E. Consideration of Public Comment. The State Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public hearing are provided in the Fact Sheet of this Order.

F. Homeland Security Compliance. 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 with appropriate statutory citation to the Regional Water Board regarding redacted information within any submittal. Coverage under this General Permit may be unavailable if non-redacted information is insufficient to demonstrate eligibility and compliance.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order 2006-0008-DWQ except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the State Water Board or Regional Water Boards from taking enforcement action for past violations of the previous order.

IV. DISCHARGE PROHIBITIONS

A. The discharge of wastewater shall not create or cause conditions of nuisance or pollution.

B. The discharge of wastewater to an MS4 with a direct discharge to an ASBS is prohibited unless the owner or operator of the MS4 has been granted an exception to Ocean Plan Section III.E.4.(a).

C. The discharge of wastewater to an MS4 with a direct discharge to an ASBS shall not alter the natural ocean water quality in the ASBS.

D. The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by U.S. EPA

pursuant to section 303 of the CWA or water quality objective adopted by the State Water Board or Regional Water Boards.

V. EFFLUENT LIMITATIONS

The discharge from utility vaults and underground structures shall not cause or contribute to an exceedance of receiving water quality objectives or criteria.

VI. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Regional Water Boards' Basin Plans and are a required part of this Order. The discharge shall not cause the following in the surface receiving water:

1. Concentrations of dissolved oxygen (DO) in the receiving waters to fall below the DO objective in a Regional Water Board Basin Plan, or 5.0 milligram/Liter (mg/L), whichever is more stringent. During any period when the receiving water DO concentration is already below the applicable Basin Plan objective or 5.0 mg/L (whichever is more stringent), the discharge shall not cause any further depression of the DO concentration.
2. Oils, greases, waxes, floating material (liquids, solids, foams, and scum), or suspended material to create a nuisance or adversely affect beneficial uses.
3. Alteration of the apparent color, taste, or odor beyond present natural background levels.
4. Biostimulatory substances to be present in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
5. Turbidity in amounts that adversely affect beneficial uses in the receiving waters. In no case shall turbidity increase more than 20 percent over background levels.
6. The ambient pH to fall below 6.5 or exceed 9.0.
7. Deposition of material that causes a nuisance or adversely affects beneficial uses.
8. Significant erosion or alteration of the watercourse.
9. The ambient receiving water temperature to be altered more than 5ºF.
10. Total residual chlorine to be present at concentrations that are detectable using approved methods as specified in 40 C.F.R. section 136.
11. Taste or odor-producing substances that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or cause nuisance or adversely affect beneficial uses.
12. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in title 22, California Code of Regulations, that harm human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in

the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

13. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses, that produce a detrimental response in human, plant, animal, or aquatic life, or that bioaccumulate in aquatic resources at levels harmful to human health.

14. Violation of any applicable water quality objective for receiving waters adopted by the State or applicable Regional Water Board or applicable water quality criterion adopted by U.S. EPA pursuant to section 303 of the CWA.

These limitations shall apply unless more stringent provisions exist in either the Regional Water Boards' Basin Plan[3] or an applicable State Water Board's water quality control plan. The more stringent limitation shall apply.

B. Groundwater Limitations (Not Applicable)

VII. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment B of this Order.

2. **State Water Board Standard Provisions.** The Standard Provisions in Attachment B contain requirements that are specified in 40 C.F.R. and the California Water Code. The standard provisions below include requirements that are not contained in 40 C.F.R. and the California Water Code. The Discharger shall comply with the following provisions:

   a. For the Regional Water Board to receive timely and accurate information regarding all points of discharge, the Discharger shall establish and maintain a list of liaisons to serve as the primary contacts with the appropriate Regional Water Board. The Discharger must send the Regional Water Board(s) a list of designated liaison personnel, telephone number(s), and specific area(s) of responsibility within 30 days after the date of submittal of the NOI and after any update to the list.

   b. The Discharger shall keep a hard-copy or electronic copy of this Order and the PLAN at a location where key operating and site management personnel can refer to the documents. Key operating and site management personnel shall be familiar with the contents of this Order and the PLAN.

   c. The Discharger is required to retain records, including all monitoring information and copies of all reports required by this Order, for five years unless directed otherwise by a Regional Water Board Executive Officer or the State Water Board's Deputy Director.

[3] Basin Plans can be found at http://www.waterboards.ca.gov/plans_policies/

d. This Order expires on **June 29, 2020**. If this Order is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 C.F.R. section 122.6 and remain in full force and effect. Dischargers that have regulatory coverage under this Order at the time of expiration will continue to be covered under this Order until subsequent regulatory coverage becomes effective under a reissued order.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment C of this Order for sampling and analyses of discharges for routine effluent monitoring requirements for the annual report and in conducting required sampling and analyses for the special studies specified below.

C. Special Provisions

1. Reopener Provisions

a. This Order may be re-opened for modification, or revocation and reissuance in accordance with the provisions contained in 40 C.F.R. section 122.62.

b. Conditions that necessitate a major modification of a permit are described in the 40 C.F.R. section 122.62, including:

i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, this Order may be re-opened and modified in accordance with the new or amended standards.

ii. When new information that was not available at the time of permit issuance justifies new permit conditions.

c. This Order may also be reopened in order to amend provisions governing direct or indirect discharges to ASBS, based upon the Discharge Characterization Study for Discharges to Municipal Separate Storm Sewer Systems Discharging to Areas of Special Biological Significance (see section VII.C.2.b below).

2. Special Studies

a. **Discharge Characterization Study (Study 1)**

Each Discharger is required to conduct a utility vault and underground structure discharge characterization study (Discharge Characterization Study) in order to collect sufficient data to evaluate the potential for discharges from these structures to cause or contribute to exceedances of water quality standards for priority pollutants. Each Discharger shall develop a Monitoring Work Plan that specifies how the Discharger plans to implement the Discharge Characterization Study consistent with the requirements contained in Attachment G.

Each Discharger shall comply with the time schedule and conditions listed in Attachment G when developing and implementing the Discharge Characterization Study.

Alternatively, Dischargers may form a coalition and work together to develop a work plan for the characterization studies. In addition, Dischargers may conduct sampling for the studies as a coalition or individually.

b. **Discharge Characterization Study for Discharges to Municipal Separate Storm Sewer Systems (MS4s) Discharging to Areas of Special Biological Significance (ASBSs) (Study 2)**

The California Ocean Plan provides that waste shall not be discharged to an ASBS unless subject to an exception. Non-storm water discharges to ASBSs are prohibited except as specified in the General Exception, State Water Board Resolution 2012-0012[4]or other approved Ocean Plan exception. In order to legally discharge waste into an ASBS, Dischargers must have: (1) an exception to the California Ocean Plan prohibition against waste discharges to an ASBS; and (2) appropriate authorization to discharge. Authorization to discharge for point source waste discharges to navigable waters consists of coverage under an NPDES permit. The General Exception contains provisions for allowing an NPDES permitting authority to authorize non-storm water discharges to an MS4 that discharges directly to an ASBS. This Order establishes a process for evaluation and authorization of the discharge of non-storm water from utility vaults and underground substructures to MS4s that have an exception and a direct discharge to an ASBS.

Dischargers dewatering utility vaults or underground structures where the discharge reaches an MS4 shall determine whether the MS4 subsequently discharges to an ASBS. Dischargers shall first determine whether the MS4 permittee is listed in Attachment A of State Water Board Resolution 2012-0031[5] and whether the utility's discharges are located within the watershed that drains to the listed ASBS. Dischargers discharging to such MS4s shall characterize discharges from five representative utility vaults or underground structures. The Deputy Director will compare results from Study 2 to regional monitoring program results for the ASBS General Exception (Resolution 2012-0031) Ocean Receiving Water and Reference Area Monitoring Program. The Deputy Director will make an assessment of whether the discharges from utility vaults or underground structures alter natural ocean water quality in the ASBS.

Within their service territories, Dischargers shall identify each MS4 that discharges directly to an ASBS and identify five representative utility vaults

[4] State Water Resources Control Board Resolution 2012-0012, Approving Exceptions to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report: http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0012.pdf

[5] State Water Resources Control Board Resolution 2012-0031, Amending the General Exception to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses: http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0031.pdf

and underground structures that drain indirectly through the respective MS4s for inclusion in the study. Dischargers that discharge within an ASBS watershed of an MS4 owned or operated by a permittee listed in Attachment A of State Water Board Resolution 2012-0031 must conduct an additional discharge Characterization Study to characterize representative utility vault or underground structure discharges to the MS4 with a direct discharge to an ASBS. Dischargers meeting the criteria above shall comply with the requirements contained in Attachment G, section IV. Dischargers that do not discharge to an MS4 listed on Resolution 2012-0031 are not required to complete the requirements in Attachment G, section IV.

The State Water Board may reopen this Order after Study 2 is completed if the State Water Board finds that the discharge from utility vaults and underground structures to MS4s, with an exception to discharge to ASBSs, alters the natural ocean water quality of an ASBS. The State Water Board will take no action if there is no basis for imposing conditions necessary to protect natural ocean water quality. If the permit is reopened, the State Water Board may direct the following actions for permittees that the State Water Board determines to be altering the natural ocean water quality:

- Impose additional conditions that will protect natural ocean water quality; or
- Include amendments to prohibit discharges from utility vaults and underground structures to MS4s with an exception to discharge to ASBSs.

3. Best Management Practices and Pollution Prevention

a. Each Discharger is required to develop a PLAN that includes best management practices (BMPs) designed to prevent or control the discharge of pollutants. The BMPs may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. The PLAN is a written document that describes the Discharger's approach to comply with the requirements in this Order. The PLAN must include 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 then prescribe the appropriate measures that will be implemented, as necessary, to prevent or control the discharge of pollutants. All PLANs developed by Dischargers must meet the minimum specifications as described below.

b. Dischargers who are enrolling for the first time under this Order must submit the PLAN together with their application, as described in section II.C. (Application), to the State Water Board. Re-enrollees shall submit a revised or new PLAN in order to incorporate and comply with newly established requirements contained in section VII.C.3.c. below as part of their application for coverage under this Order. Each Discharger must also indicate in their application the location where the PLAN is to be maintained and identify the appropriate contact person(s), with telephone number(s), for the PLAN. As

necessary, the Discharger may be required to revise the PLAN if requested by the State Water Board or Regional Water Boards.

c. The PLAN shall include the following items:

i. **PLAN Administration**

(a) **Pollution Prevention Team.** Each PLAN shall identify a specific individual or individuals within the utility's organization to serve as members of a Pollution Prevention Team (or equivalent) who are responsible for developing the PLAN and assisting the utility in its implementation, maintenance, evaluation, and revision of the PLAN. The PLAN shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the utility's PLAN.

(b) **Employee Training.** The Discharger shall implement a training program to ensure that all utility personnel that are responsible for implementing the PLAN are trained in the proper execution of the procedures and BMPs identified in the PLAN to minimize the potential for the release of pollutants in utility vault and underground structure discharges. The training shall address topics such as spill response, good housekeeping, pollution control procedures, and material management practices. In addition, staff who dewater utility vaults or underground structures shall be trained to use a dewatering checklist or dewatering procedures to facilitate evaluation of the quality of the water prior to a planned (non-emergency or non-automated critical) discharge from a utility vault or underground structure. The PLAN shall identify who is responsible for the training and how often training will take place. Training shall be held at intervals frequent enough to assure adequate understanding of the PLAN goals, objectives, and procedures.

ii. **Identification of Potential Pollutant Source**

(a) **Description of Potential Pollutant Sources.** Each PLAN shall provide a general description of potential sources that may add pollutants to utility vault and underground structure discharges. Each PLAN shall identify all utility activities and materials that may potentially be a source of pollutants. The PLAN shall include a description of the types of utility materials handled at the site that potentially may be exposed to vault water either within the vault or underground structure or during discharge operations.

(b) **Drainage Map.** Provide a map showing (1) the Discharger service area within a specific Regional Water Board boundary and (2) the corresponding major surface water bodies and watersheds to which utility vault or underground structure water may discharge. Map

features must also include ASBS boundaries, MS4 discharge points to the ASBS, and major roadways.

(c) **Pollution Assessment**

(1) Using the information identified in section VII.C.3.c.ii and procedures and pollution control measures developed in sections VII.C.3.c.iii and iv of this Order, analyze and discuss the pollution sources which have been identified to potentially cause or contribute to an exceedance of water quality objectives. The analysis shall identify potential sources of pollutants and, for each potential source, any corresponding pollutant or pollutant parameter (e.g., oil and grease) of concern. For each pollutant of concern, identify specific control measures which utility company personnel may use to control the discharge of the pollutant.

(2) If existing discharge data are available, use these data to identify sites or categories of sites which present an increased risk of discharging utility vault water with elevated pollutant levels. Identify potential sources of the elevated pollutant levels and identify specific control measures which will be used to control pollutant levels in the discharges at these sites.

iii. **Procedures for Discharges from Utility Vaults and Underground Structures**

Each Discharger shall develop and use a checklist or series of procedures to evaluate the quality of the water prior to a planned (non-emergency or non-automated critical) discharge from a utility vault or underground structure. These procedures shall be included in the PLAN. The checklist or series of procedures are intended to allow the Discharger to make a preliminary determination of the quality of water to be disposed and indicate to the Discharger which pollution control measures should be used when discharging the water. The procedures shall include, at a minimum, visual inspection for evidence of, or the potential for, pollutants to be present in the discharge.

