City of Rohnert Park
Non-Storm Water Discharge Best Management Practices (BMP) Plan

This City of Rohnert Park Non-Storm Water Discharge Best Management Practices (BMP) Plan is being submitted as required by NPDES MS4 Permit Order No. R1-2009-0050 and sets forth approved protective measures that are required of all applicable discharges in order to minimize or prevent the effects of non-storm water discharges to the City of Rohnert Park's storm drain system.

Categories of Non-Storm Water Discharges:

1. **Stream diversions permitted by the State or Regional Water Board where such flows are intentionally diverted into the storm drain system.**

   Conditions under which allowed:

   - All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
   - Provided that all necessary permits, or authorizations, are received and all permit conditions are in place prior to diverting the flow.

   Best Management Practices (BMPs) to be implemented:

   a) Erosion, sediment, and velocity controls to keep the diverted flows from discharging sediment to the storm drain system.
   b) Storm drain shall be clean prior to diversion to prevent discharge of sediment from the storm drain into local waterways.

2. **Natural springs and rising ground water that are intentionally diverted into the storm drain system.**

   Conditions under which allowed:

   - All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
   - Ground water dewatering (from construction or pumped sources) may require a separate NPDES permit.
   - Permanent diversions that exist prior to the approval of this BMP Plan and are required to protect public infrastructure and public safety shall be exempt, unless they pose a threat to water quality in which case City of Rohnert Park reserves the right to require BMPs to protect water quality.
   - No sources of contamination, as mapped on the State Regional Water Quality Control Board's Geotracker website (http://geotracker.swrcb.ca.gov), within one half mile of the diversion site.

   Best Management Practices (BMPs) to be implemented:

a) Segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if possible, or directly to storm drain system, so as to avoid flowing across paved surfaces or gutters where pollutants are present.
b) Control flow rate of discharge to minimize erosion potential.
c) Sediment, if present, shall be removed from discharge through settling or filtration prior to release.
d) BMPs, such as sand bags, shall be utilized to prevent erosion and sediment transport.
e) All sediment removed from discharge shall be collected and disposed of in a timely, legal and appropriate manner.

3. Overflows or diversions from riparian habitats or wetlands where such flows are intentionally diverted into the storm drain system.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Provided that all necessary permits or authorizations are received prior to diverting the flow.

Best Management Practices (BMPs) to be implemented:

a) Segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if possible, or directly to storm drain system, so as to avoid flowing across paved surfaces or gutters where pollutants are present.
b) Control flow rate of discharge to minimize erosion potential.
c) Sediment, if present, shall be removed from discharge through settling or filtration prior to release.
d) BMPs, such as sand bags, shall be utilized to prevent erosion and sediment transport.
e) All sediment removed from discharge shall be collected and disposed of in a timely, legal and appropriate manner.

4. Uncontaminated ground water[1] infiltration [as defined by 40 CFR 35.2005(20)][2] into structures where flows are diverted into the storm drain system. (Private utility vault dewatering requires a separate NPDES permit).

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Construction dewatering is not covered by this BMP Plan. Separate permit coverage from the North Coast Regional Water Quality Control Board is required.

[1] NPDES permit for ground water dewatering is required within the North Coast Region.

[2] "(20) Infiltration. Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow."

- Applies to low volume dewatering of City of Rohnert Park owned infrastructure only for routine maintenance and/or inspection purposes.
- Evaluate vault water using the attached Appendix A: Vault Dewatering Decision Flow Chart, or equivalent, to determine whether discharge to storm drain is allowed.

Best Management Practices (BMPs) to be implemented:

a) No sources of contamination, as mapped on the State Regional Water Quality Control Board's Geotracker website (http://geotracker.swrcb.ca.gov), within one half mile of the diversion site.
b) Sediment and debris, if present, shall be removed from discharge through settling or filtration prior to release.
c) All sediment and debris removed from discharge shall be collected and disposed of in a timely, legal, and appropriate manner.

5. Flows from emergency fire-fighting activity.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.

Best Management Practices (BMPs) to be implemented:

a) If time and resources allow, plug the storm drain collection system for temporary storage and proper disposal of runoff.
b) If time and resources allow, dam, dike or beam runoff from fires at industrial facilities or where hazardous materials are involved in the firefighting activities. Request Hazardous Materials Response Teams if necessary for mitigation, monitoring, damming, diking, and testing equipment.
c) Report any hazardous materials entering the storm drain system by calling CalEMA at 1-800-852-7550. Proper agencies will be notified.
d) When putting equipment back into service do not drain any foam in an area that may enter the storm drain, direct foam to landscaped areas or graveled or green areas whenever possible and safe to do so without causing damage or erosion.
e) Train fire safety employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
f) Establish a regular training schedule, train all new employees, and conduct annual refresher training.
g) Use a training log or similar method to document training.
h) Sediment and debris, if present, shall be removed from discharge through settling or filtration prior to release whenever possible.
i) All sediment and debris removed from discharge shall be collected and disposed of in a timely, legal, and appropriate manner.

