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ATTACHMENT E – NOTICE OF INTENT
ORDER WQ 2014-0174-DWQ
GENERAL PERMIT NO. CAG990002

DIVISION OF WATER QUALITY

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

I. NOTICE OF INTENT STATUS (See Instructions)

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

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

A. Name City of Roseville Electric		Owner/Operator Type (Check One)		
		1. <input checked="" type="checkbox"/> City	2. <input type="checkbox"/> County	3. <input type="checkbox"/> State
		4. <input type="checkbox"/> Gov. Combo	5. <input type="checkbox"/> Private	
B. Mailing Address 2090 Hilltop Circle				
C. City Roseville	D. County Placer	E. State California	F. Zip Code 95747	
G. Contact Person Julie Manfredi	H. Title Electric Compliance Analyst		I. Phone (916) 774-5674	
J. Email Address JManfredi@roseville.ca.us				

Additional Owners _____

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

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

IV. RECEIVING WATER INFORMATION

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

V. LAND DISPOSAL/RECLAMATION

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

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

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

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

There are some discharge locations where disposal/reclamation is not feasible; discharge to municipal storm system may required.

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 City of Roseville		B. Contact Person Julie Manfredi	
C. Street Address Where PLAN is Located 2090 Hilltop Circle		D. Title of Contact Person Electric Compliance Analyst	
E. City Roseville	F. County Placer	G. State CA	H. Zip Code 95747
I. Phone (916) 774-5674		J. Email Address JManfredi@roseville.ca.us	

IX. DESCRIPTION OF DISCHARGE(S)

Describe the discharge(s) proposed. List any potential pollutants in the discharge. Attach additional sheets if needed.
Potential discharges may be required during routine or emergency maintenance of utility vaults and underground structures. Discharges shall be to landscaped areas or to municipal storm system should landscaped areas be unavailable. Potential pollutants include oil and grease, pH, total suspended solids, and total petroleum hydrocarbons, both diesel and gasoline range organics.

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: Shawn Matchim

B. Signature: 

C. Date: 05/28/15

D. Title: Electric Regulatory Compliance Administrator

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 #:	



POLLUTION PREVENTION PLAN (PPP)

The City of Roseville

Site Operator: The City of Roseville, Placer County
Permit Type: General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures

Order No.: 2014-0174-DWQ
Permit No.: CAG990002

Prepared By: Golder Associates Inc.
1000 Enterprise Way, Suite 190
Roseville, CA 95678

May 2015

1416271-03

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**Stormwater Pollution Prevention Plan (SWPPP)
Project Information and Certification**

State Water Resources Control Board Water Quality Order No. 2014-0174-DWQ
National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges
Associated with Industrial Activities
NPDES No. CAS990002

Project Information

Facility Name: City of Roseville
Facility Location: 2090 Hilltop Circle
Roseville, California 95747

Contact: Julie Manfredi
(916) 774-5674

Site Area City of Roseville

Reviewing Agency

Jurisdiction: Sacramento Office:
Regional Water Quality Control Board – Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670
Phone: (916) 464-3291
Fax: (916) 464-4645

Project Engineer

Prepared by: Golder Associates, Inc
1000 Enterprise Way, Suite 190
Roseville, CA 95678
(916) 786-2424
(916) 786-2434 (fax)

Contact: Ed Childers, P.E.
Project Number: 1416271-03



ABBREVIATIONS

BAT	Best Available Technology
BCT	Best Control Technology
BMP	Best Management Practice
CVRWQCB	Central Valley Regional Water Quality Control Board
MRP	Monitoring and Reporting Plan
MRWP	Monitoring and Reporting Work Plan
NAL	Numeric Action Level
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&G	Total Oil and Grease
PPP	Pollution Prevention Plan
PPT	Pollution Prevention Team
RWQCB	Regional Water Quality Control Board
SPCC	Spill Prevention, Control, and Countermeasures
SWRCB	California State Water Resources Control Board
TSS	Total Suspended Solids



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1.0 INTRODUCTION

The content of this Pollution Prevention Plan (PPP) is consistent with the requirements of the General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures (General Permit) under Order No. 2014-0174-DWQ and NPDES No. CAS990002 adopted by the State Water Resources Control Board (SWRCB) on 21 October 2014.

Golder has prepared this PPP for the exclusive use of the City of Roseville (Facility) in general compliance with the 13 February 2015 Golder Associates, Inc. (Golder) proposal¹. Golder prepared this PPP based upon information provided by the City of Roseville. The PPP will comply with the Best Available Technology/Best Control Technology (BAT/BCT) for discharges during implementation of normal routine maintenance and operations of utility vaults and underground structures owned and operated by the Facility.

A Notice of Intent (NOI) under Order WQ 2014-0174-DWQ has also been prepared by Golder for the exclusive use of the Facility, as required under the General Permit for the Facility.

1.1 Purpose

The purpose of the PPP is to protect receiving waters of the United States and the State of California by reducing the amount of pollutants from intermittent discharges from the removal of water from utility vaults, manholes, and other underground structures and to ensure that pollutant concentration in the discharged water do not cause, have a reasonable potential to cause or contribute to, an excursion above Federal, SWRCB and Regional Water Quality Control Board (RWQCB) water quality objectives. Additionally, no discharges will cause acute or chronic toxicity to the receiving waters.