Each Discharger's PLAN shall also include the procedures that will be used for discharges that occur during emergency situations where it is recognized that utility vault or underground structure dewatering may need to occur as soon as possible to avoid endangerment to human health, public safety, or the environment or to reestablish essential public services. Further, the PLAN shall address the procedures to be used for automated critical discharges. Automated critical discharges are necessary to protect equipment that is vulnerable to damage by water infiltration or seepage, to minimize outage delays and maintain reliability of essential public services, and for safety purposes. The Discharger shall describe the feasible procedures that may be implemented during emergency situations and for automated critical

discharges to minimize the release of pollutants to the environment. The Discharger's staff responsible for dewatering utility vaults or underground structures shall use a checklist or procedures during dewatering activities to facilitate evaluation of the quality of the water prior to a planned (non-emergency or non-automated critical) discharge from a utility vault or underground structure.

iv. **Pollution Control Measures**

Each Discharger covered by this Order shall develop a description of BMPs appropriate for their site(s) and operations and implement such BMPs. The appropriateness and priorities of BMPs in a PLAN must reflect identified potential sources of pollutants described in section VII.C.3.c.ii. above. In addition, the Discharger should discuss the advantages and limitations of each BMP. If relevant, include a flow diagram describing the conditions under which specific pollution control measures and/or BMPs will be deployed. The description of pollution control measures and/or BMPs shall address the following minimum components:

(a) **Good Housekeeping.** The Discharger shall identify and discuss good housekeeping BMPs which can be adopted to prevent or control the discharge of pollutants. Examples of best practices that should be considered by each Discharger include, but are not limited to, the following:

(1) 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.

(2) If applicable, store and contain liquid materials in such a manner that if the container is ruptured, the contents will not discharge, flow, or be washed into the storm drainage system, surface waters, or groundwater.

(3) Prior to dewatering a utility vault or underground structure, when feasible and safe, maintain the cleanliness and orderliness of all areas that may be impacted by the discharge including the discharge area (e.g., street, roadway, storm drain inlet) which should be clear of debris and sediment prior to discharging.

(4) Use an absorbent material (e.g., absorbent pads, rags) on the utility vault's or underground structure's water surface prior to dewatering and discharge when an oil sheen has been observed.

(b) **Discharge Procedures.** The PLAN shall include, at a minimum, provisions and procedures which will be implemented during the discharge from utility vaults and underground structures to minimize

the introduction of pollutants and protect receiving water quality. For example, best practices that should be considered to control erosion and minimize the discharge of sediment include, but are not limited to, the following:

(1) When feasible and safe, sweep/clear the area surrounding the discharge point to prevent washing sediment and debris into storm drains.

(2) Use straw wattles to reduce erosion.

(3) Use a filter sock or bag to reduce oil and sediment discharge.

(c) **Pollution Control and Waste Disposal Procedures**. Instances may arise where utility personnel determine that a utility vault or underground structure discharge may have a reasonable potential to cause or contribute to an exceedance of water quality objectives for the receiving water and that BMPs and procedures implemented in accordance with sections VII.C.3.c.iv.a. and b. above will be insufficient to adequately control pollutants in the discharge. In these instances, the PLAN shall include provisions and procedures to be implemented to capture, treat, and/or dispose of the discharge in a manner that is protective of receiving water quality (e.g., hauling the utility vault or underground structure water to a wastewater treatment plant or a disposal site). Any potential discharge for which it is determined that the discharge from the utility vault or underground structure will cause or contribute to an exceedance in the receiving water of applicable water quality objectives is not authorized under this Order. The determination of the potential to cause water quality impacts shall be based on field observations prior to dewatering as well as the results of the Identification of Potential Pollutant Source required in section VII.C.3.c.ii above.

d. **Annual PLAN Evaluation and Revision**

Each Discharger shall conduct an overall evaluation of the effectiveness of its PLAN in controlling the discharge of pollutants during a discharge event and revise or replace the PLAN as necessary to address procedures and BMPS found to not be effective in minimizing the discharge of pollutants.

i. PLAN Evaluation Requirements

At least once per year, the Discharger shall conduct an evaluation of the effectiveness of their PLAN in controlling the discharge of pollutants during a discharge event. At a minimum, the PLAN evaluation shall include the following:

(a) Evaluate the PLAN measures to reduce pollutant loadings to determine whether they are adequate and properly implemented in accordance with the terms of this Order or whether additional control measures are needed. Ensure that utility source control measures, sediment and erosion control measures, and other structural BMPs

identified in the PLAN are operating correctly. Perform an evaluation of equipment needed to implement the PLAN.

(b) If the results of the annual monitoring at five representative sites required in the MRP (Attachment C) exceed of one or more of the Numeric Action Levels (NALs) listed in Table 3 below, then a Discharger shall evaluate the potential cause(s) of the NAL exceedance(s). At a minimum, this evaluation shall include an assessment of the 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 3. 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

ii. PLAN Revisions

If PLAN revisions are necessary based on the PLAN evaluation required in section VII.C.3.d.i above, the Discharger shall develop a revised PLAN with new or revised BMPs to prevent future exceedance(s) of NALs. The Discharger shall implement such BMPs and document the progress of their implementation and effectiveness in the Annual Report to the Regional Water Board Executive Officer.

If it is determined that the cause(s) of an exceedance of an NAL were beyond the control of the Discharger and not a result of inadequate PLAN implementation, procedures, or BMPs, then revisions to the PLAN are not required. The Discharger shall provide as part of the Annual Report an explanation detailing when this situation occurs.

iii. Annual PLAN Evaluation and Revision Reporting

(a) The Discharger shall provide the results of the annual PLAN evaluation and any revisions to the PLAN as part of the Annual Report required in section VI.B. of the MRP (Attachment C).

(b) Each Discharger shall retain for five years records summarizing the scope of the annual PLAN evaluation, personnel making the evaluation, the date(s) of the evaluation(s), significant observations relating to the implementation of the PLAN, and actions taken to revise the PLAN.

4. Other Special Provisions

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

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

VIII. COMPLIANCE DETERMINATION – NOT APPLICABLE

ATTACHMENT A – DEFINITIONS

Area of Special Biological Significance (ASBS)
ASBSs are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that maintenance of natural ocean water quality is ensured. All ASBSs are also classified as a subset of State Water Quality Protection Areas. ASBSs are also referred to as State Water Quality Protection Areas – Areas of Special Biological Significance.

Automated Critical Discharge
This is a discharge necessary to protect equipment that is vulnerable to damage by water infiltration or seepage, to minimize outage delays and maintain reliability of essential public services, and for safety purposes.

Best Management Practices (BMPs)
BMPs are permit conditions used in place of or in conjunction with numeric effluent limitations to prevent or control the discharge of pollutants. These may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. BMPs may include, but are not limited to, employee training, treatment requirements, operating procedures, or practices to control site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage.

Natural Ocean Water Quality
The water quality (based on selected physical, chemical, and biological characteristics) that is required to sustain marine ecosystems, and which is without apparent human influence, i.e., an absence of significant amounts of: (a) man-made constituents (e.g., DDT); (b) other chemical (e.g., trace metals), physical (temperature/thermal pollution, sediment burial, etc.), and biological (e.g., bacteria) constituents at concentrations that have been elevated due to man's activities above those resulting from the naturally occurring processes that affect the area in question; and (c) non-indigenous biota (e.g., invasive algal bloom species) that have been introduced either deliberately or accidentally by man. Discharges "*shall not alter natural ocean water quality*" as determined by a comparison to the range of constituent concentrations in reference areas agreed upon via the regional monitoring program(s) under Resolution 2012-0031. If monitoring information indicates that natural ocean water quality is not maintained, but there is sufficient evidence that a discharge is not contributing to the alteration of natural ocean water quality, then the Regional Water Board may make that determination. In this case, sufficient information must include runoff sample data that have equal or lower concentrations for the range of constituents at the applicable reference area(s).

Notice of Exclusion (NOE)
A one-page notice indicating that the applicant is NOT eligible for coverage under this Order and states the basis for the determination.

Notice of Intent (NOI)
A form completed and signed by a utility owner/operator notifying the State and Regional Water Boards that the operator will comply with the Order for vault dewatering activities at a specific utility or site.

Notice of Termination or Transfer (NOTT)
A form completed and signed by a utility company owner operator notifying the State and Regional Water Boards that the utility company owner or operator no longer wishes to be covered under this Order. Submission of an NOTT constitutes notice that the owner or operator (and his/her agent) of the utility company identified on the form is no longer authorized to discharge wastewater associated with maintenance activities under this Order. This definition includes situations in which specific vaults, underground structures, or specific areas are terminated or transferred.

Pollution Prevention Plan (PLAN)
A written document that describes the operator's activities to comply with the requirements in this Order. The PLAN is intended to facilitate a process whereby the operator evaluates potential pollutant sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants such as BMPs.

Utility Company
Any person, as defined in section 13050 of the California Water Code, whose business is to supply essential public services, excluding water and sewer, necessary for day to day living and/or operations. This includes, but is not limited to, suppliers of natural gas, electricity, internet, cable TV, and telephone services.

ATTACHMENT B – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE DUTY TO COMPLY

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the CWA and the California Water Code (Water Code) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. §122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. §122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it must have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. §122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. §122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. (40 C.F.R. §122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. §122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. §122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (U.S. EPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. §122.41(i); Water Code, §13383) to:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. §122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. §122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. §122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. §122.41(i)(4).)

G. Bypass

1. Definitions
   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [*40 C.F.R. §122.41(m)(1)(i)*].
   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 C.F.R. §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedance(s) of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 C.F.R. §122.41(m)(2)].
3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 C.F.R. §122.41(m)(4)(i)]:
   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 C.F.R. §122.41(m)(4)(A)];
   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 C.F.R. §122.41(m)(4)(B)]; and
   c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Order Compliance I.G.5 below [40 C.F.R. §122.41(m)(4)(C)].

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Order Compliance I.G.3 above [40 C.F.R. §122.41(m)(4)(ii)].

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 C.F.R. §122.41(m)(3)(i)].

   b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 C.F.R. §122.41(m)(3)(ii)].

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 C.F.R. §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 C.F.R. §122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 C.F.R. §122.41(n)(3)]:

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 C.F.R. §122.41(n)(3)(i)];

   b. The permitted facility was, at the time, being properly operated [40 C.F.R. §122.41(n)(3)(i)];

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E [40 C.F.R. §122.41(n)(3)(iii)]; and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Order Compliance I.C above [40 C.F.R. §122.41(n)(3)(iv)].

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 C.F.R. §122.41(n)(4)].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. §122.41(f).)

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, this Order shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. §122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the State Water Board. The State Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. §122.41(l)(3); §122.61.)

D. Severability

The provisions of this Order are severable and if any provisions of this Order or the application of any provisions of this Order to any circumstance is held invalid, the applications of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

E. Pollution, Contamination, or Nuisance [Wat. Code, § 13050].

Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. §122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under 40 C.F.R. Part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. Part 136 unless otherwise specified in 40 C.F.R. Part 503 unless other test procedures have been specified in this Order [40 C.F.R. §122.41(j)(4)] [40 C.F.R. §122.44(i)(1)(iv)]

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. Part 503), the

Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 C.F.R. §122.41(j)(2)].

B. Records of monitoring information shall include:

1. For the Discharge Characterization Study, and Annual Report:

   a. The date, exact place (i.e., City/County and street address and/or latitude/longitude), and time of sampling or measurements (40 C.F.R. §122.41(j)(3)(i));

   b. The individual(s) who performed the sampling or measurements (40 C.F.R. §122.41(j)(3)(ii));

   c. The date(s) analyses were performed (40 C.F.R. §122.41(j)(3)(iii));

   e. The individual(s) who performed the analyses (40 C.F.R. §122.41(j)(3)(iv));

   f. The analytical techniques or methods used (40 C.F.R. §122.41(j)(3)(v)); and

   g. The results of such analyses. (40 C.F.R. §122.4l1(j)(3)(vi).)

2. For all discharges (i.e., routine monitoring):

   a. The date, place (i.e., City/County and street address and/or latitude/longitude), and/or vault identifier;

   b. Estimated volume discharged;

   c. Indication of whether the discharge was sampled as part of the Discharge Characterization Study.

C. Claims of confidentiality for the following information will be denied (40 C.F.R. §122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. §122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data.
3. (40 C.F.R. §122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. §122.41(h); Water Code, §13267.)

B. Signatory and Certification Requirements

1. All permit applications shall be signed as follows:

   a. 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 [40 C.F.R. §122.22(a)(1)];

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 C.F.R. §122.22(a)(2)]; or

   c. 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) [40 C.F.R. §122.22(a)(3)].

2. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in paragraph (B.1) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in paragraph (B.1) of this provision [40 C.F.R. §122.22(b)(1)];

   b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 C.F.R. §122.22(b)(2)]; and

   c. The written authorization is submitted to the Regional Water Board, State Water Board, or U.S. EPA [40 C.F.R. §122.22(b)(3)].

3. If an authorization under paragraph (B.2) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (B.2) of this provision must be submitted to the Regional Water Board, State Water Board or U.S. EPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 C.F.R. §122.22(c)].

Any person signing a document under Standard Provisions – Reporting V.B.1 or V.B.2 above shall make the following certification:

"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." (40 C.F.R. §122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment C) in this Order. (40 C.F.R. §122.22(l)(4).)
2. Monitoring results must be reported on a Self-Monitoring Report (SMR) form as agreed to by the Deputy Director and the Discharger.
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the SMR or sludge reporting form specified by the State Water Board. (40 C.F.R. §122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. §122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. §122.41(l)(5).)

E. Planned Changes

The Discharger shall give notice to the State and the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted activity or discharge. Notification is not required for the addition of new or alteration of existing vaults and underground structures. Notice is required under this provision (40 C.F.R. §122.41(l)(1)) only when the alteration or addition could significantly change the

nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1).

F. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board and the State Water Board of any planned changes in the permitted discharge or activity that may result in noncompliance with Order requirements. (40 C.F.R. §122.41(l)(2).)

G. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, and V.D above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.F above. (40 C.F.R. §122.41(l)(7).)

H. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. §122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

The State and the Regional Water Board are authorized to enforce the terms of this Order under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

ATTACHMENT C – MONITORING AND REPORTING PROGRAM

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ATTACHMENT C – MONITORING AND REPORTING PROGRAM

Section 122.48 of title 40 of the Code of Federal Regulations (40 C.F.R. §122.48) requires that all NPDES permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the State Water Resources Control Board (the State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards) to require technical and monitoring reports. This Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements which implement federal and California State laws and regulations.

