



Engineering Department

714 Johnson Street

Sebastopol, CA 95472

Phone (707) 823-2151

Fax (707) 823-4721

Website: www.ci.sebastopol.ca.us

E-mail: skelly@cityofsebastopol.org

Susan Kelly, Engineering Director

Assistant to the City Manager

CITY OF SEBASTOPOL

NPDES MS4

Permit Order No. R1-2009-0050

DRAFT Non-Storm

Water Discharge

BMP Plan

AMENDED DRAFT: July 13, 2015

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Introduction

This City of Sebastopol (City) 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 applicable allowable discharges in order to prevent or minimize the effects of non-storm water discharges to the City's storm drain system. The categories of Non-Storm Water Discharges, which are allowable when best management practices are observed, are as follows:

Allowable Non-Storm Water Discharges BMPs

1. Stream Diversions

This includes stream diversions permitted by the State or North Coast Regional Water Quality Control Board (Regional Board) where such flows are intentionally diverted into the storm drain system. This would likely apply to in-stream maintenance or construction projects.

Conditions under which allowed:

- a. All necessary permits, or authorizations, are received and all permit conditions are in place prior to diverting the flow.
- b. All work is completed in coordination with the Sonoma County Water Agency, California Department Fish and Wildlife, the Regional Board, and the U.S. Army Corps of Engineers, or other applicable agencies, as necessary for the specific project.

Best Management Practices (BMPs) to be implemented:

- a. Control the erosion, sediment, and velocity to keep the diverted flows from discharging sediment to the storm drain system.
- b. Clean storm drain prior to diversion to prevent discharge of sediment from the storm drain into local waterways.
- c. Follow the Resource Agency permit requirements for protection of aquatic life.

2. Natural Springs and Rising Groundwater

This includes natural springs and rising ground water that are intentionally diverted into the storm drain system.

Conditions under which allowed:

- a. Ground water dewatering (from construction or pumped sources) may require a separate NPDES permit. The City will consult with NPDES personnel at the Regional Board for discharge requirements on a case by case basis.
- b. Permanent diversions that existed prior to the approval of this BMP Plan and are required to protect public infrastructure and public safety shall be exempt.
- c. The diversion does not cause or contribute to exceedances of receiving water quality objectives.

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 the storm drain system, so as to avoid flowing across paved surfaces or gutters where pollutants may be present.
- b. Control the flow rate of the discharge to minimize erosion.
- c. Remove the sediment, if present, from discharge through settling or filtration prior to release.
- d. Utilize BMPs, such as placement of sand bags, to prevent erosion and sediment transport.
- e. Collect and dispose of all sediment removed from discharge and dispose of in a timely, legal and appropriate manner.

3. Uncontaminated Groundwater Infiltration from Routine City Infrastructure Maintenance

This includes low volume dewatering of uncontaminated ground water that has infiltrated [as defined by 40 CFR 35.2005(20)] City utility structures and is diverted into the storm drain system. This also includes municipal vault dewatering. All private utility vault dewatering requires separate coverage under Order No. 2006-0008-DWQ, or as updated.

Conditions under which allowed:

- a. All feasible alternatives to discharge of non-storm water flow have been considered, including discharging to sewer, and are not possible.
- b. Applies to low volume dewatering of City-owned infrastructure only for routine maintenance and/or inspection purposes.
- c. There are no known sources of contamination in the infiltrated ground water.

Best Management Practices (BMPs) to be implemented:

- a. Evaluate water for odor, oil sheen or other indication of contamination to determine whether discharge to Storm drain is allowed.
- 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. Remove sediment and debris, if present, from discharge through settling or filtration prior to release.
- d. Collect and dispose of all sediment and debris removed from discharge in a timely, legal, and appropriate manner.
- e. Control flow rate of discharge to minimize erosion potential.

4. **Overflows/Diversions from Riparian Habitats or Wetlands**

This includes overflows or diversions from riparian habitats or wetlands where such flows are intentionally diverted into the storm drain system.