1.2 PPP Organization

The PPP is organized into the following sections:

Section 1 - Introduction: (current section) reviews the purpose of the PPP and provides a general introduction for the plan.

Section 2 - Plan Administration: provides information regarding the plan administration, the Facility pollution prevention team, employee training, and plan application.

¹ Golder Associates, Inc. 2015. Quote for Update of Existing Stormwater Pollution Prevention Plan and development of Utility Vaults Pollution Prevention Plan. 13 February 2015.



Section 3 - Potential Pollutant Sources: provides information regarding potential pollutant sources, description of underground structures, and discussion of drainage and underground structures maps.

Section 4 – Discharge Procedures: provides information regarding procedures for discharges including the inspection of underground structures and evaluation of waters contained in underground structures and recordkeeping.

Section 5 – Pollution Control Measures: provides information regarding pollution control measures including housekeeping, preventative maintenance, and spill prevention and response.

Section 6 – Monitoring and Reporting: provides information regarding monitoring and reporting.

Section 7 – Annual Evaluation and Revision: contains information regarding annual evaluation of the PPP and revision requirements.

Section 8 – Certification: contains the PPP certification.



2.0 PLAN ADMINISTRATION

The PPP will comply with the BAT/BCT during implementation and will address the Pollution Prevention Team (PPT), Employee Training, and Plan Application.

2.1 Pollution Prevention Team

A stormwater pollution prevention team (Table 2-1) has been assembled to assist the Facility in carrying out the contents of the PPP.

TABLE 2-1: POLLUTION PREVENTION TEAM

Name	Title	Responsibilities	Contact Information
Jason Grace	Electric Operations Manager	PPT Oversight	(916) 774-5643
Tom Pontes	Electric Line Construction Supervisor	PPP Implementation	(916) 774-5550
Tom Cox	Electric Line Construction Supervisor	PPP Implementation	(916) 774-5611
Michael Rilje	Electric Preventative Data System Technician	PPP Implementation	(916) 774-5598
Julie Manfredi	Electric Compliance Analyst	PPP Oversight	(916) 774-5674

2.2 Employee Training

The Facility shall provide training to all utility personnel involved with the contents, procedures, and proper execution of the PPP. Any newly hired affected employee(s) shall be trained on the contents, procedures, and proper execution of the PPP. Any revisions or other changes to the PPP shall be communicated to all utility employees. Annual training shall be provided thereafter. Training shall be provided by Compliance Staff, or other designee. Training topics at a minimum shall include:

- Spill response
- Good housekeeping
- Pollution control procedures
- Material management practices
- Dewatering procedures

All training records are maintained in an online database or at the Facility located at 2090 Hilltop Circle, Roseville California. Training records shall be made available to the Central Valley RWQCB (CVRWQCB) or SWRCB upon request or during inspections.



3.0 POTENTIAL POLLUTANT SOURCES

3.1 Description of Underground Structures

The Facility operates wet structures, structures such as underground vaults, manholes, and other underground structures that are not completely sealed from the potential inflow of surface or subsurface waters, including storm waters. A list of utility vaults and underground structures pertaining to the General Permit and this PPP are provided in Table 3-1. These structures generally contain various types of electric networking equipment that does not normally contribute pollutants to water with the structure.

TABLE 3-1: LIST OF UNDERGROUND STRUCTURES AND VAULT TYPES

Category	External Size	Function(s)
Manhole	10'x20'x9'	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Manhole	4'-6"x8'-6"x6'-6"	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Manhole	6'-0"x12'-0"x7'-0"	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Manhole	6'-0"x15'-0"x7'-0"	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Manhole	6'-0"x8'-0"x7'-0"	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Manhole	7'-6"x16'-0"x10'-0"	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
JBox	4 x 4	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections as well as perform switching functions
JBox	4 x 6	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections as well as perform switching functions
Pull Box	3 x 5	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Pull Box	3 x 6	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Pull Box	4 x 6	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Pull Box	7 x 9	Underground structure used as an access point for the installation, maintenance, and inspection of underground cables and connections
Vault	6'9" x 8' 9"	Underground utility vault used to house pad mounted switchgear. Access is necessary to perform the installation, maintenance, and inspection of underground cables and connections

Any waters collected inside these structures typically shall be removed, if necessary, prior to the commencement of work by Facility personnel; removal procedures are detailed in Section 4.0. Discharges from these structures generally comprise all discharges under the General Permit. Potential pollutants that may accumulate in water in these structures and applicable Numeric Action Levels (NALs) are detailed in Table 3-2.

**TABLE 3-2: POTENTIAL POLLUTANT NUMERIC ACTION LEVELS**

Potential Pollutant	Units	Numeric Action Levels	
		Daily Minimum	Daily Maximum
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

Notes:

-- = No Value

3.2 Underground Structure Location and Drainage Map

The utility vaults and underground structures for the Facility are detailed on Figure 1 and are located within The CVRWQCB district. The Facility utility vaults and underground structures are located across eight creek watershed boundaries, Pleasant Grove Creek, Antelope Creek, Secret Ravine, Miners Ravine, Linda Creek-Cirby Creek, Arcade Creek, Gibson Lake–Dry Creek, and Curry Creek. The creeks are the only major surface water bodies for the Facility.

