

CITY OF COTATI

NPDES MS4

Permit Order No. R1-2009-0050

Non-Storm Water

Discharge BMP

Plan

October 15, 2015

Table of Contents

Table of Contents	
Introduction	1
Allowable Non-Storm Water Discharges BMPs	1
1. Stream Diversion	1
2. Natural Springs and Rising Groundwater	1
3. Uncontaminated Groundwater Infiltration from Routine City Infrastructure Maintenance	2
4. Overflows/Diversions from Riparian Habitats or Wetlands	3
5. Emergency Firefighting Flow	3
6. Firefighting Training Flows	4
7. Fire Hydrant Testing, Service and Repair	5
8. Discharge from Potable Water Distribution Systems	5
9. Municipal Water Tank Maintenance	6
10. Discharges from Drinking Water Supply Wells	6
11. Gravity Flow from Foundation, Footing and Crawl Space Drains	7
12. Residential Air Conditioning Condensate	7
13. Water from Crawl Space Pumps	8
14. Incidental Runoff of Potable Water from Urban Landscape Irrigation	8
15. Incidental Runoff of Recycled Water from Urban Landscape Irrigation	9
16. Recycled Irrigation Runoff in the Rural Setting	9
17. Dechlorinated / Debrominated Swimming Pool Water	9
18. Non-Commercial Car Washing	9
19. Maintenance Activities from Stormwater BMPs	10
20. Surface Cleaning of Sidewalks and Other Impermeable Surfaces	10
21. Surface Cleaning of Building Exteriors, Rooftops and Walls	10
Statement of Consistency with Basin Plan Amendment / Signature Page	11
EXHIBIT 'A' - ORDER 2014-0194-DWQ, Attachment E Monitoring and Reporting Program	12

Introduction

This City of Cotati (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 (collectively referred to as Resource Agencies).

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 practical, 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, and excavation 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 practical.
- b. Applies to low volume dewatering of City-owned infrastructure only for routine maintenance, repairs 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 practical 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 practical, 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 practical. **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 practical 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 practical.

Best Management Practices (BMPs) to be implemented:

- a. Whenever practical, 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 of 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 practical 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 practical 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 practical.

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 practical 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 practical 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 practical 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 practical.

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 practical.
- 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 and Footing Drains

Conditions under which allowed:

- a. All feasible alternatives to discharge of have been considered, including discharging to sewer, and are not practical.
- 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 practical, segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if practical 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 practical.

Best Management Practices (BMPs) to be implemented:

- a. If practical, segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if practical 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 practical.
- c. When there is no known contamination of water to be discharged.

Best Management Practices (BMPs) to be implemented:

- a. If practical, segregate flow to prevent introduction of pollutants. Flow should be discharged to landscape areas if practical 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 does not provide recycled water to urban customers.

16. Recycled irrigation runoff in the rural setting.

The City does not provide recycled water to urban customers.

17. Dechlorinated / Debrominated Swimming Pool or Spa Water

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

Best Management Practices (BMPs) to be implemented:

- a. Water is pH adjusted to between 6.5 and 8.5, and dechlorinated 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 practical 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 temporary car washes for fundraisers.

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 practical.

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 remaining 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 practical.
- 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 practical.
- 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 practical.
- 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 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.



Craig Scott
City Engineer
City of Cotati

October 15, 2015

Date

CITY OF COTATI
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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Table of Contents

I. General Monitoring Provisions.....	E-2
II. Monitoring Requirements for Planned Discharges	E-3
III. Receiving Water Monitoring Requirements during non-compliance with this Order	E-5
IV. Post-Notification of Emergency or Non-Compliant Discharges that Adversely Effect or Impact Beneficial Uses.....	E-6
V. Pre-Notification of Large Planned Discharges Greater than One Acre-foot (325,850 gallons)	E-6
VI. Reporting and Recordkeeping Requirements	E-7

List of Tables

Table 1. Key Definitions for the Purpose of this Order.....	1
Table 2. Administrative Information.....	2

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Discharges from drinking water systems, as authorized by this Order, shall be properly managed to not adversely affect or impact beneficial uses of a receiving water body. The purpose of the monitoring and reporting requirements contained in the following Monitoring and Reporting Program is to provide information demonstrating that management practices are properly implemented to protect surface water quality. The objective of the monitoring is to validate that the management practices are performing properly to maintain compliance with this Order and protect receiving waters from adverse impacts to beneficial uses.

Title 40 Code of Federal Regulations part 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the State Water Resources Control Board (State Water Board) and a Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements, which implement the federal and State of California regulations.

Dischargers authorized under this Order shall comply with all Standard Provisions in Attachment D related to monitoring, reporting and recordkeeping.