I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring location identified in the representative sampling and analysis program. Another waste stream, body of water, or substance shall not dilute the monitored discharge. The applicable Regional Water Board shall be notified in the annual report of any changes to monitoring locations.

B. Monitoring must be conducted according to U.S. Environmental Protection Agency (U.S. EPA) test procedures approved under 40 C.F.R. part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, as amended, unless other test procedures are specified in this Order and/or by the State Water Board or Regional Water Boards.

C. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or as specified in this Order or by the State Water Board or Regional Water Boards, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's Annual Report. The increased frequency of monitoring shall also be reported.

D. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Public Health or a laboratory approved by the State Water Board or Regional Water Boards.

E. All monitoring instruments and devices used by the Discharger to fulfill the monitoring program shall be properly maintained and calibrated to ensure accuracy. If applicable, all flow measurement devices shall be calibrated at least once per year to ensure accuracy of the devices. Where discharge volumes are based on pump flow rates [e.g., gallons per minute (gpm)] and pumping times, discharge flow rates may be estimated based on the pump manufacturer's design flow rate.

II. MONITORING LOCATIONS AND SAMPLE TYPES

A. All Dischargers shall identify and monitor at least five representative utility vaults or underground structures (where available) per year per region (or WDID) for the annual routine pollutant monitoring. If there are less than five discharges in a region in a given year, the number of samples in that region should be equal to the number of discharges for that year. Sampling in subsequent years may be performed at the same vaults, but Dischargers are not required to use the same locations each year.

Dischargers shall sample a range of utility vault or underground structure types within each region (industrial, commercial, and residential areas) to represent a cross section of typical vault discharges where available.

B. Monitoring locations for the annual routine monitoring, the Discharge Characterization Study (Study 1), and ASBS Monitoring (Study 2): Dischargers shall sample at the point of discharge from the utility vault or underground structure (e.g., hose) following the implementation of applicable Best Management Practices (BMPs) outlined in the pollution prevention plan (PLAN) and prior to commingling with waters from other sources or the receiving water.

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. ANNUAL ROUTINE EFFLUENT MONITORING REQUIREMENTS

A. The Discharger shall analyze a representative sample of the discharge from each of the locations identified in section II.A of this MRP for the following constituents:

Table C-1. 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 C.F.R. part 136
Total Petroleum Hydrocarbons – Gasoline Range Organics	µg/L	Grab	1/Year	Per 40 C.F.R. part 136
Oil and Grease	mg/L	Grab	1/Year	Per 40 C.F.R. part 136
pH	Standard Units	Grab	1/Year	Per 40 C.F.R. part 136
Total Suspended Solids	mg/L	Grab	1/Year	Per 40 C.F.R. part 136

B. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health, in accordance with the provision of California Water Code section 13176, and must include quality assurance/quality control data with their reports.

C. The results of sample analyses shall be reported in the annual report. Representative grab samples shall be collected at the applicable point of discharge (e.g., at the end of the discharge hose before co-mingling with other waters) after the implementation of the BMPs outlined in the PLAN. If a Discharger monitors the above constituents more frequently than required by this Order, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the annual report. Separate annual reports are required for each Regional Water Board.

D. The Discharger shall retain records of all annual routine monitoring (i.e., annual sampling) information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order for a period of at least five years from the date of the

sample, measurement, report, or application. This period may be extended by request of the State Water Board or Regional Water Boards. These records shall include:

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;
7. The name and contact information for the laboratory, utility staff, or wholesaler who performed the analyses; and
8. The analytical results of the sample analyses.

V. RECEIVING WATER MONITORING REQUIREMENTS – NOT APPLICABLE

VI. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment B) related to monitoring, reporting, and record keeping.
2. Upon written request of the State Water Board or Regional Water Boards, the Discharger shall submit a summary monitoring report.
3. All reports shall be submitted to the appropriate Regional Water Board Executive Officer.
4. At any time during the term of this Order, the State Water Board or Regional Water Boards may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS website will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal. Until such notification is given, the Discharger shall submit hard copy SMRs.

B. Annual Reports

The Discharger shall submit an Annual Report (for the period from May 1 through April 30) no later than June 1st of each year during the term of this Order. Annual Reports shall contain, at a minimum, the following information:

1. An executive summary that includes a discussion of compliance and/or violation(s) of this Order and an evaluation of the PLAN (Special Provision VII.C.3.d.).

2. A summary of monitoring data generated.
3. A summary of relevant field observations.
4. A map showing the location of each monitored (i.e., annual sampling) discharge location. On the map, indicate the location/extent of any ASBS with the potential to be influenced by the monitored discharges, if any.
5. A list of all monitored (i.e., annual sampling) discharge locations with identification and location information (i.e., City/County and street address and/or latitude/longitude), the date when each monitored discharge occurred, and the estimated volume of utility vault water discharged.
6. A description of the Discharger's 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 in Table 3 of Limitations and Discharge Requirements on page 18.
8. For annual routine monitoring, an estimate of annual volume discharged (i.e., each WDID) or the estimated volume of each discharge from a utility vault or underground structure (gallons). The Discharger shall describe the method(s) and assumption(s) used to calculate the estimate.

The Discharger shall arrange all reported data in a tabular format so that they are readily discernible. The data shall be summarized to clearly illustrate whether BMPs are protective of water quality as demonstrated by compliance with the NALs described in Special Provision VII.C.3. Currently, electronic submittal of data is not required in CIWQS. The State Water Board will inform the Dischargers when electronic submittal in CIWQS is required. However, if CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

Each Discharger shall attach a cover letter to the Annual Report. The information contained in the cover letter shall clearly identify violations of the Order, exceedances of the NALs, discuss corrective actions taken or planned, and provide a time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

The Annual Report must be submitted to the appropriate Regional Water Board, signed and certified as required by the Standard Provisions (Attachment B).

C. Reporting Protocols for Annual Routine Monitoring

The Discharger shall report with each sample result the applicable reported Reporting Level (RL) and the current Method Detection Limit (MDL), as specified in 40 C.F.R. part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

1. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
2. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified" or DNQ. The estimated chemical concentration of the sample shall also be reported.

   For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (plus a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
3. Sample results less than the laboratory's MDL shall be reported as "<" followed by the MDL.
4. Dischargers are to instruct laboratories to establish calibration standards so that the RL (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest or highest point of the calibration curve.
5. The Discharger shall report the results for all monitoring specified in this MRP in the SMR. The Discharger shall submit annual SMRs including the results of all required monitoring using 40 C.F.R. part 136 test methods or other test methods specified in this Order. If a Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and data submitted in the SMR.
6. In addition to the elements listed in section IV.B.1 of the Standard Provisions (Attachment B), records of monitoring shall include:
   a. The dimensions, size, and/or volume of the vault;
   b. The duration of the discharge; and
   c. The estimated volume of the discharge.

D. Discharge Monitoring Reports (DMRs)

When requested by U.S. EPA, the Discharger shall also complete and submit DMRs to U.S. EPA. The submittal date shall be specified in the U.S. EPA request.

ATTACHMENT D – FACT SHEET

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ATTACHMENT D – FACT SHEET

As described in the findings in section III of this Order, the State Water Resources Control Board (State Water Board) incorporates this Fact Sheet as findings of the State Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California.

I. ORDER INFORMATION

A. Regulatory Background

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants to waters of the U.S. from any point source is effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

On September 22, 1989, the U.S. Environmental Protection Agency (U.S. EPA) granted the State of California, through the State Water Board and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to 40 Code of Federal Regulations (C.F.R.), parts 122 and 123 (40 C.F.R. parts 122 and 123).

Section 122.28 of 40 C.F.R. provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general permit rather than individual permits.

On August 15, 1996, the State Water Board issued a general permit for discharges from utility vaults and underground structures to surface waters (Order 96-12-DWQ). The permit was reissued on July 19, 2001 and again on July 19, 2006.

In accordance with 40 C.F.R., the State Water Board must meet general program requirements prior to the re-issuance and adoption of a general NPDES permit. This Order reissues the 2006 permit, previously adopted as Order 2006-0008-DWQ. General program requirements include preparing the draft Order, public noticing, allowing a public comment period, and conducting a public hearing. To meet these requirements, the State Water Board prepared a draft Order. The draft Order was sent to interested parties on **July 2, 2014** for comments. A public hearing to receive testimony from interested parties was scheduled for **October 21, 2014**. The Notice of Public Hearing was sent to the interested party list at the same time the draft Order was sent. A public hearing notice was also posted in major newspapers throughout the State of California on **July 2, 2014**.

B. General Criteria for Authorization to Discharge

This Order is intended to authorize short-term intermittent discharges of pollutants to surface waters from dewatering of utility vaults and underground structures. To be covered by this Order, discharges must meet the following criteria:

1. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an exceedance in a receiving water of any applicable criterion established by U.S. EPA pursuant to CWA section 303.
2. Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an exceedance in a receiving water of any water quality objective adopted by the State Water Board or Regional Water Boards including prohibitions of discharge for the receiving water.
3. The discharge does not cause acute or chronic toxicity in the receiving water.

C. Types of Discharges Not Authorized Under This Order

The following discharges are not authorized under this Order:

1. Discharges from vehicle and equipment washing, vehicle maintenance, and/or groundwater cleanup activities by utility companies.
2. Discharges resulting from utility service construction activities by utility companies engaged in developing service areas. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002) and/or CWA section 401 certifications.
3. Discharges by utility companies that are Dischargers and/or co-Dischargers under Urban Area wide Storm Water Permits, which cover the intended discharges.
4. Discharges to a sanitary sewer or a combined sewer system. These discharges do not need regulatory coverage under the NPDES Program although the agency controlling the sanitary sewer or combined sewer system must approve discharges to its conveyance system.

II. NOTIFICATION REQUIREMENTS

A. Application

The purpose of this Order is to facilitate regulation of discharges from the dewatering of utility vaults and underground structures. To obtain coverage under this Order, the Discharger must submit a complete application to the State Water Board as described below:

1. A Notice of Intent (NOI), which is provided in Attachment E, signed in accordance with the signatory requirements of the Standard Provisions in Attachment B;
2. A service territory/watershed map(s);
3. A pollution prevention plan (PLAN); and
4. A first annual fee (applicable to new dischargers only).

State Water Board staff in coordination with Regional Water Quality Control Board (Regional Water Board) staff will review the application package for completeness and applicability to this Order. Additionally, the State Water Board's Deputy Director of the Division of Water Quality (Deputy Director) may issue a Notice of Exclusion (NOE)[6] which either terminates permit coverage or requires submittal of an application for an individual permit or alternative general permit.

Discharges in more than one Regional Water Board boundary must be covered by a separate enrollment under this Order. Each enrollment will cover all discharges occurring within the boundaries of that Regional Water Board. Signing the certification on the NOI signifies that the Discharger intends to comply with the provisions of this Order. An NOI must be signed to be valid.

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 non-redacted information is insufficient to demonstrate eligibility and compliance.

B. Fees

California Water Code section 13260(d) requires each person for whom waste discharge requirements (WDRs) are issued to pay an annual fee to the State Water Board. California Water Code section 13260(f) requires: (1) the State Water Board to adopt a schedule of fees by emergency regulation; and (2) fees to be adjusted annually to conform to the revenue levels set forth in the State Budget Act for the activities that have been issued WDRs.

The fee for enrollment under this Order shall be based on Category 3 in section 2200(b)(9) of title 23, California Code of Regulations , which can be found at http://www.waterboards.ca.gov/water_issues/programs/npdes/ and is payable to the State Water Board.

C. Public Notification

The State Water Board has notified interested agencies and persons of its intent to prescribe WDRs in this Order and provided them with an opportunity to submit their written comments and recommendations.

The State Water Board encourages communication between Dischargers and municipal separate storm sewer systems (MS4s) in this Order. Dischargers shall comply with any notification requirements of the MS4 permit covering any MS4 to which they discharge, and shall follow the MS4 permit's notification protocols.

[6] An NOE is a one-page notice that indicates and justifies why the applicant is not eligible for coverage under this Order. This justification can include, but is not limited to, the necessity to comply with a total maximum daily load (TMDL) or to protect sensitive water bodies.

III. DISCHARGE DESCRIPTION

A. Existing Discharge Description

Utility vaults and underground structures are used to house a wide range of utility facilities including transformers, meters, filters, pressure regulators, cables, connectors, and valves with or without actuators. Some utility vault structures are constructed to be water-tight (i.e., dry). However, most utility vaults and underground structures are not water tight (i.e., wet). Wet structures include manholes and hand holes containing utility facilities including cables, cable connections, and signal enhancers. Dry structures are sealed more tightly and are usually air conditioned since these contain switchgears, computers, and electronics that are sensitive to heat and moisture.

Utility vaults, underground structures, and the equipment contained therein do not generate wastewater in and of themselves. However, water collects in utility vaults or underground structures from a variety of potential sources which include, but are not limited to, the following: storm water runoff and surface water drainage, groundwater infiltration, and infiltration from nearby wet utility structures (e.g., water from sewer or water line breaks and leaks). Water in utility vaults and underground structures may potentially contain pollutants associated with one or more sources of water as well as, potentially, contain pollutants originating from within the confines of the utility vaults or underground structures.

For safety reasons, utility companies must dewater utility vaults and underground structures prior to entering them to perform inspections, repairs, maintenance, and/or installation of equipment. Dewatering of the utility vaults and underground structures is achieved by pumping out the water. The volume of discharges typically vary from a few gallons to a few thousand gallons depending on the configuration and individual situation at each vault or structure, but can be more for larger vaults or structures. The duration of the discharge could last a few minutes to a few hours depending on the amount of water present in the utility vaults and underground structures and the pump used. Typical pump rates are five gpm to 60 gpm, but in some circumstances, could be as high as 600 gpm depending on the pump used, the utility vault or underground structure conditions, and downstream conditions. In certain circumstances, use of automated sump pumps may be needed in utility vaults and underground structures to protect equipment that is vulnerable to damage by water infiltration or seepage, to minimize outage delays and maintain reliability of essential public services, and for safety purposes.