Conditions under which allowed:

- a. All necessary permits, or authorizations, are received and all permit conditions are in place prior to diverting the flow.
- b. All work is completed in coordination with the Sonoma County Water Agency, California Department Fish and Wildlife, the Regional Board, and the U.S. Army Corps of Engineers or other agencies, as required for the specific project.

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 the flow rate of the discharge to minimize erosion potential.
- c. Remove all sediment, if present, from discharge through settling or filtration prior to release.
- d. Utilize BMPs, such as placement of sand bags, to prevent erosion and sediment transport.
- e. Collect and dispose of all sediment in a timely, legal and appropriate manner.

5. **Emergency Firefighting Flow**

Conditions under which allowed:

- a. All feasible alternatives to discharge of non-storm water flow have been considered, including discharging to sewer, and are not possible. **Note that during a firefighting emergency, the safety of the public and the firefighting personnel are the priority.**

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 California Office of Emergency Services (Cal OES) 800-852-7550.
- 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

6. Firefighting Training Flows

This includes flows from firefighting routine training activities, including live-fire training, and equipment repair activities.

Conditions under which allowed:

- a. 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. 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.

Best Management Practices (BMPs) for Fire Vehicle and Equipment Wash and Repair:

- 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

Conditions under which allowed:

- a. 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. Dechlorinate water using aeration and/or other appropriate means including infiltration into the ground. Chlorine residual in discharge shall not exceed 0.019 mg/L.
- b. Utilize BMPs to increase the removal of chlorine by volatilization before discharge to a storm drain.
- 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.
- d. Control flow rate of discharge to minimize erosion potential.
- e. Utilize hoses and sand bags to prevent erosion and sediment transport.

8. Discharge from Potable Water Distribution Systems

This applies to system maintenance activities such as water line and water lateral flushing.

Conditions under which allowed:

- a. All feasible alternatives to discharge have been considered, including discharging to landscape and to sewer, and are not possible or feasible.
- b. Water main breaks and fire hydrant knockdowns are considered “spills” and require a California Office of Emergency Services (Cal OES) notification due to the high quantity of flow.

Best Management Practices (BMPs) to be implemented:

- a. Dechlorinate, pH adjust to between 6.5 and 8.5 and reoxygenate using aeration and/or other appropriate means including infiltration into the ground.
- b. Remove sediment and solids from discharge through settling or filtration.
- c. Segregate flow to prevent introduction of pollutants. Discharge flow to landscape areas if possible so as to avoid flowing across paved surfaces or gutters where pollutants are present.
- d. Control flow rate of discharge to minimize erosion potential.
- e. Utilize BMPs, such as placement of sand bags, to prevent erosion and sediment transport.
- f. Collect and dispose of all sediment removed from discharge in a timely, legal and appropriate manner.

9. Municipal Water Tank Maintenance

Conditions under which allowed:

- a. 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. Minimize the quantity of water in tank prior to maintenance activity.
- b. Dechlorinate the water remaining in the tank at the onset of the maintenance activity.
- c. After the dechlorination is complete, discharge the water slowly to land. Implement measures to eliminate or minimize erosion.
- d. Vacuum out the final residual silt remaining in the bottom of the water tank into a haul truck and properly dispose of in a timely, legal and appropriate manner.

10. Discharges from Drinking Water Supply Wells

This activity applies to activities such as well flushing or pumping-to-waste; well development, rehabilitation, and testing; and groundwater monitoring for purpose of supply well development, rehabilitation and testing. The conditions and BMPs shall also apply to

- Discharges of super-chlorinated water,
- Discharges of water in excess of 325, 850 gallons from a single discharge, and
- Any drinking water system discharge which is within 300 feet of surface water.