3.3 Potential Pollution Source Assessment

A potential pollutant source assessment (assessment) was performed to identify potential pollution sources that may contribute to an exceedance of water quality objectives. Existing discharge records were unavailable to review for this assessment. The effectiveness of existing BMPs and implementation, to the extent possible, minimum BMPs to reduce or prevent pollutants in discharges were reviewed as part of the assessment.

Potential pollutant sources include surface and subsurface water runoff or infiltration into the utility vaults or underground structures for all potential pollutants. Control measures and BMPs are outlined in the discharge procedures provided in Section 4.0 and pollution control provided in Section 5.0.



4.0 DISCHARGE PROCEDURES

4.1 Inspection of Underground Structures

In accordance with the General Permit, prior to removing water from a utility vault or underground structure, trained Facility utility personnel shall inspect the structure to determine if a discharge is required in order to perform work. The initial inspection shall determine if obvious issues are present in the structure, such as odors, free-floating product, volume of water above maximum allowable limit of 50,000 gallons, if applicable, and structural integrity.

Personnel shall ensure the work area is clearly marked and protected according to applicable standards, appropriate personal protective equipment (PPE) is donned, and any required permits are properly executed (e.g. permit-required confined space).

4.2 Evaluation of Waters

The evaluation of waters contained in utility vaults or underground structures shall be conducted by trained Facility utility personnel and be in general accordance with the General Permit. A structural diagram for evaluation of waters is provided in Appendix B and a sample de-watering checklist is provided in Appendix C.

4.2.1 Initial Evaluation

Upon opening a utility vault or underground structure, the trained Facility utility personnel shall evaluate any standing water for the following characteristics:

- Oily sheen
- Cloudiness
- Discolored
- Oil
- Tar
- Sand
- Grease
- Odor

Should the water exhibit any of the above characteristics a member of the PPT team, or otherwise designated job supervisor, shall be consulted. If disposal of the water is required, personnel shall contact the City of Roseville Industrial Waste Section at (916) 746-1883 or the Stormwater Management Program at (916) 746-1722 or (916) 223-3258, wherein the water shall be disposed appropriately. If the water can be removed without disturbing any pollutants (e.g. sand, tar) the water may be discharged while being monitored as detailed in Section 4.3.



If the water appears to have an oily film, a C.I.Agent®, a petroleum hydrocarbon solidifying powder, shall be applied and allowed to coagulate. Once contaminants have sufficiently coagulated, the mass is removed and placed in specified containment bins prior to discharge.

4.2.2 Additional Evaluations

Following initial evaluation of any standing water within the utility vault or underground structure, and during discharge procedures, the water shall be monitored by trained Facility utility personnel for any characteristic changes as identified in Section 4.2.1. Should the water exhibit any characteristic changes, the discharge shall be ceased immediately and waters re-evaluated. The water may be allowed to stand undisturbed for at least 5 minutes, after that time, if the water can be removed without disturbing any pollutants, the water may be continued to be discharged while being closely monitored. If disposal of the water is required, personnel shall contact the City of Roseville Industrial Waste Section at (916) 746-1883 or the Stormwater Management Program at (916) 746-1722 or (916) 223-3258, wherein the water shall be disposed appropriately.

4.3 Water Discharge Procedures

Waters contained in utility vaults and underground structures that have passed inspection and evaluation procedures can be discharged to receiving waters in accordance with the conditions outlined in the General Permit. Waters may be pumped directly into a storm sewer or catch basin or along a street if a storm sewer is not in the immediate vicinity. Temporary berms, erosion control measures, or other BMPs shall be used to channel waters into the appropriate receiving area, as practical.

Facility personnel shall estimate and record the volume of water within each structure prior to discharge, as detailed in Appendix C. The Facility does not operate any utility vaults or underground structures that would exceed 50,000-gallons. Any sediments or other debris present in the structure that cannot readily be removed for proper disposal prior to discharge shall be disturbed as little as possible during discharge procedures.

All discharges by the Facility from utility vaults and underground structures are manual discharges. That is, trained Facility utility personnel use a filter and hose assembly to pump the water into the nearest landscaped area. If no landscaped area is available, the water is pumped into the nearest storm sewer. Waters are continually evaluated by personnel during discharge procedures. Straw waddles, or similar, shall be utilized in landscaped areas that may be prone to erosion.

Should waters require discharge under an emergency situation, where waters may be discharged as soon as possible to avoid endangerment to human health, public safety, or the environment, the Facility shall discharge to the nearest municipal storm sewer should other means be unavailable (e.g. landscaped areas or waste collector).



4.4 Recordkeeping

Inspection, evaluation, and discharge procedures from utility vaults and underground structures are recorded on the De-Watering Checklist. A sample checklist is provided in Appendix C. All maintenance and inspection activities shall be recorded. Records include:

- Name of Facility personnel
- Date and time
- Vault number and volume
- Identification if rain event in last three days
- Estimated discharge volume
- Evaluation of waters
- Job supervisor signature

Any problem noted during inspections shall have a documented corrective action. Follow-up date, time, and procedures shall likewise be documented. All records of discharges under the General Permit shall be maintained in an online database or central file at the Facility located at 2090 Hilltop Circle in Roseville California and be made available to the CVRWQCB and SWRCB for inspection.



5.0 POLLUTION CONTROL MEASURES

The Facility shall maintain measures and controls to ensure that waters discharged are in general compliance with the General Permit. The measures and controls (BMPs) are discussed below and include good housekeeping, preventative maintenance, and spill prevention and response.