Utility vault or underground structure water is not considered storm water because its composition is not limited to storm water runoff or surface drainage.

B. Discharge Characteristics

In general, discharges from utility vaults and underground structures are not expected to contain pollutants in amounts that could cause violations of applicable surface water quality objectives if discharged to receiving waters. However, the specific characteristics of discharges from utility vaults and underground structures will depend in part on the characteristics of (1) the surrounding groundwater that infiltrates

into the utility vault or underground structure, (2) the storm water or other surface runoff that directly enters the vault or structure itself, (3) the materials occupying the utility vault or underground structure, and (4) the materials handled and activities performed at the site. For example, depending on soil types and the history of the site use (including adjacent sites), groundwater may be contaminated with toxic pollutants from spills or leaks. As a result, there may be the potential for dewatering discharges to also contain pollutants originating from such contamination.

Depending upon the location and setup of pumps used for dewatering, there is also the potential for sediment and solids to be present in the discharges. The method of dewatering may also influence the quality of the groundwater to be discharged. For example, certain sump pump operations may present the potential for oil and grease or petroleum hydrocarbons to be contained in a discharge. Thus, water in utility vaults and underground structures may potentially contain pollutants associated with one or more sources of water as well as potentially contain pollutants originating from within the confines of the utility vaults or underground structures. The typical constituents found in utility vault and underground structure discharges are oil and grease, petroleum hydrocarbons, and total suspended solids.

IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the applicable plans, policies, and regulations identified in the Findings in section III of this Order. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from utility vaults and underground structures to surface waters.

Section 122.28(a)(1) of title 40 of the Code of Federal Regulations [40 C.F.R. §122.28(a)(1)] allows NPDES permits to be written to cover a category of discharges within a state's political boundaries as a general NPDES permit. U.S. EPA Region 9 has granted the State Water Board the authority to issue general NPDES permits.

B. California Environmental Quality Act (CEQA)

Under California Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

C. State and Federal Laws, Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Boards have adopted Water Quality Control Plans (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans.

In addition, the Basin Plans implement State Water Board Resolution 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Basin Plans identify typical beneficial uses as follows: municipal and domestic supply, agricultural irrigation, stock watering, process supply, service supply, hydropower supply, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, navigation, rare, threatened, or endangered species habitat, groundwater recharge, and freshwater replenishment.

Requirements of this Order implement provisions contained in the applicable Basin Plans.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their Basin Plans. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

   The SIP authorizes case-by-case exceptions to meeting priority pollutant criteria where site specific conditions in individual water bodies differ sufficiently from statewide conditions if the State Water Board determines that: (1) the exceptions will not compromise protection of surface water beneficial uses and (2) the public interest will be served. However, because of the vast number of utility vaults and underground structures throughout the state with discharges entering distinct water bodies, it is infeasible to apply case-by-case exception at this time to discharges from utility vaults and underground structures. Thus, the State Water Board is not considering an exception at this time because of lack of information.

   In order to better assess the impact of utility vault discharges with regard to priority pollutants and non-priority pollutants that have not been previously

evaluated and to determine if the current established BMPs are protective of receiving water quality or if additional BMPs may be necessary, this Order requires completion of a representative effluent Characterization Study to compare concentrations of pollutants in utility vault and underground structure discharges with water quality criteria specified in the CTR and water quality objectives in the Basin Plans. Due to the sheer number of utility vaults throughout the state, it is appropriate for the effluent Characterization Study to consider a representative set of utility vaults selected based on watershed discharge zones.

4. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

5. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit with some exceptions in which limitations may be relaxed.

6. **Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state including protecting rare and endangered species. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

D. Impaired Water Bodies on CWA 303(d) List

Under section 303(d) of the 1972 CWA, states, territories, and authorized tribes are required to develop lists of water quality limited segments of water bodies. The waters on these lists do not meet water quality standards even after point sources of pollution have installed the minimum required levels of pollution control technology. On November 12, 2010, U.S. EPA gave final approval to California's 2010 section 303(d) List of Water Quality Limited Segments. The Basin Plans reference this list of Water Quality Limited Segments (WQLSs), which are defined as *"…those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 C.F.R. Part 130.2(j)).*" The Basin Plans also state, "*Additional treatment beyond minimum federal standards will be imposed*

on dischargers to [WQLSs]. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment."

Impaired waters are those waters not meeting quality standards pursuant to section 303(d) of the CWA and do not support one or more beneficial uses. California impaired waters, as approved by the State Water Board, are listed on http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.

As described in section III of this Fact Sheet, discharges from utility vaults and underground structures are expected to be typically low volume and occur intermittently. Additionally, the pollutant characteristics of the discharges from utility vaults and underground structures are, at this time, unknown. Therefore, it is uncertain whether and to what extent a discharge must be subject to a total maximum daily load (TMDL) wasteload allocation. As such, this Order does not include any requirements related to TMDL implementation. However, if a Regional Water Board finds that discharges from specific utility vaults or underground structures contribute to impairment of a specific water body, staff may recommend to the Regional Water Board that coverage under this Order be terminated for that specific utility vault or underground structure, and the Discharger be required to obtain an individual NPDES permit that will ensure compliance with applicable wasteload allocations.

E. Other Plans, Policies, and Regulations

The State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Policy) in May 2000 and amended it in 2005. The requirements in this Order are consistent with the Policy. The State Water Board amended the Water Quality Control Plan for Ocean Waters of California in 2012 (2012 California Ocean Plan). The requirements in this Order are consistent with the 2012 California Ocean Plan. On March 20, 2012, the State Water Board adopted Resolution 2012-0031, Exceptions to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses, and amended it on June 19, 2012. The requirements in this Order are consistent with Resolution 2012-0031.

V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 C.F.R section 122.44(a) requires that permits include applicable technology-based limitations and standards and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality criteria have not been established, three options exist to protect water quality: (1) 40 C.F.R. section 122.44(d) specifies that WQBELs may be established using U.S. EPA criteria guidance under CWA section 304(a); (2) proposed state criteria or

a state policy interpreting narrative criteria supplemented with other relevant information may be used; or (3) an indicator parameter may be established.

A. Discharge Prohibitions

1. **Prohibition IV.A (The discharge shall not create or cause conditions of nuisance or pollution).** This prohibition is based on California Water Code section 13050 that requires water quality objectives established for the prevention of nuisance within a specific area. The Regional Water Boards' water quality control plans or Basin Plans prohibit conditions that create a nuisance. This prohibition is retained from Order 2006-0008-DWQ.

2. **Prohibition IV.B [The discharge of wastewater to a municipal separate storm sewer system (MS4) with a direct discharge to an ASBS shall not alter the natural ocean water quality in an ASBS].** This prohibition is based on sections III. E. 4, III.I.2, and III.J. of the California Ocean Plan, providing that waste shall not be discharged to areas of special biological significance unless the State Water Board has granted an exception. State Water Board Resolution 2012-0012 [Approving Exception to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance (ASBS), Including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report] approves specified exceptions and provides for an NPDES permitting authority to authorize non-storm water discharges to an MS4 that discharges to an ASBS only to the extent the NPDES permitting authority finds that the discharge does not alter natural ocean water quality in the ASBS. The Statewide Storm Water Permit for the State of California Department of Transportation (Order 2012-0011-DWQ; NPDES No. CAS000003) and the Statewide General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) (Order 2013-001-DWQ, NPDES No. CAS000004) authorize these discharges unless the permitting authority finds that the discharge alters natural ocean water quality in the ASBS. Further, in these permits the State Water Board found that discharges from utility vaults and underground structures to a segment of the MS4 with a direct discharge to an ASBS are not expected to result in the MS4 discharge causing a substantial alteration of natural ocean water quality in the ASBS in the interim period while the study is being completed and this Order is being renewed.

   Similarly, this Order finds that discharges from utility vaults and underground structures to a segment of an MS4 with a direct discharge to an ASBS are not expected to result in the MS4 discharge causing a substantial alteration of natural ocean water quality in the ASBS in the interim period while the study is being completed, the Deputy Director completes and communicates his/her final assessment, and this Order is being renewed. Further, this Order authorizes these discharges unless the permitting authority finds that the discharge alters natural ocean water quality in the ASBS. Other existing or future MS4 permits may also provide this authorization.

This Order requires Dischargers to characterize representative utility vault or underground structure discharges to an MS4 with a direct discharge to an ASBS as referenced in Attachment G of this Order to demonstrate that discharges from utility vaults and underground structures do not alter the natural ocean water quality in the ASBS. In the event that a discharge is found to alter the natural ocean water quality in the ASBS, the Discharger will be informed by State Water Board staff and provided with a rationale for the finding.

3. **Prohibition IV.C (The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by U.S. EPA pursuant to section 303 of the CWA, or water quality objective adopted by the State Water Board or Regional Water Boards).** This prohibition is based on the Regional Water Boards' Basin Plans, which require that all waters be maintained free of toxic substances in concentrations that are lethal or produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. Basin Plans also require waters to be free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, or animal life. This narrative objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

B. Effluent Limitations

1. Technology-Based Effluent Limitations

a. Scope and Authority

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

i. Best Practicable Treatment Control Technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

ii. Best Available Technology Economically Achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

iii. Best Conventional Pollutant Control Technology (BCT) represents the control from existing industrial point sources of conventional pollutants including biochemical oxygen demand, total suspended solids (TSS), fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the resulting benefits, and also the cost effectiveness of additional industrial treatment beyond BPT.

iv. New Source Performance Standards (NSPS) represent the best available demonstrated control technology standards. The intent of

NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitation guidelines (ELGs) and standards representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 C.F.R. section 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 C.F.R. section 125.3.

b. Applicable Technology-Based Effluent Limitations

In the case of discharges from utility vaults and underground structures, EPA has not developed ELGs. The State Water Board believes that it is infeasible to establish numeric effluent limitations for utility vault and underground structure discharges due to the following reasons: (1) the large number of utility vaults and underground structures located throughout the State, which is estimated to be about 1.5 million; (2) discharges from utility vaults and underground structures may only occur intermittently and for short durations; (3) dewatering of utility vaults and underground structures that provide essential public services needs to be conducted promptly to facilitate restoration of those services, (4) the uncertainty of the volume and characteristics of the discharge from a utility vault or an underground structure at any time (see related discussion in section III of this Fact Sheet), and (5) the general lack of data and information to characterize discharges from utility vaults and underground structures, and available treatment technologies.

Section 122.44(k)(3) of 40 C.F.R. allows the use of BMPs to control or abate the discharge of pollutants when *"[n]umeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA."* Given the absence of sufficient data and the other factors identified in the previous paragraph, it is not appropriate to establish numeric technology-based effluent limitations for pollutants in discharges from utility vaults or underground structures. Instead, and based on BPJ, the State Water Board believes a significant majority of dischargers should be able to develop and implement appropriate best management practices (BMPs) to reduce pollutants to levels commensurate with BAT/BCT to protect the beneficial uses of receiving waters without implementing unnecessary and costly improvements that are otherwise needed to meet numeric effluent limitations.

2. Water Quality-Based Effluent Limitations (WQBELs)

a. Scope and Authority

Section 301(b) of the CWA and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) of 40 C.F.R. requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 C.F.R. section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

b. Receiving Water Beneficial Uses

The designated beneficial uses of surface waters throughout the State may include municipal and domestic supply, agricultural irrigation, agricultural stock watering, process water supply, service water supply, hydropower supply, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater aquatic habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, navigation, groundwater recharge, and freshwater replenishment.

c. Determining the Need for WQBELs

NPDES permits for discharges to surface waters must meet all applicable provisions of sections 301 and 402 of the CWA. These provisions require controls beyond BAT and BCT that are necessary to reduce pollutants to meet water quality standards.

Utility companies may have multiple discharges from utility vaults and other underground structures as a result of, for example, storm water or irrigation water inflow, subterranean seepage, and/or water condensation from the air conditioning units of dry structures. These vaults and underground structures may have small quantities of oil and grease present due to the normal operation of equipment as well as small quantities of other pollutants.

The SIP includes procedures for determining the need for and calculating WQBELs for priority pollutants, and requires Dischargers to submit data sufficient to do so. Step 8 of section 1.3 (Determination of Priority Pollutants Requiring WQBELs) of the SIP states that if insufficient data exist to fully characterize the discharge and determine whether reasonable potential exists to cause or contribute to an in-stream exceedance of water quality objectives, then the State Water Board "…*shall require additional monitoring for the pollutant in place of a [WQBEL]*". Order 2006-008-DWQ required Dischargers to collect data for a limited number of parameters. The set of parameters monitored (TPH-D, TPH-G, oil and grease, pH, and TSS) do not include the entire set of parameters which possess applicable federal water quality criteria and State water quality objectives which have been established for non-ocean surface waters as described in Section 1.1 (Applicable Priority Pollutant Criteria and Objectives) of the SIP.

Therefore, the State Water Board has determined that the available data are insufficient to fully characterize the discharge and determine if a reasonable potential exists. Instead, this Order requires Dischargers to design and implement a discharge Characterization Study to provide the State Water Board with a full characterization of utility vault and underground structure discharges. The resulting data should allow the State Water Board to determine whether the discharges have the potential to cause or contribute to an in-stream exceedance of water quality objectives.

Further, as described in sections V.B.1.b and VIII.B.3 of this Fact Sheet, this Order requires development and implementation of appropriate BMPs in order to reduce the potential for a discharge to cause or contribute to an exceedance of in-stream water quality objectives while data are being collected. In-stream water quality objectives include all applicable Basin Plan objectives, including narrative toxicity objectives, numeric objectives (if applicable), and all applicable federal criteria, including CTR and NTR criteria.

d. Satisfaction of Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations and requirements in this Order are at least as stringent as the effluent limitations and requirements in Order 2006-0008-DWQ.

e. Satisfaction of Antidegradation Policy

The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Due to the intermittent, short duration, and relatively low volume of discharge expected from discharges regulated

under this Order, the impact on existing water quality is expected to be insignificant. Dischargers seeking authorization to discharge under this Order are required to specify the watershed to which wastewater is discharged. If the appropriate Regional Water Board, subsequent to review of any application, determines that the impact of a discharge(s) on a particular receiving water body(s) will be significant, then authorization for coverage under this Order for the specific discharges to the water body(s) will be denied and coverage under an individual permit for the specific discharge(s) will be required (including preparation of an antidegradation analysis).