6. Flows from fire-fighting training and equipment repair activities.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.

Best Management Practices (BMPs) to be implemented – Live Fire Training:

a) Live fire training activities will be pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
b) Runoff from live fire training activities will be dechlorinated by containment, aeration, volatilization, or with dechlorination tablets used by trained personnel before discharge to the storm drain system.
c) Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
d) Establish a regular training schedule, train all new employees, and conduct annual refresher training.
e) Use a training log or similar method to document training.
f) Sediment and debris, if present, shall be removed from discharge through settling or filtration prior to release.
g) All sediment and debris removed from discharge shall be collected and disposed of in a timely, legal, and appropriate manner.

Best Management Practices (BMPs) to be implemented - Fire Fighting Training:

a) Whenever possible, practice drills are to be performed in areas where runoff will be contained or directed to sewer.
b) When practice drills must be performed in an area where runoff could potentially leave the site, the site shall be surveyed by the officer-in-charge prior to training activities to ensure that debris will not enter the storm drain system.
c) As determined feasible, runoff from training drills or other non-emergency activities, will be directed to landscaped areas, graveled or green areas whenever possible and safe to do so without causing damage or erosion.
d) Areas that have debris that could potentially enter the storm drain system as a result of the drill activities will not be used for training until the debris has been removed.
e) Runoff from fire training activities will be dechlorinated by containment, aeration, volatilization, or with dechlorination tablets used by trained personnel before discharge to the storm drain system.
f) Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
g) Establish a regular training schedule, train all new employees, and conduct annual refresher training.
h) Use a training log or similar method to document training.

Best Management Practices (BMPs) to be implemented - Vehicle and Equipment:

a) Wash vehicles at a specifically designated wash area that drains to the sanitary sewer or take vehicles to a commercial, city or county wash rack.
b) If a wash rack connected to a sanitary sewer system is not available, runoff from vehicle and equipment washing activities shall be directed onto landscaped, graveled or green areas whenever possible and safe to do so without causing damage or erosion.
c) Perform maintenance or repair work inside. Only emergency repairs and maintenance activities that do not involve fluids may be performed outdoors.
d) Do not store leaking vehicles or equipment outdoors. Contain leak (drip pans), repair immediately or move indoors and repair.
e) Good housekeeping and dry cleanup practices will be utilized as part of standard facility maintenance procedures.

7. Fire hydrant testing, service and repair.

The City shall implement BMPs for applicable discharges from the City's potable water system consistent with the Statewide General NPDES Permit for Drinking Water System Discharges to Waters of the United States (Order WQ 2014-_____-DWQ, NPDES No. CAG_____) adopted by the California State Water Resources Control Board on November 18, 2014.

8. Discharges from potable water sources. [3]

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Applies to water line and water lateral flushing.
- Water main breaks and fire hydrant knockdowns are considered "spills" and require a CalEMA notification due to the high quantity of flow.

Best Management Practices (BMPs) to be implemented:

a) Must be dechlorinated and reoxygenated using aeration and/or other appropriate means including infiltration into the ground.
b) Sediment and solids removed from discharge through settling or filtration.
c) Segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if possible so as to avoid flowing across paved surfaces or gutters where pollutants are present.

[3] The term applies to low volume, infrequent, and/or incidental releases that are innocuous from a water quality perspective. Releases may occur for discharges from potable water sources only with the implementation of appropriate BMPs, dechlorination prior to discharge. Discharges from utility vaults shall be conducted under coverage of a separate NPDES permit specific to that activity.

d) Control flow rate of discharge to minimize erosion potential.
e) BMPs, such as sand bags, shall be utilized to prevent erosion and sediment transport.
f) All sediment removed from discharge shall be collected and disposed of in a timely, legal and appropriate manner.
g) Notification of RWQCB if planned discharge is 325,850 gallons or greater

9. Municipal water tank maintenance

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.