Conditions under which allowed:

- a. All feasible alternatives to discharge of non-storm water flow have been considered, including discharging to land on-site or sewer, and are not possible.
- b. The diversion does not cause or contribute to exceedances of receiving water quality objectives.
- c. For single discharges in excess of 325, 850 gallons, when there has been prior notification to the Regional Water Board.
- d. For single discharges greater than 325,850 gallons and/or any discharge of super-chlorinated water, only when monitoring is implemented consistent with the provisions of the Statewide General NPDES Permit for Drinking Water System Discharges, Order WQ 2014-0194-DWQ, Attachment E - Monitoring and Reporting Program (attached hereto and incorporated herein as Exhibit A).

Best Management Practices (BMPs) to be implemented:

- a. Prevent aquatic toxicity by dechlorinating such that the level of chlorine in the discharge is less than 0.019 mg/L prior to entering a receiving water.

- b. Prevent riparian erosion by implementing flow dissipation, erosion control and hydromodification prevention measures.
- c. Minimize sediment discharge turbidity and color impacts by implementing control measures.
- d. Do not exceed receiving water limitation for turbidity and take action when the turbidity level is greater than 100 Nephelometric Turbidity Units NTU until it is less.
- e. Monitor the temperature, pH, and chemical constituents of concern, and stay inside the range of receiving water objectives in the Basin Plan
- f. Responsible personnel are properly trained to implements required BMPs.

11. Gravity Flow from Foundation, Footing and Crawl Space Drains

Conditions under which allowed:

- a. All feasible alternatives to discharge of have been considered, including discharging to sewer, and are not possible.
- b. 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 reserves the right to require BMPs to protect water quality.
- c. **When there is no known contamination of water to be discharged.**

Best Management Practices (BMPs) to be implemented:

- a. Remove sediment and solids 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. Utilize BMPs, such as sand bags, to prevent erosion and sediment transport.
- d. Collect and dispose of all sediment removed from discharge in a timely, legal and appropriate manner.

12. Residential Air Conditioning Condensate

This is for discharges from residential or other small air conditioning units with incidental quantities of condensate. Large air conditioning units, such as used in commercial or industrial settings, are required to divert condensate to the sewer system. Discharge to the storm drain system from these large systems is prohibited.

Conditions under which allowed:

- a. All feasible alternatives to discharge of have been considered, including discharging to sewer, and are not possible.

Best Management Practices (BMPs) to be implemented:

- a. 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.

13. Water from Crawl Space Pumps

Conditions under which allowed:

- a. 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 reserves the right to require BMPs to protect water quality.
- b. All feasible alternatives to discharge have been considered, including discharging to landscape or sewer, and are not possible.
- c. **When there is no known contamination of water to be discharged.**

Best Management Practices (BMPs) to be implemented:

- a. 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.
- b. Remove sediment and solids from discharge through settling or filtration.
- c. Utilize BMPs, such as sand bags, to prevent erosion and sediment transport.
- d. Collect and dispose of all sediment removed from discharge in a timely, legal and appropriate manner.
- e. There are no known sources of contamination near the extraction site.

14. Incidental Runoff of Potable Water from Urban Landscape Irrigation

Conditions under which allowed:

- a. **Incidental irrigation runoff is in minimal quantities.**

Best Management Practices (BMPs) to be implemented:

- a. **All landscape irrigation must comply with the City's Water Waste Ordinance, which prohibits runoff and breaks or leaks in the delivery system**
- b. **All new landscape installations must comply with the City's Water Efficient Landscape Ordinance which has landscape planting and irrigation criteria designed to maximize water use efficiency and retention of irrigation water on the landscape site.**

15. Incidental Runoff of Recycled Water from Urban Landscape Irrigation

The City of Sebastopol does not provide recycled water to urban customers.

16. Recycled irrigation runoff in the rural setting.

The City of Sebastopol does not provide recycled water to urban customers.

17. Dechlorinated / Debrominated Swimming Pool Water

This is for discharge of swimming pool water, only when water has been dechlorinated or debrominated and it is within normal pH range. Discharge of chlorinated or brominated swimming pool water is prohibited.