In order to keep pollutants at a minimum, the Facility shall employ good housekeeping procedures for all structures by maintaining the integrity of the structure with regular preventative maintenance, cleanliness of structures and surrounding areas (e.g. inspections and sweeping), as feasible, and removal any wastes or debris either manually, by coagulation, or by absorbent material (e.g. pat, rags, etc.).

In the event of a release of pollutants to the waters of the United States and State of California:

- The discharge shall be immediately stopped and the release contained to the extent practical. The spill shall be immediately reported to the Facility. If appropriate, the Facility shall report the release to the National Response Center at (800) 424-8802 within 24 hours of the release. Appropriate regulatory agencies shall also be contacted within 24 hours of the release
- A written report describing the details of the release shall be prepared for the CVRWQCB within 5 days of the release. The report shall outline measures planned to reduce or prevent reoccurrence of the release
- If the release contained hazardous pollutants, the Facility may employ a hazardous materials response contractor to mitigate the release
- Documentation of the release and response actions shall be maintained at the Facility and will be available to the CVRWQCB and SWRCB for inspection



6.0 ANNUAL EVALUATION, REVISION, AND REPORTING

Preparation of this PPP does not guarantee compliance with the General Permit. It is the responsibility of the Facility to implement the BMPs and recommendations in this document and revise the PPP when conditions warrant and as necessary.

The Facility shall conduct an overall evaluation at least once per year of the effectiveness of the PPP in controlling the discharge of pollutants during a discharge event and revise or replace the PPP as necessary to address procedures and BMPs found to be ineffective in minimizing pollutant discharge.

The evaluation shall at a minimum include:

- Evaluation of the PPP measures to reduce pollutant loadings to determine whether controls are adequate and properly implemented in accordance with the General Permit, or whether additional controls or BMPs are needed
- Ensure that utility source control measures, sediment and erosion control measures and other BMPs identified in the PPP are operating correctly
- Evaluate the equipment needed to adequately implement the PPP
- Evaluate the potential cause(s) should annual monitoring at representative sites exceed one or more of the NALs and assess potential source(s) of pollutant(s) and whether procedures and BMPs need to be revised, or if additional NALs need to be added

Should PPP revisions be necessary based upon the annual evaluation, the Facility shall develop a revised PPP with new or revised BMPs to prevent future exceedance(s) of NALs. The Facility shall implement the BMPs and document the progress of their implementation and effectiveness in the annual report to the CVRWQCB.

If the cause(s) of an exceedance of an NAL was beyond the control of the Facility and not a result of inadequate PPP implementation, procedures, or BMPs, then revisions to the PPP are not required, but explanation shall be detailed by the Facility in the annual report to the CVRWQCB. The annual evaluation and any revision(s) of the PPP shall be provided as part of the annual reporting required in the Monitoring and Reporting Plan (See section 7.0).

The Facility shall retain for five years records summarizing the scope of the annual PPP evaluation, personnel making the evaluation, the date(s) of the evaluation(s), significant observations relating to the implementation of the PPP, and actions taken to revision the PPP. All records shall be maintained in an online database or central file at the Facility located at 2090 Hilltop Circle in Roseville California.



7.0 MONITORING AND REPORTING PLAN

According to the General Permit, the Facility shall be required to comply with the Monitoring and Reporting Plan (MRP) in addition to two discharge characterization studies.

- Discharge Characterization Study (Study 1): The General Permit states that each discharger shall conduct a utility vault and underground structure discharge characterization study in order to collect sufficient data to evaluate the potential for discharges from these structures that may cause or contribute to exceedances of water quality standards.
- Discharge Characterization Study for Discharges to Municipal Separate Storm Systems (MS4) Discharging to Areas of Special Biological Significance (ASBSs) (Study 2): The General Permit states that according to the California Ocean Plan, wastes shall not be discharged to an ASBS unless subject to exception. Dischargers dewatering utility vaults or underground structures where the discharge reaches an MS4 shall determine whether the MS4 subsequently discharges to an ASBS, or whether the drainage is located within a watershed that discharged to an ASBS.

The Facility has developed a Monitoring and Reporting Work Plan (MRWP) in general accordance with the General Permit and requirements of the MRP. The MRWP is included as Appendix A.

According to the General Permit, the Facility shall submit a monitoring plan and time schedule for Study 1 within eight months following the effective date of the General Permit, and by no later than the first rainy season following the final approval of the Study 1 monitoring plan, conduct the Phase I monitoring as detailed in the General Permit.

Under the provisions of the General Permit, the Facility shall not be required to conduct Study 2 as the Facility, the MS4 discharges, and the watershed in which the Facility and MS4 discharges is located do not discharge to an ASBS.