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Groundwater – Not Applicable

B. Surface Water

Receiving water limitations are based upon water quality objectives contained in appropriate Regional Water Board Basin Plans, statewide Water Quality Control Plans, or criteria promulgated by U.S. EPA pursuant to CWA section 303. Basin Plans for all the Regional Water Boards can be found at http://www.waterboards.ca.gov/plans_policies/.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 C.F.R. requires that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment C of this Order, establishes monitoring and reporting requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for utility vault and underground structure discharges.

A. Influent Monitoring – Not Applicable

B. Effluent Monitoring

Pursuant to the requirements of 40 C.F.R. section 122.44(i), effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is also necessary to assess the effectiveness of the treatment process or controls used by a Discharger, and to assess the impacts of the discharge on the receiving water and groundwater (if applicable).

Order 2006-0008-DWQ required a case study (during the first year of the permit, five samples for each type of discharge in each Regional Water Board boundary area was required) and annual monitoring thereafter at each of the five representative sites for each discharge type for benzene, ethylbenzene, oil and grease, pH, toluene, total petroleum hydrocarbons/diesel range organics (TPH-D), total petroleum hydrocarbons/gasoline range organics (TPH-G), TSS, and xylene.

In an effort to characterize discharges from utility vaults and underground structures, this Order requires the continuation of annual monitoring.

C. Toxicity Testing Requirements

A whole effluent toxicity (WET) limitation is required if a discharge causes, has a reasonable potential to cause, or contributes to an exceedance of applicable water quality standards, including numeric and narrative objectives. Since these types of discharges are prohibited under this Order, WET limits are not applicable and WET monitoring will not be required.

D. Receiving Water Monitoring – Not Applicable

Utility vault and underground structure discharges are typically short-term and relatively low volume and are directed, in most cases, to MS4s. Therefore, the exact location of the discharge into the receiving water is usually not known or cannot easily be identified by Discharger personnel in the field. Due to this general uncertainty, receiving water monitoring is not considered feasible and will not be required as part of this Order.

VIII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment B. Each Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

40 C.F.R. section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 C.F.R. section 123.25(a) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the California Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference California Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 C.F.R section 122.62 which allows the State Water Board to reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations or adoption of new regulations by the State Water Board or Regional Water Boards including revisions to Basin Plans.

2. Special Studies

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established

through effluent limitations and other requirements in NPDES permits. At this time, insufficient data exist to evaluate the potential of discharges from utility vaults or underground structures to cause or contribute to exceedances of water quality standards.

This Order establishes provisions requiring the Discharger to develop and implement two discharge characterization studies. Discharge Characterization Study 1 is intended to characterize discharges from dewatered utility vaults or underground structures to evaluate the potential for utility vault discharges or underground structures to cause or contribute to exceedances of water quality standards in compliance with section 402(a)(1) of the Clean Water Act and the SIP. Therefore, one of the objectives of this study is to collect sufficient effluent data from utility vaults and underground structures to identify the priority pollutants present in the effluent and their concentrations. Discharge Characterization Study 2 is intended to determine whether Dischargers that discharge to a municipal separate storm sewer system (MS4) permittee listed in Attachment A of State Water Resources Control Board (State Water Board) Resolution 2012-0031 have a potential to alter the natural ocean water quality in the ASBS to which the MS4 directly discharges.

Each Discharger shall perform Phase I of Discharge Characterization Study 1 to collect samples from at least five utility vaults or underground structure discharges per Regional Water Board where discharge sites are located. Each utility vault and underground structure shall be sampled one time during the first year or Phase I of the study, if feasible (i.e., water is present in utility vaults or underground structures). The Discharger shall analyze collected samples for the pollutants listed in Table G-3. In addition, the hardness and pH of the discharge shall be analyzed in order to accurately compute hardness- and pH-dependent water quality criteria for certain metals.

The selection of parameters monitored during Phase II of the Discharge Characterization Study 1 is determined by a comparison to a subset of CTR criteria (as provided in Attachment G) which are applicable to discharges regulated under this Order. The values provided reflect the most stringent criteria of either: (1) the freshwater criteria maximum concentration (CMC) aquatic life criteria, or (2) the human health criteria for the consumption of organisms only. The CMC aquatic life criteria are protective against short-term, acute effects which must be anticipated from the short duration and intermittent discharges subject to this Order. Human health criteria reflect pollutant concentrations which are not expected to pose a significant risk to human health.

Dischargers may form a coalition and work together to develop a work plan for the characterization studies. In addition, Dischargers may conduct sampling for the studies as a coalition or individually.

3. Best Management Practices and Pollution Prevention

a. Pollution Prevention Plan (PLAN)

As described in Section V of this Fact Sheet, it is infeasible to establish numeric effluent limitations. Based on the authority contained in section 304(e) of the CWA and the regulations set forth in 40 C.F.R. section 122.44(k), states may incorporate BMPs into NPDES permits when numeric effluent limitations are infeasible or the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. Therefore, and consistent with Order 2006-0008-DWQ, this Order continues to require the development and implementation of a PLAN.

The PLAN requirements provide the flexibility necessary to establish controls which can appropriately address the variety of circumstances in which utility companies discharge water to surface waters. The PLAN has two major objectives: (1) to identify situations which allow water to collect in the vault or underground structure and lead to a discharge, and (2) to describe and ensure the implementation of practices that will reduce pollutants in the discharge from the normal operations of utility companies.

The PLAN requirements contained in Order 2006-0008-DWQ specifically included the development and implementation of BMPs. To evaluate the effectiveness of PLANs developed and implemented under Order 2006-0008-DWQ to protect receiving water quality, the State Water Board reviewed the PLANs, observed utility vault dewatering practices, and assessed the monitoring data collected during the previous permit term. In particular, 19 existing PLANs submitted by 13 Dischargers during the previous permit term (November 2006 to January 2012) were reviewed and examined.

b. Assessment of Existing PLAN Contents.

The majority of Discharger PLANs are organized in a manner which parallels the organization structure of the previous permit Special Provision, section VII.C.3, in Order 2006-0008-DWQ, which was intended to ensure that the Discharger include all required elements of the PLAN. PLANs typically began with an introduction, background, and a general description of the utility and its structures. Next, most PLANs addressed the types of discharges to be addressed and designated a Pollution Prevention Team with specified roles and responsibilities. Additionally, most PLANs included a description of pollutant sources, including a drainage map, an inventory of exposed materials, a narrative description of any reported spills or leaks for the three years prior to submission, and a summary of potential pollutant sources with potential risks identified. PLANs also included descriptions of various measures and controls to be implemented, including housekeeping and preventative maintenance, spill prevention and response, inspections, and sediment and erosion control practices. Employee training was typically addressed, as well as procedures for record keeping and comprehensive site

compliance evaluations. Many Dischargers also included methods for determining conditions under which utility vault water can be discharged to drains or surrounding areas, and whether or not the vault water requires special handling procedures, requires further testing, or requires alternative disposal due to the potential presence of toxic or hazardous pollutants.

The State Water Board also observed that a number of Dischargers have performed research and implemented unique or special procedures to minimize the potential for the discharge of pollutants from utility vault water prior to discharge. The following are several examples of practices and methodologies employed by Dischargers:

- To ensure that debris and trash in the discharge path are not draining into storm sewers, when feasible and safe, the discharge area surrounding the storm drain is swept to clear debris before discharging water from vaults.
- To prevent sediment and oil from being discharged into a storm drain, a filter sock (or similar filtering type device) is attached to the end of the pump discharge hose.
- A detailed and prescriptive sensory checklist method was developed to help technicians make a preliminary determination regarding the quality of the utility vault water prior to discharge. Technicians then use this information to determine how to dispose of the water or when to call for an outside contractor to remove the water for off-site treatment or disposal.
- Use of a visual check for oil sheen, suspended particles, and cloudy/milky water. This visual check helps determine an appropriate method for removing and disposing of the vault water.
- Use of absorbent pads or rags on the surface of water in a vault that has an oil sheen to remove oil before the vault is pumped out.
- Use of straw wattles to combat erosion when discharging over land. Straw wattles are also used at storm drain inlets to act as a filter prior to discharge.
- Based on the review of PLANs submitted by Dischargers, Figure D-1 provides a schematic diagram depicting an example generalized approach for assessing potential discharges from utility vaults.

c. Assessment of the Effectiveness of Existing PLANs.

Attachment E, section IV.A, under Order 2006-0008-DWQ required the implementation of a sampling and analysis program to represent the typical types of discharges from utility vaults and underground structures. Further, Attachment E, section IV.B, under Order 2006-0008-DWQ required that samples be taken after implementation of BMPs outlined in the Discharger's PLAN. Order 2006-0008-DWQ specifically required the collection and analysis of five samples during the first year of the coverage under the Order

(referred to as case studies), as well as annual monitoring at representative sites, for the following constituents:

- Total Petroleum Hydrocarbons (TPH)
- TPH as Gasoline (TPH-G)
- TPH as Diesel (TPH-D)
- Benzene, Ethylbenzene, Toluene, and Xylene
- Oil and Grease
- pH
- TSS

The monitoring data collected by Dischargers during the previous permit term (November 2006 to January 2012) for the constituents listed above were compiled from the annual reports submitted by Dischargers to the Regional Water Boards under Order 2006-0008-DWQ. These data represent discharges from electric, gas, and telecommunication utility vaults.

Because the samples were taken by Dischargers after implementation of PLANs, the data were used to generally assess the effectiveness of the PLANs to protect receiving water quality. To facilitate this assessment, the State Water Board selected benchmarks to serve as the basis for determining the effectiveness of PLANs. Exceedances of the benchmarks were interpreted as possible evidence that the existing PLANs may not be sufficient in all cases to protect receiving waters.

The actual impact of a discharge on a receiving water depends on a number of site-specific conditions, including applicable Basin Plan objectives, designated uses, other contributing discharges to the receiving water, assimilative capacity of the receiving water, the timing of the discharge, and the duration and volume of the discharge. However, the development of site-specific benchmarks for use in this analysis is infeasible given the diversity and large number of potential discharges from utility vaults across the State. Therefore, the benchmarks were developed on the basis of readily available criteria and objectives deemed applicable to all discharge types and locations. To that end, benchmarks were developed based on the sources described below:

- NPDES General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES No. CAS000001), April 2014 – The numeric action levels contained in this general permit were used as the basis for the benchmarks for pH, TSS, and oil and grease. Additional information can be found at the Storm Water Program Website <http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0057_dwq.pdf>.
- CTR (40 C.F.R. section 131.38) – The CTR promulgated numeric aquatic life criteria for 23 priority pollutants and numeric human health

criteria for 57 priority pollutants that are applicable in the State of California for inland surface waters, enclosed bays and estuaries. CTR criteria are available for benzene, ethylbenzene, and toluene and were used as the basis for the benchmarks.

- Compilation of Water Quality Goals – The State Water Board Compilation of Water Quality Goals is an extensive compendium of numeric water quality thresholds from the literature for over 860 chemical constituents and water quality parameters. These thresholds were developed to assist in the assessment of whether beneficial uses of surface water including those for the protection of aquatic life and human health are going to be impaired or threatened by the discharge. The most stringent water quality goal was used as the basis for a number of pollutants:
  - The California Department of Health's Drinking Water Standards were used as the basis for the benchmark for xylene;
  - The State Water Board Water Quality Criteria for Taste and Odor Threshold was used as the basis for the benchmark for TPH-G; and
  - The U.S. EPA Health Advisory Taste and Odor Threshold were used as the basis for the benchmark for TPH-D.

Table D-1 below summarizes the compilation of data and comparison with the established benchmarks for those constituents for which monitoring data were available. Based on this analysis, the State Water Board has determined that the observed variability and magnitude of constituent concentrations indicate that implementation of PLANs by Dischargers may not always be protective of water quality in all cases.

Table D-1. Summary of Data Reported Under Order 2006-0008-DWQ

Parameter (Units)	Industry Type	Benchmark	Min[1]	Median[1]	Max[1]	No. of Samples	Percent Exceeding[2]
pH (standard units)	Electrical	6.0 – 9.0	**2.8**	7.8	**9.8**	322	2.1% (2.1%)
	Telecommunications		6.3	7.7	**12**	471	
	Gas		**4.1**	7.6	**9.8**	163	
	All Utilities		***2.8***	*7.7*	***12***	*964*	
TSS (mg/L)	Electrical	400	<0.01	<10	400	300	2.2% (2.2%)
	Telecommunications		<1.0	5.6	**2,560**	479	
	Gas		<1.0	2.9	**1,600**	174	
	All Utilities		*<0.01*	*6.0*	***2,560***	*953*	
Oil and Grease (mg/L)	Electrical	25	<0.002	<4.7	**67**	332	0.20% (0.20%)
	Telecommunications		0.11	<5.0	**65**	479	
	Gas		<1.0	<3.0	20	170	
	All Utilities		*<0.002*	*<5.0*	***67***	*981*	
TPH-D (mg/L)	Electrical	2	$<4.8x10^{-5}$	<0.05	**3.5**	312	8.5% (18%)
	Telecommunications		<0.05	<0.05	**420**	479	
	Gas		<0.0005	<0.0005	**9.5**	172	
	All Utilities		*$<4.8x10^{-5}$*	*<0.05*	***420***	*963*	
TPH-G (mg/L)	Electrical	0.005	<0.05	<0.05	**55**	115	0.27% (85%)
	Telecommunications		<0.05	<0.05	**<0.05**	479	
	Gas		$<5.0x10^{-5}$	$<5.0x10^{-5}$	**<1.0**	158	
	All Utilities		*$<5.0x10^{-5}$*	*<0.05*	***55***	*752*	
Benzene (µg/L)	Electrical	1.2	<1	<1	<1	12	0% (10%)
	Telecommunications		<0.5	<0.5	<0.5	385	
	Gas		<0.5	<1	**<10**	55	
	All Utilities		*<0.5*	*<1*	***<10***	*452*	
Ethylbenzene[2] (µg/L)	Electrical	3.1	<1	<1	<1	12	0% (10%)
	Telecommunications		<0.5	<0.5	0.66	385	
	Gas		<0.5	<1	**<10**	55	
	All Utilities		*<0.5*	*<1*	***<10***	*452*	
Toluene[2] (µg/L)	Electrical	6.8	<1	<1	<1	12	0% (0.22%)
	Telecommunications		<0.5	<0.5	0.55	385	
	Gas		<0.5	<1	**<10**	55	
	All Utilities		*<0.5*	*<1*	***<10***	*452*	
Xylene[2] (µg/L)	Electrical	1.75	<1	<1	<1	12	0% (10%)
	Telecommunications		<0.5	<0.5	1	385	
	Gas		<0.5	<1	**<20**	55	
	All Utilities		*<0.5*	*<1*	***<20***	*452*	

Note: Data were collected between November 2006 and January 2012. The lowest reported minimum detection limit observed within the sample population was substituted in cases where a Discharger did not report a minimum detection limit with particular non-detected samples.