Conditions under which allowed:

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

Best Management Practices (BMPs) to be implemented:

- a. Water is pH adjusted to between 6.5 and 8.5, and dechlorinate using aeration and/or other appropriate means including infiltration into the ground so that the chlorine residual in discharge does not exceed 0.019mg/L.
- b. Utilize BMPs to increase the distance and removal of chlorine by volatilization before discharge to a storm drain.
- 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.
- d. Control flow rate of discharge to minimize erosion potential.
- e. Utilize hoses and sand bags to prevent erosion and sediment transport.

18. Non-Commercial Car Washing

This includes non-commercial car washing of private vehicles by residents or non-profit organizations.

Conditions under which allowed:

- a. 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. Encourage car washing at commercial carwashes or in an area where wash water infiltrates, such as vegetated areas.
- b. Use pumps, vacuums or physical routing BMPs to direct water to the sewer, landscape, or to areas for infiltration or re-use.

- c. Implement practices to minimize runoff, such as using a bucket and sponge. Use a hose nozzle with automatic shut-off valve.

19. Maintenance Activities from BMPs

This includes pooled storm water from treatment BMPs that are intentionally discharged to the storm drain system as part of maintenance activities.

Conditions under which allowed:

- a. All feasible alternatives to discharge of non-storm water flow have been considered, including discharging to sewer, and are not possible.
- b. The discharge is not a source of pollutants.

Best Management Practices (BMPs) to be implemented:

- a. Maintain all storm water BMPs at a frequency as specified by the manufacturer.
- b. Collect and dispose of all sediment removed from discharge in a timely, legal and appropriate manner.

20. Surface Cleaning of Sidewalks and Other Impermeable Surfaces

Conditions under which allowed:

- a. All feasible alternatives to discharge of non-storm water flow have been considered, including discharging to landscape or sewer, and are not possible.
- b. No soap or cleaning agent is used.
- c. Only small amounts of oil are present on the area being cleaned.
- d. Only cold water is used.

Best Management Practices (BMPs) to be implemented:

- a. Sweep, collect and dispose of debris.
- b. Clean all oil spots, if present, with water free methods prior to power-washing.
- c. Dispose of all absorbent material, if used, in the trash.
- d. Place oil-absorbent boom around storm drain inlet during power-washing if oil spots are present.
- e. Protect the storm drain inlet with filter material to remove pollutants, if pollutants are known or observed to be present.

21. Surface Cleaning of Building Exteriors, Rooftops and Walls

This includes wash water that is from cleaning building exteriors, rooftops and walls of buildings.

Conditions under which allowed:

- a. All feasible alternatives to discharge of non-storm water flow have been considered, including discharging to landscape or sewer, and are not possible.
- b. No soap or cleaning agent is used.
- c. The building is known to be painted with lead-free paint.

Best Management Practices (BMPs) to be implemented:

- a. Sweep, collect and dispose of debris that could be washed into the storm drain system.
- b. Protect the storm drain inlet with filter material to remove pollutants and paint chips.

STATEMENT OF CONSISTENCY WITH BASIN PLAN AMENDMENT

This Sebastopol Non-Storm Water Discharge Best Management Practice (BMP) Plan is intended to be consistent with the Basin Plan Amendment. Any revisions to the Basin Plan Amendment prior to adoption will result in the subsequent revision of this BMP Plan. Any Non-Storm Water Discharge not specifically listed in this Non-Storm Water BMP Plan will be governed by the Basin Plan and the Basin Plan Amendment.

Susan Kelly
Engineering Director
City of Sebastopol

July 16, 2015

Date

CITY OF SEBASTOPOL
NPDES MS4 Permit Order No. R1-2009-0050
DRAFT Non-Storm Water Discharge BMP Plan

EXHIBIT A
ORDER WQ 2014-0194-DWQ
ATTACHMENT E
MONITORING AND REPORTING PROGRAM