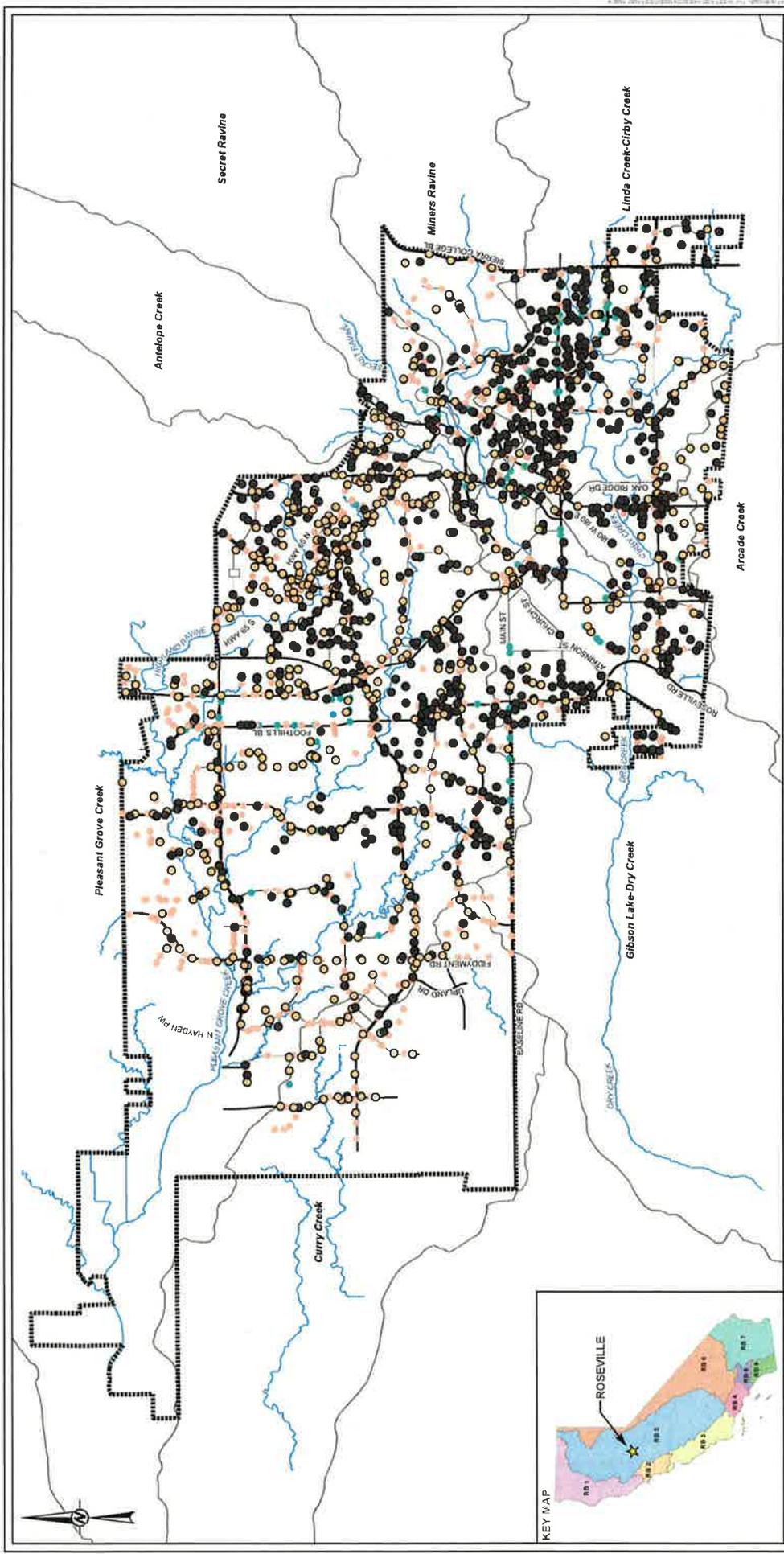
8.0 CERTIFICATION

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 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, to the best of my knowledge and belief, the information submitted is, 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.

Shawn Matchim
Electric Regulatory Compliance Administrator

06/01/2015
Date

FIGURES



LEGEND

- JUNCTION BOX
- PULL BOX
- MANHOLE
- VAULT
- COLLECTOR STREET
- ARTERIAL STREET
- CREEK
- CITY OF ROSEVILLE BOUNDARY
- USGS NHD WATERSHED BOUNDARY UNIT (HU-12)

KEY MAP

REFERENCES

1. CITY DATA (I.E. ROAD, VAULT, ETC) PROVIDED BY ROSEVILLE ELECTRIC CITY OF ROSEVILLE. DATE OF DATA: MAY 21, 2015.
2. WATERSHED INFORMATION OBTAINED FROM USDA NRCS. DATE OF INFO: MARCH 2015.



CLIENT
 ROSEVILLE ENERGY UTILITY VAULT
 CITY OF ROSEVILLE
 ROSEVILLE, CA

CONSULTANT

PROJECT NO.	2015-05-21
DESIGNED BY	EC
DRAWN BY	DMN
REVIEWED BY	BJ
APPROVED BY	EC

PROJECT TITLE
 STORMWATER POLLUTION PREVENTION PLAN
 DRAINAGE MAP

PROJECT NO. 1418271-03

REV. 0

FIGURE 1

APPENDIX A
MONITORING AND REPORTING WORK PLAN



MONITORING AND REPORTING WORK PLAN (MRWP)

The City of Roseville

Site Operator: The City of Roseville, Placer County
Permit Type: General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures

Order No.: 2014-0174-DWQ
Permit No.: CAG990002

Prepared By: Golder Associates Inc.
1000 Enterprise Way, Suite 190
Roseville, CA 95678

May 2015

1416271-03





ABBREVIATIONS

ASBS	Areas of Special Biological Significance
BMP	Best Management Practice
CFR	Code of Federal Register
CVRWQCB	Central Valley Regional Water Quality Control Board
DRO	Diesel Range Organics
GRO	Gasoline Range Organics
MRP	Monitoring and Reporting Plan
MRWP	Monitoring and Reporting Work Plan
MS4	Municipal Separate Storm Systems
NAL	Numeric Action Level
NPDES	National Pollutant Discharge Elimination System
O&G	Total Oil and Grease
PPP	Pollution Prevention Plan
RWQCB	Regional Water Quality Control Board
SWRCB	California State Water Resources Control Board
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids



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1.0 INTRODUCTION

The content of this Monitoring and Reporting Work Plan (MRWP) is consistent with the requirements of the General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures (General Permit) Monitoring and Reporting Program (MRP) under Order No. 2014-0174-DWQ and NPDES No. CAS990002 adopted by the State Water Resources Control Board (SWRCB) on 21 October 2014.