Best Management Practices (BMPs) to be implemented:

a) A plan of action, duties, responsible persons, time lines, materials, equipment and contingency plans must all be made well in advance of the isolation and be discussed with all parties involved.
    i. Make prior arrangements with RWQCB regulatory staff to discuss discharge plan.
b) Dechlorination of flushing discharge water will be done regardless of location. Dechlorination equipment depending on the application can include some of the following items:
    i. LPD-Chlor Tablets
    ii. Vita-D-Chlor™ (Ascorbic Acid - Vitamin C chemistry)
    iii. Hach Pocket Colorimeter to measure residual chlorine concentration.
c) Water that has been superchlorinated shall be dechlorinated prior to being discharged to the storm drain system.
d) Water that has been hyperchlorinated shall not be discharged to the storm drain system, even after dechlorination.
e) For any planned discharges directly into, or within 300 feet of, Inland Surface Waters, Enclosed Bays, and Estuaries, the total chlorine residual concentration in the discharge shall not exceed 0.019 mg/L.
f) Inspect and clear all storm drains, drainage channels for possible blockages.
g) Inspect for possible erosion and sediment issues.
h) Inspect possible sources of contamination in storm drains, drainage channels, i.e., oil cans, hazardous waste, garbage etc.
i) Prior to each discharge, you must evaluate the impacts and minimize them to highest degree possible with a drainage plan to include the following:
    i. Reason for the discharge
    ii. Location of Reservoir site
    iii. Site Map

iv. Water Quality data from SCWA
v. Anticipated discharge
vi. Flow and quantity
vii. Notification of RWQCB if planned discharge is 325,850 gallons or greater

j) Once the drainage path is clear, follow packaging instructions for de-chlorinating reagent dosing rates.
k) Ascorbic Acid, a natural material, (Vitamin c) is relatively safe and preferred over other reagents.
l) Care must be taken when using Sodium Thiosulphate due to its oxygen depleting properties when over applied.
    i. After distributing the reagent through roof hatch and vents,
    ii. monitor chlorine residual levels. A pocket colorimeter may be used to measure residual chlorine concentration in the water.
m) Ponding can be used to aid in detention time, as well as distributing de-chlorinating reagent by hand.
n) Once there is a non-detectable residual, slowly begin to discharge.
o) Inspect effluent flow and adjust accordingly.
p) Occasionally re-sample effluent to ensure the absence of chlorine.
q) If necessary, use hay bales to aid with flow, erosion and sediment issues
r) For groundwater supply well operations, no discharges greater than 100 Nephelometeric Turbidity Units (NTUs) shall occur,nor exceed cooresponding Regional Water Board basin plan water quality objectives for turbidity.
    i. Should any exceedance of 100 NTUs occur, action shall be taken to modify, change or enhance BMPs until turbidity level is 100 NTUs or less

s) For discharges associated with well development and/or rehabilitation activities and individual discharges greater than 325,850 gallons, the following consituents shall be monitored:

Monitoring Requirement[4]s			
Parameter	**Units**	**Sampling**	**Sample Type**
Chlorine, Total Residual	mg/L	1/Event	Grab
Volume	Gallons	1/Event	Estimate
pH	Standard Units	1/Event	Grab
Turbidity	NTU	1/Event	Visual Estimate
Turbidity	NTU	1/Event	Grab

Notes:

- A handheld field meter shall be used , provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions.
- A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained.
- Sampling shall take place downstream of management practices, as feasible.
- Total chlorine residual shall be monitored with a method sensitive to and accurate at a minimum level of 0.1 mg/L. False positives are acceptable if explanation of the cause is included.
- Total Chlorine Residual monitoring is not required of non-chlorinated discharges.
- Volume may be calculated using available meter reading information or visual estimate.
- pH monitoring is required for superchlorinated discharges only

Event Sampling Frequency	
Duration of Discharge	**Sampling Requirement**
Less than 20 minutes	One sample is required during the first 10 minutes of the discharge.
20 minutes to 60 minutes	One sample is required during the first 10 minutes of the discharge, plus a second sample is required within the last 10 minutes of the discharge.
Greater than 60 minutes	One sample is required within the first 10 minutes, a second sample is required within the next 50 minutes, and a third sample is required approximately within the last 10 minutes of the discharge or as close to the end of the discharge as is feasible.