[1] A bold number indicates it exceeds the benchmark, it is below the minimum, or its reporting level is higher than the benchmark.

[2] The first value is the percent of observations which were conclusive excursions above a benchmark (i.e., a detected value above the reporting limit observed above the benchmark). The second value is the total percentage of potential excursions including both conclusive excursions and inclusive (i.e., observations where the parameter was not detected in the effluent but the reporting limit exceeded the benchmark).

[3] The data for ethylbenzene, toluene, and xylene each possessed a single detected value. The maximum reported method detection limit is reported for the overall maximum since each greatly exceed the three reported detected values and provides a clearer illustration of the potential range of discharges.

d. Proposed Changes to PLAN Requirements.

As described above, there are Dischargers that have implemented BMPs designed to minimize the potential impact to receiving waters. These and

other BMPs should be considered by all Dischargers, if appropriate, for inclusion in their respective PLANs to ensure effective implementation of BMPs. Analysis of monitoring data collected during the term of Order 2006-0008-DWQ indicates that improvements in PLANs may be needed to achieve applicable water quality objectives and protect receiving water designated uses. Based on currently available information, treatment in the field aside from filtration BMPs such as filter socks is impractical due to the lack of feasible, portable, or cost-effective treatment methods. Additionally, treatment in the field may be impractical due to the sheer number and wide geographical distribution of utility vaults and underground structures.

For this Order, the State Water Board is revising the PLAN requirements to ensure that Dischargers are developing and implementing effective BMPs. Highlights of these revised requirements include the following:

- Adding a new requirement to develop and implement procedures for pre-discharge evaluation of water contained in the utility vault or underground structure. These procedures will help ensure that an initial assessment of the potential presence of pollutants is performed prior to initiation of pumping and discharge.
- Expanding the pollution control measures to require the consideration of BMPs for more effective good housekeeping and treatment and disposal procedures.

In addition, the PLAN evaluation and revision requirements have been modified to include numeric action levels (NALs) for the pollutants of concern which, when exceeded, will serve as a quantitative indicator that the Discharger's BMPs may not in all cases be adequately controlling the quality of utility vault and underground structure discharges. The NALs are not numeric effluent limitations and exceedances of these levels are not considered permit violations. The NALs operate as quantitative indicators of the relative effectiveness of a Discharger's PLAN and associated BMPs; their exceedance triggers the need for evaluation and corrective actions as necessary.

In most cases, the NALs listed in Table 3 of this Order were based on the benchmarks (discussed in VIII.B.3.a.ii. above) with the exception of the NAL for TPH-D. Rather than basing it on the U.S. EPA Health Advisory Taste and Odor Threshold, the NAL for TPH-D has been set at 2 mg/L because heavier hydrocarbon compounds such as diesel are generally undetectable using an odor test until it reaches approximately 2 mg/L, and is more easily detected by taste at lower concentrations than gasoline[7]. This Order includes specific requirements for evaluating the performance of a Discharger's PLAN and to make corrective revisions as necessary. Given the variety of utility vault or

[7] McKee, J. and Wolf, H., 1963, Water Quality Criteria, State Water Resources Control Board, Publication No. 3-A, page 230.

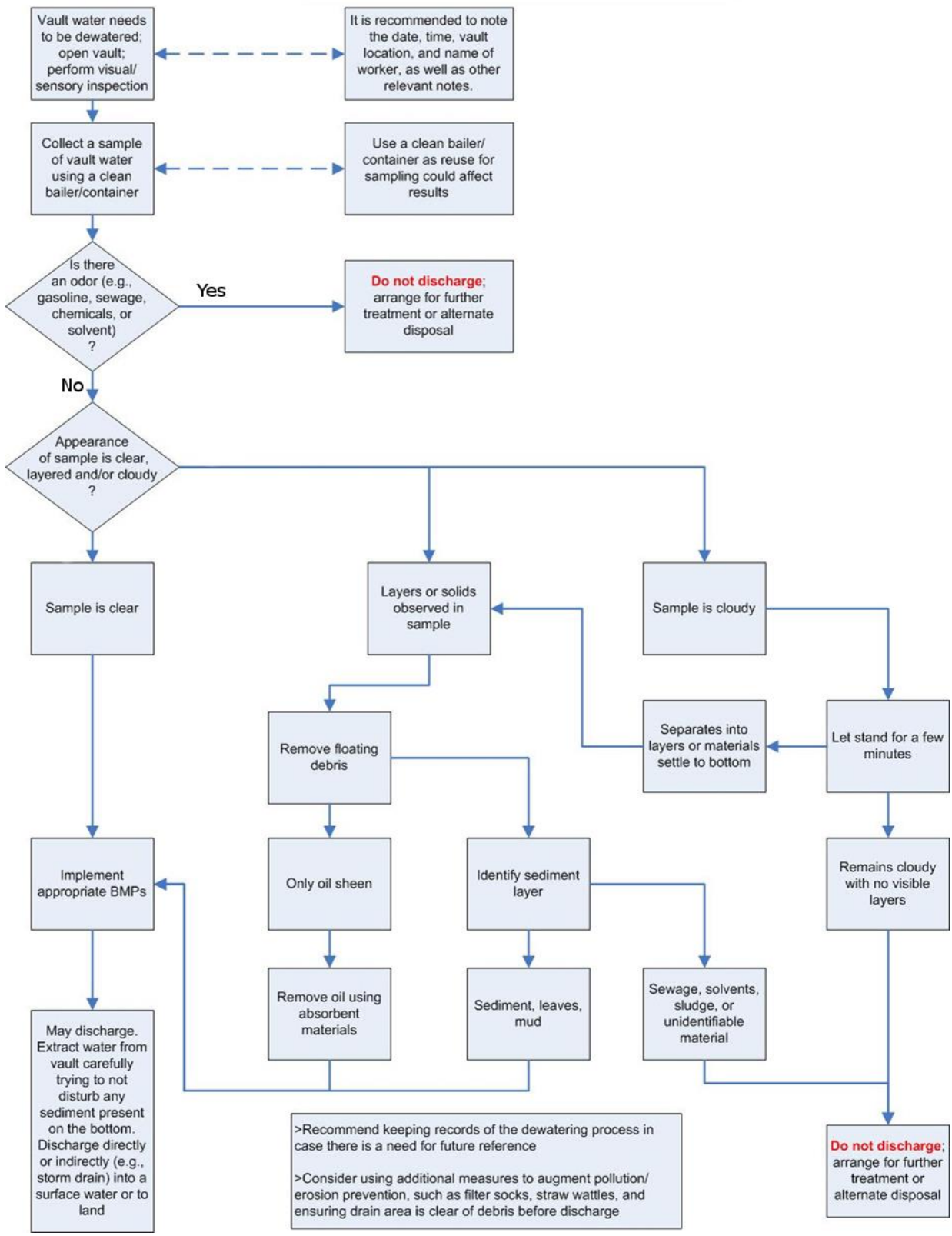
underground structure types, the geographic diversity of discharge locations, and absence of standard industry-wide BMPs, procedures for evaluating and revising BMPs on the basis of new data, the NALs, and operational experience should be incorporated into Discharger PLANs regularly (e.g., annually). The explicit incorporation of an iterative revision process is intended to encourage all Dischargers to identify both best practices and inadequate or insufficient practices, and to incorporate this information into the management of utility vault and underground structure discharges in a timely manner.

This provision states that, at a minimum, Dischargers must revisit the adequacy and performance of their PLANs under the following circumstances:

- A PLAN must be evaluated and revised when pollutants of concern are detected in effluent at concentrations exceeding the NALs.
- An annual PLAN evaluation indicates that revisions are warranted.

For help in developing or revising a PLAN, Dischargers can refer to the following document: *California Stormwater BMP Handbook - Industrial/Commercial (January 2003 Edition)*, published by the California Stormwater Quality Association. It is available online at: http://www.cabmphandbooks.com/ and provides references the Discharger may find useful.

Figure D-1. Example Structural Diagram for Utility Vault Discharges



C. Other Special Provisions

Dischargers are required to dispose of solids removed from liquid wastes in accordance with applicable federal, state and local laws, regulations, and ordinances.

IX. PUBLIC PARTICIPATION

The State Water Board is considering the issuance of WDRs that will serve as a general NPDES permit for discharges from utility vaults and underground structures. As a step in the WDR adoption process, the State Water Board staff has developed tentative WDRs. The State Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The State Water Board has notified interested agencies, parties, and persons of its intent to prescribe this Order for discharges from utility vaults and underground structures to surface water and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided to interested agencies, parties, persons through specific mailings, and distribution through publication in major newspapers throughout California. The State Water Board, in a public meeting, heard and considered all comments pertaining to discharges to be regulated by this Order.

The public had access to the agenda and any changes in dates and locations through the State Water Board's website at: http://www.waterboards.ca.gov/board_info/calendar/#2014.

B. Written Comments

The staff determinations were tentative. Interested persons were invited to submit written comments concerning the tentative Order as provided through the notification process. Comments were due either in person, by fax, email, or mail to the Executive Office at the State Water Board at the address on the cover page of this Order.

Only written comments received at the **State Water Board office by 12:00 p.m. on August 1, 2014** were fully addressed by staff and considered by the State Water Board.

C. Public Hearing

The State Water Board held a public hearing on the tentative Order during its regular Board meeting on the following date and time at the following location:

Date: **October 21, 2014**
Time: **9:00 a.m.**
Location: **Coastal Hearing Room Joe Serna Jr./CAL/EPA Building**
1001 I Street, 2nd Floor
Sacramento, CA 95814

Interested persons were invited to attend. At the public hearing, the State Water Board heard testimony, if any, pertinent to the discharge and Order. Oral testimony was heard; however, for accuracy of the record, important testimony was requested in writing.

D. Information and Copying

Order-related documents, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the State Water Board by calling (916) 341-5455.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this Order should contact the State Water Board, reference the Order, and provide a name, address, and phone number. Alternatively, any person may sign up for the Utility Vaults Permit electronic mailing list at: http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml#quality.

F. Additional Information

Requests for additional information or questions regarding this Order were directed to Victor Lopez at (916) 323-5511 or victor.lopez@waterboards.ca.gov.

This Order will expire on **June 29, 2020**. At the time of expiration, an enrollee covered under this Order shall continue to be covered unless the enrollee submits a Notice of Termination or Transfer (NOTT) to terminate coverage. When a new order is reissued, dischargers must apply to obtain coverage under the new order.

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.☐ New Discharger 2.☐ Existing Discharger 3.☐ Change of Information: WDID # _____ 4.☐ Change of ownership or responsibility: WDID# _____

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

A. Name		Owner/Operator Type (Check One) 1.☐ City 2.☐ County 3.☐ State 4.☐ Gov. Combo 5.☐ Private	
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Contact Person	H. Title	I. Phone	
J. Email Address			

☐ **Additional Owners** _____

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

Send to: ☐ **Owner/Operator** ☐ **Other**	A. Name		B. Title	
	C. Mailing Address			
D. City		E. County	F. State	G. Zip Code

IV. RECEIVING WATER INFORMATION

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.
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:

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	B. Contact Person		
C. Street Address Where PLAN is Located	D. Title of Contact Person		
E. City	F. County	G. State CA	H. Zip Code
I. Phone	J. Email Address		

IX. DESCRIPTION OF DISCHARGE(S)

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

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: _____

B. Signature: _____ C. Date: _____

D. Title: _____

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.

ATTACHMENT F – NOTICE OF TERMINATION OR TRANSFER

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

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

I. WDID

WDID# _____

II. DISCHARGER INFORMATION

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip
G. Contact Person	H. Email address	I. Title	J. Phone

III. BASIS FOR TERMINATION OR TRANSFER

IV. CERTIFICATION

"I certify under penalty of law that 1) I am not required to be permitted under this General Permit No.CAG990002, and 2) 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: _____

B. Signature: _____ **C. Date:** _____

D. Title: _____

V. FOR STATE WATER BOARD USE ONLY

☐ **Approved** for Termination or Transfer ☐ **Denied** and Returned to the Discharger

A. Printed Name: _____

B. Signature: _____

C. Date: _____

NOTT Effective Date: / /

Section I – WDID Number

The WDID Number is a number assigned to each discharger covered under an Order. If you do not know your WDID No., please call the State Water Resources Control Board or Regional Water Quality Control Board and request it prior to submittal of the Notice of Termination.

Section II – Owner/Operator

A. **Name** – Enter the name of the owner/operator.
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. Email Address – Enter the email address of the contact person.

I. Title – Enter the contact person's title.

J. Telephone – Enter the daytime telephone number of the contact person.

Section III – Basis of Termination or Transfer

Explain the reason behind your termination or transfer request. When a partial transfer of a utility vault or underground structure is conducted, a description of the areas being transferred must be provided. Provide dates and other information necessary to explain the basis for the request.