Golder has prepared this MRWP for the exclusive use of the City of Roseville (Facility) in general compliance with the 13 February 2015 Golder Associates, Inc. (Golder) proposal¹. Golder prepared this MRWP based upon information provided by the City of Roseville. The MRWP will comply with the provisions outlined in Appendix C of the General Permit, where applicable, for discharges during implementation of normal routine maintenance and operations of utility vaults and underground structures owned and operated by the Facility.

1.1 Purpose

The purpose of the MRP is to ensure the protection of receiving waters of the United States and the State of California by monitoring and reporting potential pollutants from intermittent discharges from the removal of water from utility vaults, manholes, and other underground structures and to ensure that pollutant concentration in the discharged water do not cause, have a reasonable potential to cause or contribute to, an excursion above Federal, SWRCB and Regional Water Quality Control Board (RWQCB) water quality objectives. Additionally, no discharges will cause acute or chronic toxicity to the receiving waters.

¹ Golder Associates, Inc. 2015. Quote for Update of Existing Stormwater Pollution Prevention Plan and development of Utility Vaults Pollution Prevention Plan. 13 February 2015.



2.0 GENERAL REQUIREMENTS

According to the General Permit, the Facility shall be required to comply with the MRP in addition to two discharge characterization studies:

- Discharge Characterization Study (Study 1): The General Permit states that each discharger shall conduct a utility vault and underground structure discharge characterization study in order to collect sufficient data to evaluate the potential for discharges from these structures that may cause or contribute to exceedances of water quality standards
- Discharge Characterization Study for Discharges to Municipal Separate Storm Systems (MS4) Discharging to Areas of Special Biological Significance (ASBSs) (Study 2): The General Permit states that according to the California Ocean Plan, wastes shall not be discharged to an ASBS unless subject to exception. Dischargers dewatering utility vaults or underground structures where the discharge reaches an MS4 shall determine whether the MS4 subsequently discharges to an ASBS, or whether the drainage is located within a watershed that discharged to an ASBS

The MRWP shall include, in general accordance with the General Permit, the requirements set forth for the MRP

According to the General Permit, the Facility shall submit a monitoring plan and time schedule for Study 1 within eight months following the effective date of the General Permit, and by no later than the first rainy season following the final approval of the Study 1 monitoring plan, conduct the Phase I monitoring as detailed in the General Permit.

Under the provisions of the General Permit, the Facility shall not be required to conduct Study 2 as the Facility, the MS4 discharges, and the watershed in which the Facility and MS4 discharges is located do not discharge to an ASBS.

2.1 Sampling Plan

Prior to discharge, the trained Facility utility personnel shall evaluate the utility vault and underground structure in accordance with the Facility's most recent approved Pollution Prevention Plan (PPP). Upon discharge, personnel shall collect an effluent sample in general accordance with the procedures and methods outlined below.

2.1.1 Equipment Cleaning and Maintenance

Before sampling, all equipment that is placed in the utility vault or underground structure or comes in contact with waters to be discharged shall be cleaned thoroughly. Any equipment parts that may absorb contaminants, such as plastic pump valves, bladders, etc., shall be cleaned or replaced, as practical.

All equipment shall be properly maintained by regular maintenance and calibrated, as applicable.



2.1.2 Sample Collection

A grab effluent sample shall be manually collected at the point of discharge (e.g. end of hose) at each designated sample location. Sampling locations are identified in Section 3.0. The water sample shall be collected in either supplied pre-cleaned sample containers or other appropriate clean sample containers and transferred into pre-cleaned laboratory containers prior to analysis. Any sample filtering requirements shall be performed by the laboratory, unless otherwise indicated by the Chain-of-Custody record (COC).

2.1.3 Sample Containers and Preservation

Sample containers and preservatives vary with each type of analytical parameter. Container types and materials are selected to be non-reactive with the particular analytical parameter tested. Sample preservatives used are consistent with regulatory guidelines and specified analytical methods. Sample containers and preservatives required per analytical parameters shall be in general accordance with methods outlined in 40 Code of Federal Register (CFR) Part 136 or as otherwise specified in the General Permit.

