Water Utility O&M Activities

Planned Potable Water Discharge to Storm Drain



San Francisco Bay Municipal Regional Stormwater NPDES Permit (MRP) Provision C.15.b.iii. (1)



General Best Management Practices (BMPs)

- 1. Pre-activity: If planned discharge is > 250,000 gpd or > 500,000 gallons total notify Regional Water Board Staff one week in advance.
- 2. Evaluate release volume and character. Compare with release point and conveyance to determine appropriate BMP use.
- 3. Clear/cleanup the flow path.

Regional Water Board Notification Sue Ma (510) 622-2386

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Include: project name, type of discharge, receiving waterbody(ies), date of discharge, time of discharge, estimated volume (gallons), estimated flow rate (gpd), and monitoring plan.



Filter bag w/dechlor tablets in gutter (Palo Alto WUDPPP)

- 4. Place erosion and sediment control devices in flow path if needed. Erosion and sediment control:
 - Slows the flow of water, preventing erosion and/or allowing some portion of the sediment to settle out and/or:
 - Protects bare earth surfaces to preclude the detachment of soil particles from the flow of water;
 - Bypasses sediment using piping to move flow around potential pollutants;
 - Prevents the flow of water from reaching or picking up sediment by using berms or dikes.

Example erosion and sediment controls: filter bag over sump pump hose discharge, storm drain inlet protection, flow path check filters, vegetation filtration, flow diversion (surface protection), armoring (surface protection), diffuser.



Diffuser (Palo Alto WUDPPP August 2011)

- 5. Dechlorinate potable water. Example types of dechlorination equipment available:
 - Dechlor mat (3' x 4') used with tablets
 - Dechlor strip (6" x 36") used with tablets
 - Diffuser used with tablets
 - Drip system used with liquid

- **6.** Monitor release after BMPs and before discharge to storm drain for chlorine residual, turbidity* and pH. (*Turbidity can also be monitored in the receiving water.)
- 7. Compare monitoring results to the benchmark values. If discharge continues, adjust the BMPs if results are above benchmark values and collect another sample.
- 8. Record results (see Field Form).
- 9. Close operation.
 - Inspect the flow path for erosion damage or sediment deposition
 - Cleanup and dispose of control materials appropriately



dechlor mat from Pollardwater.com

Benchmarks

Chlorine residual: <0.05 mg/L Turbidity*: <50 NTU

pH: >6.5 or <8.5

Benchmarks

*If turbidity is monitored in the receiving water (RW), limit the increase above background levels as follows:

RW Background Incremental Increase

Dry Creek 50 NTU 5 NTU 50-100 NTU 10 NTU

>100 NTU 10% of background

Resources:

Guidelines for the Development of Your Best Management Practices (BMP) Manual for Drinking Water System Releases, CA-NV American Water Works Association, 2005. http://ca-nv-awwa.org/iMISpublic/AM/Template.cfm?Section=Resource_Center34&Template=/CM/ContentDisplay.cfm &ContentID=7742

SCVURPPP Water Utility Operation and Maintenance Discharge Model Pollution Prevention Plan approved January 20, 2011. http://www.scvurppp-w2k.com/pdfs/1011/WUDPPP 01 20 11.pdf

City of Palo Alto Water Utility Operation and Maintenance Discharge Model Pollution Prevention Plan (EOA August 22, 2011)

Municipal Regional Permit. State Water Resources Control Board. October 14, 2009. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/mrp.shtml