Section IV – Certification

All Notice of Termination 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 Notice of Termination

ATTACHMENT G – DISCHARGE CHARACTERIZATION STUDIES

I. BACKGROUND

This Order establishes provisions requiring the Discharger to develop and implement two discharge characterization studies. Discharge Characterization Study 1 is intended to characterize discharges from dewatered utility vaults or underground structures.to evaluate the potential for utility vault discharges or underground structures to cause or contribute to exceedances of water quality standards in compliance with section 402(a)(1) of the Clean Water Act and the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)*. Therefore, one of the objectives of this study is to collect sufficient effluent data from utility vaults and underground structures to identify the priority pollutants present in the effluent and their concentrations. Discharge Characterization Study 2 is intended to determine whether Dischargers that discharge to a municipal separate storm sewer system (MS4) owned or operated by a permittee listed in Attachment A of State Water Resources Control Board (State Water Board) Resolution 2012 - 0031 have a potential to alter the natural ocean water quality in the area of special biological significance (ASBS) to which the MS4 directly discharges.

II. GENERAL MONITORING REQUIREMENTS FOR THE CHARACTERIZATION STUDIES

A. Use of Certified Laboratories

The laboratory analyzing the monitoring samples shall be certified by the California Department of Public Health in accordance with the provisions of California Water Code 13176 and must include quality assurance/quality control data with their reports.

B. Use of U.S. Environmental Protection Agency (U.S. EPA)-Approved Analytical Methods

The priority pollutants shall be analyzed using the analytical methods described in part 136 of the Code of Federal Regulations or by methods approved by the State Water Board.

C. Use of Appropriate Minimum Levels

The minimum quantitation levels for the analysis of each pollutant will be equal to or lower than the minimum levels in Appendix 4 of the SIP that corresponds to the controlling water quality criterion concentrations. In cases where the controlling water quality criteria concentrations are below the detection limits of all approved analytical methods, the best available procedure shall be utilized that meets the lowest of the minimum levels. Table G-3 contains suggested U.S. EPA-approved analytical procedures. The Discharger is not required to use these specific procedures as long as the procedure selected achieves the desired minimum levels. However, analytical methods utilized shall be consistent with the requirements of 40 C.F.R. part 136. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

D. Monitoring Plan

Within eight months following the effective date of this Order, each Discharger is required to provide a Monitoring Plan that describes how to complete Discharge Characterization Studies 1 and 2 as specified below. At a minimum, the Monitoring Plan shall include the following components:

1. **Sample Collection Procedures.** The Discharger shall provide standard operating procedures (SOPs) describing the method(s) to be used for collecting samples. The step-by-step description should include all details pertaining to sample collection including a description of the cleaning and preparation procedures for sampling equipment and sample containers. The SOP shall also specify the methods that will be used to collect samples at each site including the type of samples that will be collected (e.g., grab, composite, flow composite) and how they will be collected (e.g., manually or automated). The SOP shall be prepared and implemented in accordance with the State Water Board's Surface Water Ambient Monitoring Program's quality assurance program plan. All monitoring samples shall be collected and analyzed according to the Discharger's SOP developed for the purpose of compliance with this Order. The State Water Board's Surface Water Ambient Monitoring Program's quality assurance program plan is available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml.

2. **Sampling Handling Procedures**. The Discharger shall describe the post-collection sample handling procedures used to maintain sample integrity including how samples will be preserved during handling (in accordance with 40 C.F.R. part 136) and transported, the appropriate hold-time is for each analysis, and the chain-of-custody will be used.

3. **Sample Location.** The Discharger shall monitor at a location such that a representative sample of the discharge is collected (i.e., at the end of the discharge hose before co-mingling with other waters) after the implementation of all applicable best management practices (BMPs) described in the Pollution Prevention Plan (PLAN).

4. **Sample Analysis.** The Discharger shall specify the analytical method to be used for each priority pollutant to be monitored. The Discharger shall also describe how samples will be analyzed (in-house or through contract laboratories). As described in section II.A above, the laboratory analyzing the monitoring samples shall be certified by the California Department of Public Health in accordance with the provisions of California Water Code 13176 and must include quality assurance/quality control data with their reports.

5. **Monitoring Schedule.** The Discharger shall propose a time schedule to complete Discharge Characterization Studies 1 and 2, and submit the results of the studies consistent with the following schedule:

Table G-1

Discharge Characterization Study 1	
Task	**Compliance Date**
I. Submit Monitoring Plan and Time Schedule for Discharge Characterization Study 1.	Within eight months following the effective date of this Order.[1]
II. Begin Phase I of Discharge Characterization Study 1.	By no later than the first rainy season following the final approval of the Monitoring Plan, conduct Phase I monitoring.[2]
III. Continue Phase II Monitoring of Discharge Characterization Study 1.	By no later than the third rainy season following the final approval of the Monitoring Plan, conduct Phase II of Discharge Characterization Study 1.[3]
IV. Complete Discharge Characterization Study 1	After completing Phases I and II of Discharge Characterization Study 1 or if collecting all samples (five samples per WDID in Phase I and five samples per WDID in Phase II) proves infeasible (i.e., no water present in utility vaults or underground structures due to lack of precipitation and/or groundwater infiltration), no later than four years following the effective date of this Order.
V. Submit Final Report for Discharge Characterization Study 1.	No later than four years and six months following the effective date of this Order.

1. Within two months following this compliance date, the State Water Board will review the Monitoring Plan and provide notice to the Discharger of its sufficiency. If the Discharger does not receive the notice from the State Water Board by two months following this compliance date, the Discharger shall consider the Monitoring Plan approved.
2. If it is infeasible (i.e., no water is present in utility vaults or underground structures due to lack of precipitation or groundwater infiltration) to complete Phase I during this period, sampling and analysis may continue in the subsequent rainy season.
3. If it is infeasible (i.e., no water is present in utility vaults or underground structures due to lack of precipitation or groundwater infiltration) to complete Phase II during this period, sampling and analysis may continue in the subsequent rainy season provided that the Task IV (Complete Characterization Study) compliance date has not yet occurred.

Table G-2

Discharge Characterization Study 2	
Task	**Compliance Date**
I. Identify MS4s with the potential to receive discharges from the Discharger's utility vaults and underground structures. Determine whether the identified MS4s discharges to an ASBS.	Within four months following the effective date of this Order.[1]
II. Submit Monitoring Plan and Time Schedule for Discharge Characterization Study 2	Within eight months following the effective date of this Order.[2]
III. Begin Discharge Characterization Study 2.	By no later than the second rainy season following the final approval of the Monitoring Plan, conduct Phase I monitoring.[3]
IV. Complete Discharge Characterization Study 2.	No later than three years following the effective date of this Order.
V. Submit Final Reports for Discharge Characterization	No later than three years and six months

Discharge Characterization Study 2	
Task	**Compliance Date**
Study 2.	following the effective date of this Order.

1. Additional ASBS Monitoring requirements are not required to be conducted where a Discharger has no discharges from utility vaults or underground structures to an MS4 that discharges to an ASBS.
2. Within two months following this compliance date, the State Water Board will review the Monitoring Plan and provide notice to the Discharger of its sufficiency. If no notice has been received by the Discharger by two months following this compliance date, the Discharger shall consider the Monitoring Plan approved.
3. If it is infeasible (i.e., no water present in utility vaults or underground structures due to lack of precipitation or groundwater infiltration) to complete Phase I during this period, sampling and analysis may continue in the subsequent rainy season.

E. Reporting Protocols

The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

1. Sample results greater than or equal to the reported reporting level (RL) shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
2. Sample results less than the reported RL, but greater than or equal to the laboratory's Method Detection Limit (MDL), shall be reported as "Detected, but Not Quantified" or DNQ or J-flagged values ; i.e., pollutants observed at concentrations above the analytical MDL but below the RL for the constituent. The estimated chemical concentration of the sample shall also be reported.
3. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may shortened to "Est. Conc.). The laboratory, if such information is available, may include numerical estimates of the data quantity for the reported result. Numerical estimates of data quality may be percent accuracy (+ or – a percentage of the reported value), numerical ranges (low and high), or any other means considered appropriate by the laboratory.
4. Sample results that are less than the laboratory's MDL shall be reported as "<" followed by the MDL.

III. DISCHARGE CHARACTERIZATION STUDY 1

A. Selection of Sites to be Monitored

The Discharger shall sample from at least five utility vaults or underground structures per Regional Water Board boundary where discharge sites are located (as specified in section IV.B of the NOI (Attachment E)). For example, if a Discharger were to discharge from utility vaults or underground structures within two Regional Water Boards, the Discharger must sample the discharge from at least five utility vaults from each region.

The utility vault and underground structure sites selected by the Discharger shall be typical or representative of the various types and location of utility vaults operated by

the Discharger within each Regional Water Board. The selection criteria that should be considered by the Discharger include:

- Type of utility vault or underground structure (e.g., dry, wet)
- Type of receiving water (e.g., coastal, inland, lakes)
- Type of land use (e.g., commercial, industrial, residential)

The Discharger shall provide the rationale and criteria used to select the five representative sites to be monitored in each Regional Water Board.

B. Phase I Requirements

Each Discharger shall perform Phase I of Discharge Characterization Study 1 that at a minimum meets the following requirements:

1. **Location.** The Discharger shall sample from at least five utility vaults or underground structure discharges per Regional Water Board where discharge sites are located (as specified in section IV.B of the NOI (Attachment E)).
2. **Sampling Frequency.** The Discharger shall sample five different utility vaults and underground structures. Each utility vault and underground structure shall be sampled one time during the first year or Phase I of the study, if feasible (i.e., water is present in utility vaults or underground structures).
3. **Constituents.** The Discharger shall analyze collected samples for the pollutants listed in Table G-3. In addition, the hardness and pH of the discharge shall be analyzed in order to accurately compute hardness- and pH-dependent water quality criteria for certain metals.

C. Phase II Requirements

Each Discharger shall perform Phase II of Discharge Characterization Study 1 Monitoring that at a minimum meets the following requirements:

1. **Location.** The Discharger shall sample from the same vault(s) sampled during Phase I where feasible. Where repeated sampling is infeasible (i.e., no water present in vaults due to lack of precipitation and/or groundwater infiltration), a utility vault or underground structure with similar characteristics (and, therefore, typical of the Discharger's utility vaults or underground structures within a region) shall be selected and its discharge sampled. A total of five different utility vaults or underground structures shall be sampled within each Regional Water Board that the Discharger operates in.

   Utility vault or underground structure discharges shall be monitored at a location such that a representative sample of the discharge is collected (i.e., at the end of the discharge hose before co-mingling with other waters) after the implementation of the applicable BMPs described in the PLAN.
2. **Sampling Frequency.** Each utility vault sampled during Phase I shall be resampled once during the second year of the Discharge Characterization Study 1 (Phase II period).

3. **Constituents.** The Discharger shall analyze all samples collected for each detected priority pollutant that exceeds the applicable water quality objective listed in Tables G-3, G-4, and G-5 as identified in the Phase I Report. A detection is defined as any pollutant concentration observed to exceed the analytical MDL, including DNQ or J-flagged values. The Discharger shall also monitor for hardness and pH.

D. Phase I and Phase II Reporting Requirements

The Discharger shall submit a report each on the results of the Phases I and II to the State Water Board **no later than four years and six months following the effective date of this Order**. The report shall contain, at a minimum, the following elements:

1. A description and location information for each vault whose discharge was selected for Phase I and Phase II. If a Phase I utility vault or underground structure is replaced and monitored during Phase II, then the Discharger shall provide a rationale for the representativeness of each selected replacement utility vault or underground structure.
2. The Discharger shall submit all results of analyses produced during Phase I and Phase II including detected, DNQ, and non-detected values. In the case of DNQ and non-detected values, the associated MLs and MDLs used in the analyses shall be reported.

Results which are believed to be erroneous due to misapplication of sampling or analytical techniques shall be identified and discussed in detail in the Discharger's Phase I and Phase II reports. The State Water Board will evaluate and determine whether to include the identified data points in analyses of the utility vault or underground structure discharge data.

IV. DISCHARGE CHARACTERIZATION STUDY 2

Dischargers that discharge to an MS4 owned or operated by a permittee listed in Attachment A of State Water Board Resolution 2012 - 0031 and that are also located within the MS4's watershed that has a direct discharge to an ASBS shall conduct Discharge Characterization Study 2 to characterize representative utility vault or underground structure discharges to an MS4 with a direct discharge to an ASBS. Dischargers that do not discharge to an MS4 with a direct discharge to an ASBS are not required to conduct Discharge Characterization Study 2. The locations of the MS4 outfalls to an ASBS are found in Appendix 5 of the Final Program Environmental Impact Report for the General Exception at http://www.swrcb.ca.gov/water_issues/programs/ocean/asbs.shtml. In the event it is unclear whether a particular utility vault or underground structure discharges to an ASBS via an MS4, the Discharger may consider that only those utility vaults or underground structures located within a one mile inland from the ASBS shoreline are subject for inclusion in the Discharge Characterization Study 2.

Dischargers are prohibited from discharging water from utility vaults or underground structures directly to an ASBS pursuant to this Order unless the discharger has first obtained the applicable exception to the California Ocean Plan.