2.1.4 Sample Documentation

The following procedures are used during sampling and analysis to provide COC control during sample handling from collection through storage. Sample documentation includes the use of the following:

- Water sample field data sheets to document sampling activities in the field, as applicable
- Labels to identify individual samples
- Chain-of-custody record sheets for documenting possession and transfer of samples

At a minimum, sample field data sheets should include:

- Date
- Time
- Sample identification
- Sampler name
- Location (i.e. physical address or latitude and longitude)
- Equipment used
- Estimated volume of water (or reference to de-watering form)

Labels could include:

- Date (required)
- Time (required)
- Sample identification (required)



- Sampler's initials (optional)
- Analysis (optional)
- Preservative (optional)

At a minimum, the COC should include:

- Date
- Time
- Sample identification(s)
- Sampler name(s)
- Client information
- Analytical request
- Number of bottles
- Type of preservative (if applicable)
- Media type
- Turn-around-time
- Signature and date of relinquisher

2.1.5 Sample Handling

All sample containers are labeled immediately following collection. Samples are kept cool with ice until received by a certified laboratory by the California Department of Public Health. At the time of sampling, each sample is logged on a COC, which accompanies the samples to the laboratory; all samples are transported by the sampler, or other designee as recorded on the COC. Samples will be handled according to testing laboratories standards.

Upon receipt of the samples by laboratory personnel, the COC is signed and released, and a unique sample identification number is assigned to each sample container. The identification number is recorded on the COC and is used to identify the sample in all subsequent internal COC and analytical records during the analytical process. The manager of the subcontracted laboratory ensures that the holding times for requested analyses are not exceeded.

2.1.6 Quality Assurance

Standard sampling procedures shall be in general accordance with the State Water Board's Surface Water Ambient Monitoring Program's quality assurance program plan. Handling procedures including preservation shall be in general accordance with 40 CFR Part 136 or if otherwise specified in the General Permit.



3.0 MONITORING AND REPORTING PROGRAM

3.1 Sample Locations

The Facility shall identify and sample at least five representative utility vaults or underground structures. The representative locations shall be from a variety of structure types and located across the watershed areas, as feasible. Should the Facility discharge from less than five of the selected representative utility vaults or underground structures, the number of samples should equal the number of discharges. The Facility shall sample the same or alternative utility vaults and underground structures in subsequent years in accordance with the General Permit.

3.2 Sample Analyses

The Facility shall collect a grab sample from each selected location once per year. Analytical methods, reported units, bottle size, bottle type, preservative, hold times, and numeric action levels (NALs) generally required are detailed in Table 3-1.

TABLE 3-1: ANALYTICAL METHOD SUMMARY TABLE

Analytical Method ¹	Reported Units	Bottle Size	Bottle Type	Preservative	Hold Times	Numeric Action Level	
						Daily Minimum	Daily Maximum
TPH-DRO EPA 8015	µg/L	40 milliliters	Void of Air Space Glass with Teflon-lined Cap	Hydrochloric Acid	7 days	--	2
TPH-GRO EPA 8015	µg/L	40 milliliters	Void of Air Space Glass with Teflon-lined Cap	Hydrochloric Acid	7 days	--	5
O&G EPA 413.1	mg/L	1 Liter	Amber Glass	Hydrochloric Acid	28 days	--	25
pH EPA 9040 or field test	Standard Units	1 Liter	Polyethylene	None	15 minutes (field test)	6.0	9.0
TSS EPA 160.2	mg/L	1 Liter	Polyethylene	None	7 days	--	400

Notes:

¹ According to 40 CFR Part 136

DRO – Diesel Range Organics

O&G – Oil and Gas

µg/L – micrograms per liter

TPH – Total Petroleum Hydrocarbons

GRO – Gasoline Range Organics

TSS – Total Suspended Solids

mg/L – milligrams per liter



Samples will be delivered to and analyzed by a certified laboratory by the California Department of Public Health. Analytical results shall be provided to the Facility in addition to quality assurance/quality control data associated with analyses of the samples.

3.3 Reporting and Records

The Facility shall report analytical results in the annual report to the Central Valley RWQCB (CVRWQCB). The annual report shall be submitted no later than June 1st of each year under the General Permit. The report shall include:

- Executive Summary – includes discussion of compliance or violation and evaluation of the PPP
- Summary of monitoring data
- Summary of relevant field observations and field sheets including COC
- Map showing location of each monitored and discharged location
- List of all monitored discharge locations including location information, date of discharge and estimated volume discharged (include any assumptions used to calculate volumes)
- Description of sample collection, analysis, and quality control procedures
- Tabulated sampling results including location, date, analytical data for constituent(s), minimum detection levels, detection limits, and comparison of numeric action levels (NALs)
- Any revisions of the PPP

