

A8



WATER QUALITY MONITORING PROGRAM

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APPENDICES

A1 Standard Operating Procedure – “SSO Sampling and Monitoring”

REFERENCES

- R1 Monitoring and Reporting Program Order NO. WQ 2013-0058-EXEC
- R2 Chapter 3 Water Quality Objectives (Basin Plan)
- R3 Water Quality Objectives for Bacteria Non-Contact Water Quality Objective
- R4 U.S. EPA Bacterological Criteria for Water Contact Recreation **Introductuion**

This section of the Water Quality Monitoring Program provides the District’s response activities and standard operating procedures utilized in the OERP. This program is reviewed on an annual basis and amended as necessary.

State Regulatory Requirements for the “Water Quality Monitoring Program”

To comply with sub-section *D.7(v) of the SSS WDR’s, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSO’s to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality shall at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface waters and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.)
3. Require water quality monitoring analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia,
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus and e-coli.

***D.7 (v) “adequate sampling to determine the nature and impact of the release...”**

The above requirements are written as part of the Districts Standard Operating Procedures on Sampling and Monitoring which is located at Appendix A1 of this document.

Additionally, for spills greater than 50,000 gallons a SSO Technical Report is required and must be submitted within 45 calendar days of the SSO end date. The district shall provide all of the information requested in the Monitoring and Reporting Program (MRP) located at Section C- Reporting Requirements, Sub-section 5 SSO Technical Report items i- Causes and Circumstances of the SSO, ii-Enrollees response to the SSO and iii-Water Quality Monitoring.

A copy of the MRP is located at Appendix R1 of the Water Quality Monitoring Program. The Technical Report can be produced via a Crystal Report in the Lucity Database

Spill Travel Time:

Method-1; using a velocity probe (FH950, Meter Velocity Sensor) to determine the rate of flow in the surface water or

Method-2; a visual ft/sec measurement from above (floating debris) to estimate the number feet debris may travel seconds.

Either method will allow you to estimate the distance traveled and where the SSO may be headed and located within minor tributary (which may flow to a larger body of water) or the possible location within an underground storm drainage system which may allow for SSO recovery when compared to the storm drainage system and stream maps.

Safety

Scenarios where monitoring may not be possible may include (but not limited to), heavy rain/storm events where access points have been compromised, flooding around low level areas, raging water. The Buddy System may be used to ensure employee safety when sample collection is required.

Monitoring Equipment and Device Calibration

Quantity	Equipment	Calibration Frequency
1	Velocity Probe-FH950	Self-Calibrating (Adjustable)
1	YSI 30 Salinity/Conductivity/Temperature meter	Annually
5	Sigma 910 Flow Meter	Each Use
1	Sigma 930 Flow Meter	Each Use
4	Sigma 950 Ultra Sonic Flow Meters (4)	Annually
9	Marsh McBirney Flo-Meters	Each Use
13	Industrial Scientific Multi-Gas Meters	Monthly

The monitoring equipment listed above is maintained on a regular basis. These devices may be used and or deployed for monitoring purposes. All equipment is maintained per the

manufactures specifications and records of all maintenance data will be stored electronically or by written record.