A. Selection of Sites to be Monitored

Among all the utility vaults or underground structures that discharge to an MS4 that subsequently discharges to an ASBS, a total of five representative utility vaults or underground structures shall be sampled during the Characterization Study period, as specified in Table G-2. If there are less than five vaults or underground structures from which a discharge to an MS4 that discharges directly to an ASBS occurs, then only the number of actual utility vaults or underground structures that are dewatered shall be sampled. Each of the five representative utility vaults or underground structures shall be sampled for the following constituents to characterize the representative discharge during two of the four rainy seasons following final approval of the Characterization Study work plan:

- Oil and Grease
- Total Suspended Solids
- Bacteria Indicator[8]
- Metals listed in California Ocean Plan Table 1[9]
- Polynuclear Aromatic Hydrocarbons (PAHs)[10]
- Currently Used Pesticides (Pyrethroids and Organophosphate Pesticides)
- Nutrients including ammonia, nitrate, and phosphate

All constituents must be analyzed using the lowest MDLs, per 40 C.F.R. part 136. In addition, all constituent results shall be compared to the regional monitoring program results for the ASBS General Exception (Resolution 2012-0031) Ocean Receiving Water and Reference Area Monitoring Program. For metal analysis, all samples must be analyzed by the approved analytical method with the lowest MDLs (currently Inductively Coupled Plasma/Mass Spectrometry) described in the California Ocean Plan. For information on minimum limits (MLs) and standard monitoring procedures, refer to Appendices II and III of the California Ocean Plan. Dischargers may work together to collect the five samples required per ASBS where their service territories overlap and discharge to MS4s that discharge to a mutual ASBS.

B. Reporting Requirements

The Discharger shall submit a report on the results of Discharge Characterization Study 2 to the State Water Board **no later than four years and six months following the effective date of this Order**. The report shall contain, at a minimum, the following:

[8] Indicator bacteria includes total coliform bacteria, fecal coliform bacteria (or *E. coli*), and/or Enterococcus bacteria.

[9] Table 1 of the Ocean Plan can be found at this link: http://www.swrcb.ca.gov/water_issues/programs/ocean/docs/cop2012.pdf

[10] PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, benzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

1. The estimated volume discharged from utility vaults and underground structures to an MS4 with a direct discharge to an ASBS over a year;
2. Map and description of locations of up to five representative utility vaults or underground structures that are sampled;
3. Description for the sampling and analysis procedures;
4. The water quality monitoring analyses and results of up to five representative utility vaults or underground structures that were sampled during two of the four rainy seasons.

The Deputy Director will compare results from the Discharge Characterization Study 2 to regional monitoring program results for the ASBS General Exception (Resolution 2012-0031) Ocean Receiving Water and Reference Area Monitoring Program. The Deputy Director will make an assessment of whether the discharges from utility vaults or underground structures alter the natural ocean water quality in the ASBS.

V. CRITERIA FOR STUDY 1

Tables G-3, G-4, and G-5 below provide the criteria for priority pollutants metals that are hardness dependent, and pentachlorophenol. The selection of parameters monitored during Phase II of the Discharge Characterization Study 1 is determined by a comparison to a subset of California Toxics Rule (CTR) criteria (as provided in Attachment G) which are applicable to discharges regulated under this Order. The values provided reflect the most stringent criteria of either: (1) the freshwater criteria maximum concentration (CMC) aquatic life criteria or (2) the human health criteria for the consumption of organisms only. The CMC aquatic life criteria are protective against short-term, acute effects which must be anticipated from the short duration and intermittent discharges subject to this Order. Human health criteria reflect pollutant concentrations which are not expected to pose a significant risk to human health.

Table G-3. Priority Pollutants

CTR Number	Pollutant	CAS Number	Suggested Analytical Method(s)	Water Quality Criteria (µg/L)
1	Antimony	7440360	EPA 6020/200.8	4,300
2	Arsenic	7440382	EPA 1632	340
3	Beryllium	7440417	EPA 6020/200.8	No Criteria[1]
4	Cadmium	7440439	EPA 1638/200.8	Hardness Based [2]
5a	Chromium (III)	16065831	EPA 6020/200.8	Hardness Based [2]
5a	Chromium (VI)	18540299	EPA 7199/1636	16
6	Copper	7440508	EPA 6020/200.8	Hardness Based [2]
7	Lead	7439921	EPA 1638	Hardness Based [2]
8	Mercury	7439976	EPA 1669/1631	0.051
9	Nickel	7440020	EPA 6020/200.8	Hardness Based [2]
10	Selenium	7782492	EPA 6020/200.8	Hardness Based [2]
11	Silver	7440224	EPA 6020/200.8	Hardness Based [2]
12	Thallium	7440280	EPA 6020/200.8	6.3
13	Zinc	7440666	EPA 6020/200.8	Hardness Based [2]

CTR Number	Pollutant	CAS Number	Suggested Analytical Method(s)	Water Quality Criteria (µg/L)
14	Cyanide	57125	EPA 9012A	22
15	Asbestos	1332214	EPA/600/R-93/116(PCM)	No Criteria[1]
16	2,3,7,8-TCDD	1746016	EPA 8290 (HRGC) MS	0.000000014
17	Acrolein	107028	EPA 8260B	780
18	Acrylonitrile	107131	EPA 8260B	0.66
19	Benzene	71432	EPA 8260B	71
20	Bromoform	75252	EPA 8260B	360
21	Carbon Tetrachloride	56235	EPA 8260B	4.4
22	Chlorobenzene	108907	EPA 8260B	21,000
23	Chlorodibromomethane	124481	EPA 8260B	34
24	Chloroethane	75003	EPA 8260B	No Criteria[1]
25	2-Chloroethylvinyl Ether	110758	EPA 8260B	No Criteria[1]
26	Chloroform	67663	EPA 8260B	No Criteria[1]
27	Dichlorobromomethane	75274	EPA 8260B	46
28	1,1-Dichloroethane	75343	EPA 8260B	No Criteria[1]
29	1,2-Dichloroethane	107062	EPA 8260B	99
30	1,1-Dichloroethylene	75354	EPA 8260B	3.2
31	1,2-Dichloropropane	78875	EPA 8260B	39
32	1,3-Dichloropropylene	542756	EPA 8260B	1,700
33	Ethylbenzene	100414	EPA 8260B	29,000
34	Methyl Bromide	74839	EPA 8260B	4,000
35	Methyl Chloride	74873	EPA 8260B	No Criteria[1]
36	Methylene Chloride	75092	EPA 8260B	1,600
37	1,1,2,2-Tetrachloroethane	79345	EPA 8260B	11
38	Tetrachloroethylene	127184	EPA 8260B	8.85
39	Toluene	108883	EPA 8260B	200,000
40	1,2-Trans-Dichloroethylene	156605	EPA 8260B	140,000
41	1,1,1-Trichloroethane	71556	EPA 8260B	No Criteria[1]
42	1,12-Trichloroethane	79005	EPA 8260B	42
43	Trichloroethylene	79016	EPA 8260B	81
44	Vinyl Chloride	75014	EPA 8260B	525
45	2-Chlorophenol	95578	EPA 8270C	400
46	2,4-Dichlorophenol	120832	EPA 8270C	790
47	2,4-Dimethylphenol	105679	EPA 8270C	2,300
48	2-Methyl-4,6-Dinitrophenol	534521	EPA 8270C	765
49	2,4-Dinitrophenol	51285	EPA 8270C	14,000
50	2-Nitrophenol	88755	EPA 8270C	No Criteria[1]
51	4-Nitrophenol	100027	EPA 8270C	No Criteria[1]
52	3-Methyl-4-Chlorophenol	59507	EPA 8270C	No Criteria[1]
53	Pentachlorophenol	87865	EPA 8270C	[3]
54	Phenol	108952	EPA 8270C	4,600,000
55	2,4,6-Trichlorophenol	88062	EPA 8270C	6.5
56	Acenaphthene	83329	EPA 8270C	2,700

CTR Number	Pollutant	CAS Number	Suggested Analytical Method(s)	Water Quality Criteria (µg/L)
57	Acenaphthylene	208968	EPA 8270C	No Criteria[1]
58	Anthracene	120127	EPA 8270C	110,000
59	Benzidine	92875	EPA 8270C	0.00054
60	Benzo(a)Anthracene	56553	EPA 8270C	0.049
61	Benzo(a)Pyrene	50328	EPA 8270C	0.049
62	Benzo(b)Fluoranthene	205992	EPA 8270C	0.049
63	Benzo(ghi)Perylene	191242	EPA 8270C	No Criteria[1]
64	Benzo(k)Fluoranthene	207089	EPA 8270C	0.049
65	Bis(2-Chloroethoxy)Methane	111911	EPA 8270C	No Criteria[1]
66	Bis(2-Chloroethyl)Ether	111444	EPA 8270C	1.4
67	Bis(2-Chloroisopropyl)Ether	108601	EPA 8270C	170,000
68	Bis(2-Ethylhexyl)Phthalate	117817	EPA 8270C	5.9
69	4-Bromophenyl Phenyl Ether	101553	EPA 8270C	No Criteria[1]
70	Butylbenzyl Phthalate	85687	EPA 8270C	5,200
71	2-Chloronaphthalene	91587	EPA 8270C	4,300
72	4-Chlorophenyl Phenyl Ether	7005723	EPA 8270C	No Criteria[1]
73	Chrysene	218019	EPA 8270C	0.049
74	Dibenzo(a,h)Anthracene	53703	EPA 8270C	0.049
75	1,2-Dichlorobenzene	95501	EPA 8260B	17,000
76	1,3-Dichlorobenzene	541731	EPA 8260B	2,600
77	1,4-Dichlorobenzene	106467	EPA 8260B	2,600
78	3,3'-Dichlorobenzidine	91941	EPA 8270C	0.077
79	Diethyl Phthalate	84662	EPA 8270C	120,000
80	Dimethyl Phthalate	131113	EPA 8270C	2,900,000
81	Di-n-Butyl Phthalate	84742	EPA 8270C	12,000
82	2,4-Dinitrotoluene	121142	EPA 8270C	9.1
83	2,6-Dinitrotoluene	606202	EPA 8270C	No Criteria[1]
84	Di-n-Octyl Phthalate	117840	EPA 8270C	No Criteria[1]
85	1,2-Diphenylhydrazine	122667	EPA 8270C	0.54
86	Fluoranthene	206440	EPA 8270C	370
87	Fluorene	86737	EPA 8270C	14,000
88	Hexachlorobenzene	118741	EPA 8260B	0.00077
89	Hexachlorobutadiene	87863	EPA 8260B	50
90	Hexachlorocyclopentadiene	77474	EPA 8270C	17,000
91	Hexachloroethane	67721	EPA 8260B	8.9
92	Indeno(1,2,3-cd)Pyrene	193395	EPA 8270C	0.049
93	Isophorone	78591	EPA 8270C	600
94	Naphthalene	91203	EPA 8260B	No Criteria[1]
95	Nitrobenzene	98953	EPA 8270C	1,900
96	N-Nitrosodimethylamine	62759	EPA 8270C	8.1
97	N-Nitrosodi-n-Propylamine	621647	EPA 8270C	1.4
98	N-Nitrosodiphenylamine	86306	EPA 8270C	16
99	Phenanthrene	85018	EPA 8270C	No Criteria[1]
100	Pyrene	129000	EPA 8270C	11,000

CTR Number	Pollutant	CAS Number	Suggested Analytical Method(s)	Water Quality Criteria (µg/L)
101	1,2,4-Trichlorobenzene	120821	EPA 8260B	No Criteria[1]
102	Aldrin	309002	EPA 8081A	0.00014
103	alpha-BHC	319846	EPA 8081A	0.013
104	beta-BHC	319857	EPA 8081A	0.046
105	gamma-BHC	58899	EPA 8081A	0.063
106	delta-BHC	319868	EPA 8081A	No Criteria[1]
107	Chlordane	57749	EPA 8081A	0.00059
108	4,4'-DDT	50293	EPA 8081A	0.00059
109	4,4'-DDE	72559	EPA 8081A	0.00059
110	4,4'-DDD	72548	EPA 8081A	0.00084
111	Dieldrin	60571	EPA 8081A	0.00014
112	alpha-Endosulfan	959988	EPA 8081A	0.22
113	beta-Endosulfan	33213659	EPA 8081A	0.22
114	Endosulfan Sulfate	1031078	EPA 8081A	110
115	Endrin	72208	EPA 8081A	0.81
116	Endrin Aldehyde	7421934	EPA 8081A	0.76
117	Heptachlor	76448	EPA 8081A	0.00021
118	Heptachlor Epoxide	1024573	EPA 8081A	0.00011
119	PCB-1016	12674112	EPA 8082	0.00017 (Sum of PCBs)
120	PCB-1221	11104282	EPA 8082	
121	PCB-1232	11141165	EPA 8082	
122	PCB-1242	53469219	EPA 8082	
123	PCB-1248	12672296	EPA 8082	
124	PCB-1254	11097691	EPA 8082	
125	PCB-1260	11096825	EPA 8082	
126	Toxaphene	8001352	EPA 8081A	0.00075
	Hardness (as $CaCO_3$)		EPA 130.2	--
	pH		EPA 150.1	--

1. Dischargers are not required to analyze samples for parameters which do not possess criteria in Table G-3 (excluding hardness and pH). No analyses are required for parameters listed with "No Criteria" in the Water Quality Objective column.
2. For hardness-based metals criteria (i.e., cadmium, chromium (III), copper, lead, nickel, silver, and zinc), refer to Table G-4.
3. For pH-based pentachlorophenol criteria, refer to Table G-5.

Table G-4. Hardness-Based Criteria

Effluent Hardness (mg/L as $CaCO_3$)	Hardness-Based Criteria (µg/L)						
	Cadmium	Chromium (III)	Copper	Lead	Nickel	Silver	Zinc
< 10	0.34	260	1.6	4.4	67	0.077	17
10 - 20	0.53	370	2.3	7.3	94	0.16	24
30 - 40	1.4	740	5.2	21	200	0.67	49
40 - 50	1.8	900	6.6	30	240	1.0	61
50 - 100	3.3	1,400	11	57	370	2.5	94
100 - 200	7.1	2,400	21	140	660	8.2	170

Effluent Hardness (mg/L as $CaCO_3$)	Hardness-Based Criteria (µg/L)						
	Cadmium	Chromium (III)	Copper	Lead	Nickel	Silver	Zinc
> 200	9.9	3,100	27	200	840	13	220

Table G-5. Pentachlorophenol Criteria

pH	Pentachlorophenol (µg/L)
1 - 2	0.035
2 - 3	0.095
3 - 4	0.26
4 - 5	0.71
5 - 6	1.9
6 - 6.9	5.3
> 6.9	8.2