10. Utility vault dewatering.

4Monitoring requirements consistent with Statewide General NPDES Permit for Drinking Water Systems Discharges Order WQ 2014-0194-DWQ, NPDES NO CAG140001; Attachment E Monitoring and Reporting Program II. Monitoring Requirements for Planned Discharges

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Evaluate vault water using the attached Appendix A: Vault Dewatering Decision Flow Chart, or equivalent, to determine whether discharge to storm drain is allowed.
- All private utility vault dewatering requires separate coverage under General NPDES Permit for Discharges From Utility Vaults And Underground Structures to Waters of the United States, Order No. 2014-___-DWQ, General Permit No. CAG990002, adopted on California State Water Resources Control Board on October 21, 2014, or as later updated.
- Municipally owned utility vaults dewatering may be allowed if the following BMPs are implemented:

Best Management Practices (BMPs) to be implemented:

a) Sediment and solids removed from discharge through settling or filtration.
b) Segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if possible so as to avoid flowing across paved surfaces or gutters where pollutants are present.
c) Control flow rate of discharge to minimize erosion potential.
d) BMPs, such as sand bags, shall be utilized to prevent erosion and sediment transport.
e) All sediment removed from discharge shall be collected and disposed of in a timely, legal and appropriate manner.

10. Gravity flow from foundation, footing and crawl space drains.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Discharges that exist prior to the approval of this BMP Plan shall be exempt, unless they pose a measurable threat to water quality in which case the City of Rohnert Park reserves the right to require BMPs to protect water quality.

Best Management Practices (BMPs) to be implemented:

a) Sediment and solids removed from discharge through settling or filtration.
b) If possible, segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if possible so as to avoid flowing across paved surfaces or gutters where pollutants are present.
c) BMPs, such as sand bags, shall be utilized to prevent erosion and sediment transport.
d) All sediment removed from discharge shall be collected and disposed of in a timely, legal and appropriate manner.
e) No sources of contamination, as mapped on the State Regional Water Quality Control Board's Geotracker website (http://geotracker.swrcb.ca.gov), within one half mile of the diversion site.

11. Air conditioning condensate.

Discharge is prohibited.

12. Water from crawl space pumps.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Discharges that exist prior to the approval of this BMP Plan shall be exempt, unless they pose a measurable threat to water quality in which case the City of Rohnert Park reserves the right to require BMPs to protect water quality.

Best Management Practices (BMPs) to be implemented:

a) Sediment and solids removed from discharge through settling or filtration.
b) If possible, segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if possible so as to avoid flowing across paved surfaces or gutters where pollutants are present.
c) BMPs, such as sand bags, shall be utilized to prevent erosion and sediment transport.
d) All sediment removed from discharge shall be collected and disposed of in a timely, legal and appropriate manner.
e) No sources of contamination, as mapped on the State Regional Water Quality Control Board's Geotracker website (http://geotracker.swrcb.ca.gov), within one half mile of the diversion site.

13. Recycled water and potable water landscape irrigation runoff.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.
- Reclaimed water irrigation sites must have appropriate permits from the State or Regional Water Boards, and the locally permitted "Distributer" of recycled water.

Best Management Practices (BMPs) to be implemented:

a) All landscape irrigation, whether potable or recycled, must comply with Rohnert Park Municipal Code Chapter 13.62 – Water Waste Regulations, which prohibits runoff and breaks or leaks in the delivery system.
b) All new landscape installations, whether potable or recycled, must comply with the 2013 California Green Building Standards Code + Tier 1 which has irrigation criteria that is designed to maximize water use efficiency and retention of irrigation water on the landscape site and minimize water waste.
c) All recycled water will be handled as prescribed in the City or City of Santa Rosa's(Recycled Water "Wholesaler") "Recycled Water User's Guide" and all subsequent revisions and clarifications.

d) All recycled water sites must have a permit issued by the locally permitted "Distributer" and must designate a Site Supervisor, which will be trained by the "Distributer" and will act as the liaison with the City to ensure all recycled water requirements are met.
e) All sites are evaluated prior to connection to ensure suitability for recycled water use. Individual valves and/or sprinkler heads may be capped or shut off as appropriate. Customers are encouraged to "brown out" portions of the landscape or convert to low water use plantings.
f) All sites using recycled water are inspected seasonally by City staff to ensure proper operation and to check for issues.
g) If issues are identified during an inspection the system is shut down by the City and the customer is educated and the issue corrected prior to reestablishing service.
h) Notifications to CalEMA and the Regional Board are made if the discharge reached the storm drain system or a waterway and triggered the quantity trigger.

14. Dechlorinated/ debrominated swimming pool discharges.

Discharge is prohibited.

15. Non-commercial car washing by residents of private vehicles.

Conditions under which allowed:

- All feasible alternatives to discharge of non storm water flow have been considered, including discharging to sewer, and are not possible.