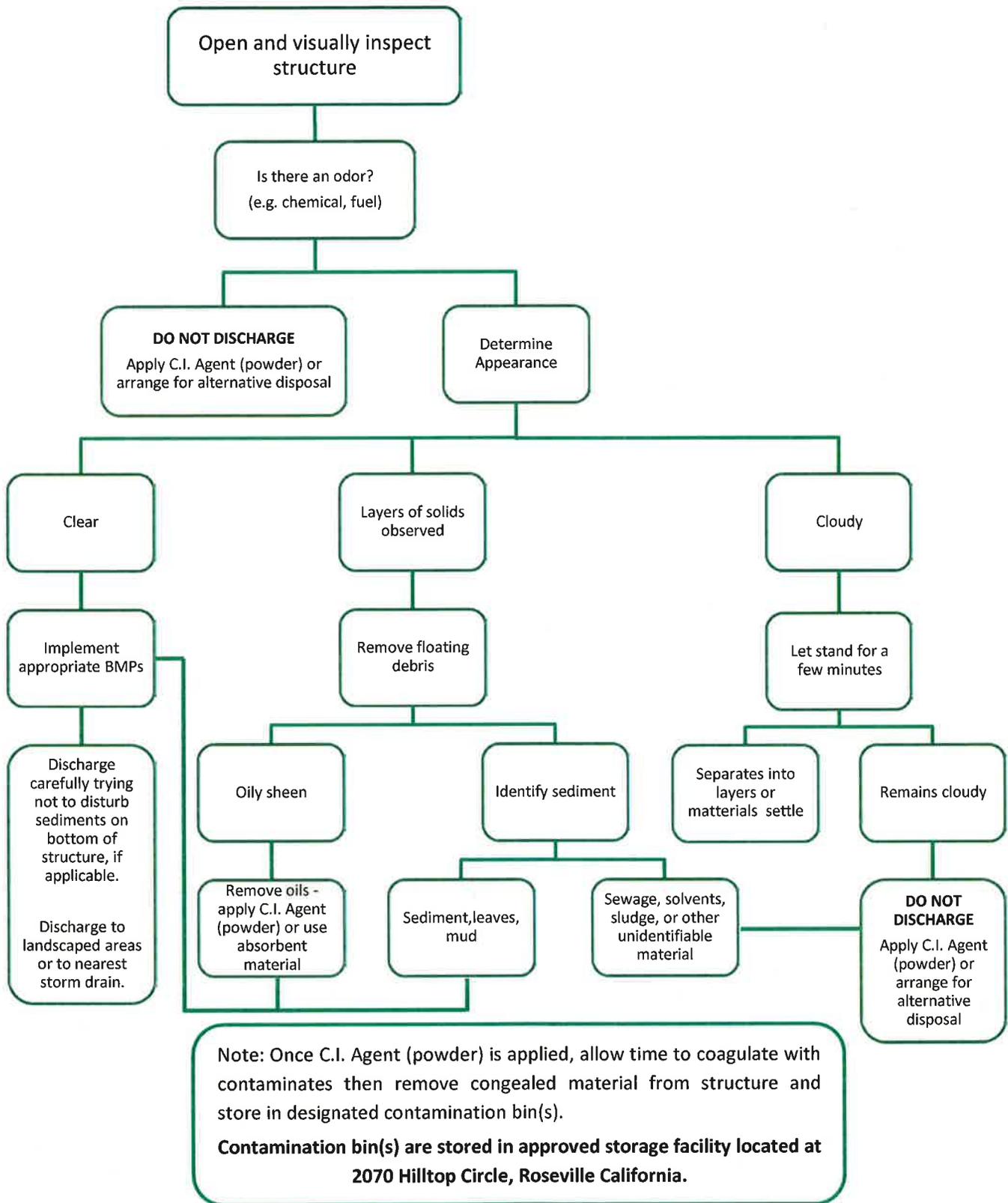
Records associated to the MRP shall be retained at the Facility for at least five years from the date of the sample, measurement, report, or application. The retention period may be altered by the RWQCB at any time. The Facility shall retain records for all monitoring information, including all calibration and maintenance records.

Records of monitoring shall include:

- The date, exact place (i.e. physical address or latitude and 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 (provided in laboratory report)
- The analytical techniques or methods uses (provided on COC and in laboratory report)
- Vault or structure identifier
- Estimated volume discharged (performed by Facility personnel operating pumping or other discharge equipment)

APPENDIX B
FLOW CHART FOR UTILITY VAULT DISCHARGE

Structural Diagram for Utility Vault Discharges



APPENDIX C
UNDERGROUND STRUCTURE INSPECTION FORM AND DISCHARGE LOG

Utility Vault and Underground Structures De-Watering Checklist

Structure Type	Structure Depth	Total Volume	Discharge Volume (gallons) from Estimated Water Depth (inches)					
	Inches	Gallons	5	10	15	20	30	
Pad Vault	42	1287	153	307	460	613	920	
12kV Single Circuit Manhole	83	2483	150	299	449	598	898	
12kV Multiple Circuit Manhole	83	3725	224	449	673	898	1346	
12kV Multiple Circuit Expansion Manhole	108	6059	281	561	842	1122	1683	
Above Ground Junction Box	40	399	50	100	150	199	299	
Existing Below Ground Junction Box	52	519	50	100	150	199	299	
12kV Local Splice Box	60	673	56	112	168	224	337	
12kV Mainline Splice Box	60	972	81	162	243	324	486	

Structure Type	Structure Depth	Total Volume	Discharge Volume (gallons) from Estimated Water Depth (inches)						
	Inches	Gallons	40	50	80	90	100		
Pad Vault	42	1287	1226	N/A	N/A	N/A	N/A		
12kV Single Circuit Manhole	83	2483	1197	1496	2394	N/A	N/A		
12kV Multiple Circuit Manhole	83	3725	1795	2244	3590	N/A	N/A		
12kV Multiple Circuit Expansion Manhole	108	6059	2244	2805	4488	5049	5610		
Above Ground Junction Box	40	399	399	N/A	N/A	N/A	N/A		
Existing Below Ground Junction Box	52	519	399	499	N/A	N/A	N/A		
12kV Local Splice Box	60	673	449	561	N/A	N/A	N/A		
12kV Mainline Splice Box	60	972	648	810	N/A	N/A	N/A		

Note: It is possible to exceed the total volume listed in the chart above as most if not all City of Roseville Electric Department vaults and underground structures are connected via conduits.

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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