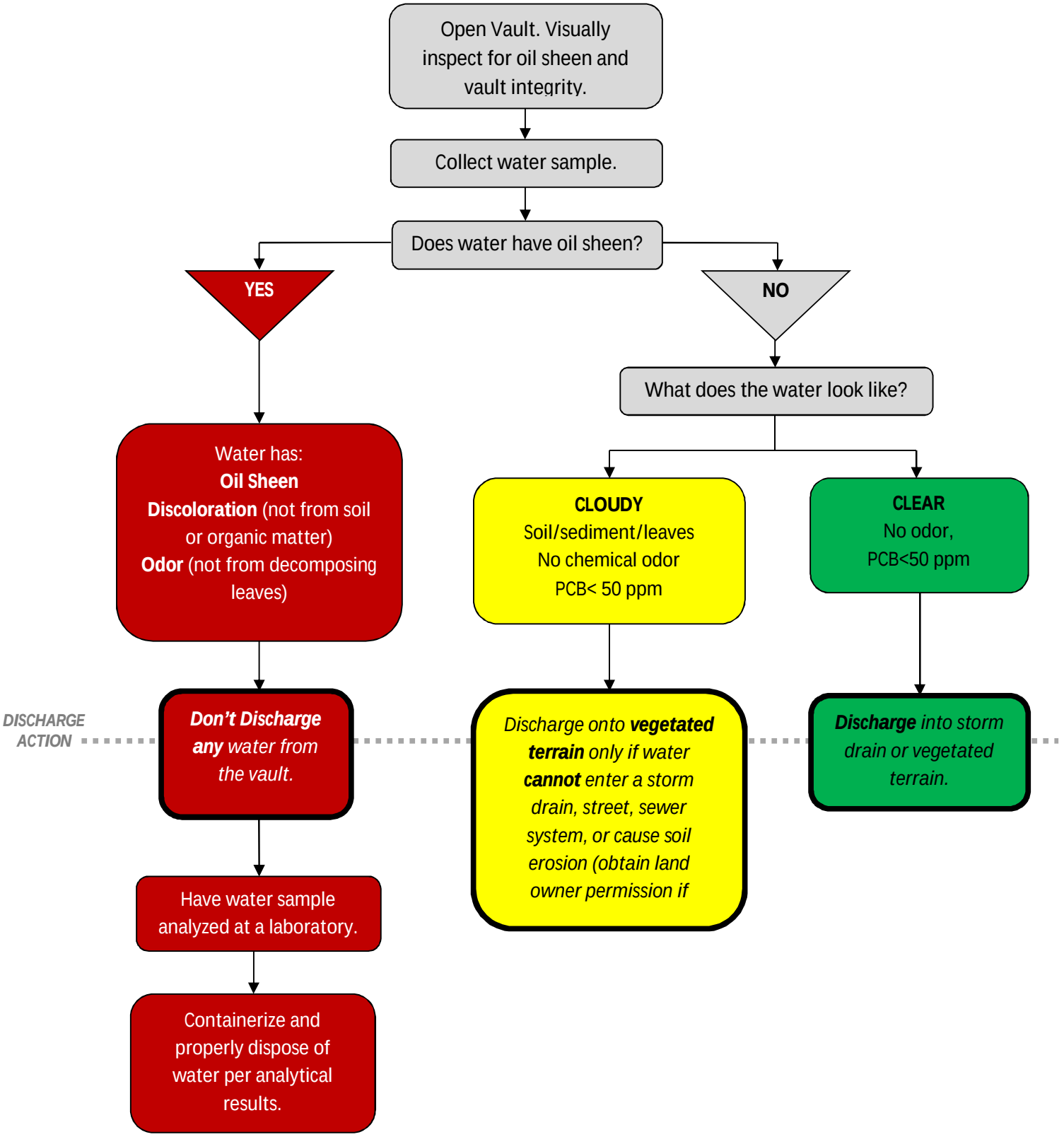
Best Management Practices (BMPs) to be implemented:

a) Preferred area is at commercial carwash or in an area where wash water infiltrates, such as vegetated areas.
b) Pumps, vacuums or physical routing BMPs may be used to direct water to the sewer, landscape, or to areas for infiltration or re-use.
i) Practices that minimize runoff, such as using a bucket and sponge, should be implemented.

16. Pooled storm water from treatment BMPs that are intentionally discharged to the storm drain system as part of maintenance activities.

Discharge is prohibited.

Appendix A: Vault Dewatering Decision Process Flow Chart



Based on the "Utility Vault Pollution Prevention Plan" prepared by Pacific Gas and Electric Company (30 October 2008), approved by the North Coast Regional Water Quality Control Board.