I. GENERAL MONITORING PROVISIONS

- A.** Samples and measurements taken as required herein shall be representative of the nature of the monitored discharge after implementation of best management practices (BMPs). All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the discharge flow joins or is diluted by any other waste stream or body of water.
- B.** Chemical analyses that require laboratory testing are not required in this Order (with the exception of application requirements for discharge into a water body with already established TMDL requirements identified in Section K of the Fact Sheet and/or TMDL-related requirements prescribed to the water purveyors listed in Attachment G). The Discharger shall conduct onsite field measurements for pH, turbidity, and total chlorine residual per quality assurance and quality control (QA/QC) protocol that conform to U.S. EPA guidelines, or procedures approved by the American Water Works Association or other professional drinking water industry association.
- C.** The Discharger shall maintain sufficient resources, including trained personnel and properly calibrated and maintained field instruments to adequately perform all field measurements required in this Order. Onsite field measurements shall be performed using handheld devices by trained personnel acting on the Discharger's behalf. A manual containing the proper operating procedures for all onsite field monitoring equipment, shall be maintained onsite or at the water purveyor's office, and shall be available for inspection by State or Regional Water Board staff.

- D. Appropriate field meter devices shall be selected consistent with accepted scientific practices and used to ensure the accuracy and reliability of measurements of monitored discharges. All devices shall be properly maintained and calibrated per manufacturer instructions and as necessary to ensure their continued accuracy.

II. MONITORING REQUIREMENTS FOR PLANNED DISCHARGES

A. Event Monitoring Requirements for Superchlorinated, Well development and/or rehabilitation, and Large Volume Discharges.

The Discharger shall monitor all superchlorinated discharges, all discharges from well development and/or rehabilitation activities, and individual discharges greater than 325,850 gallons (one acre-foot) for the constituents specified in Table E-1 and per the frequency specified in Table E-2.

Table E-1. Event Monitoring of Superchlorinated Discharges, Well Development and/or Rehabilitation, and Individual Discharge Events Greater than 325,850 Gallons

Parameter	Units	Sampling ²	Sample Type
Chlorine, Total Residual ^{1,3,4}	mg/L	1/Event	Grab ¹
Volume	Gallons	1/Event	Estimate ⁵
pH ⁶	Standard Units	1/Event	Grab
Turbidity	NTU	1/Event	Visual Estimate
Turbidity for Well Development and/or Rehabilitation Only ¹	NTU	1/Event	Grab ¹

¹ 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. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.

² Sampling shall take place downstream of management practices, as feasible.

³ 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.

⁴ Total Chlorine Residual monitoring is not required of non-chlorinated discharges.

⁵ Calculated estimate using available meter reading information or visual estimate.

⁶ pH monitoring is required for superchlorinated discharges only.

Table E-2. Event Frequency Requirements for Superchlorinated Discharges, Well Development and/or Rehabilitation Discharges to a Water of the U.S., and Discharges Greater than 325,850 Gallons

Duration of Discharge	Sampling Requirements
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.

B. Annual Representative Monitoring Requirements

This Order allows discharges of similar nature to be monitored on a representative basis. Representative monitoring is the use of monitoring results of one water quality monitoring sample to represent other discharges expected to have the same water quality. A representative monitoring measurement must represent discharges of similar nature, meaning discharges that have all the following items in common:

- (a) The same general water source (ground water or surface water of similar water quality), and
- (b) The same water treatment, and
- (c) The same type of implemented BMPs.

The Discharger shall monitor all planned discharges not listed in Section II.A above, using representative monitoring, as previously defined in this section, for the constituents specified in Table E-3 and per the frequency specified in Table E-4.

Table E-3. Annual Representative Monitoring Requirements

Parameter	Units	Sampling ²	Sample Type ¹
Chlorine, Total Residual ^{3,4}	mg/L	1/Year	Grab ¹
Volume	Gallons	1/Year	Estimate ⁵
Turbidity	NTU	1/Year	Visual Estimate

¹ 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. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.

² Sampling shall take place downstream of management practices, as feasible.

³ 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.

⁴ Total Chlorine Residual monitoring is not required of non-chlorinated discharges.

⁵ Calculated estimate using available meter reading information or visual estimate.

Table E-4. Annual Representative Monitoring Frequency Requirements

Duration of Discharge	Sampling Requirements
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.

In its annual report, the Discharger shall:

- (a) Submit a copy of its site schematic submitted in its application for enrollment with labeled representative monitoring locations, and

- (b) Identify the portions of its system that the representative monitoring results represent, and
- (c) Identify all changes in its representative monitoring locations that have occurred during the monitoring-year.

C. Annual Discharge Volume Monitoring Requirements

The Discharger shall keep:

- (a) A record of the number of direct discharges to a water of the U.S. that is greater than 50,000 gallons, during each calendar year,
- (b) An estimate of the total volume discharged to surface water during each calendar year, and
- (c) An estimate of the total volume of discharge water directed to a reuse or beneficial use in accordance with section VI. of this Order.

D. Monitoring Not Required

Monitoring is not required for any discharges that:

- (a) Do not ultimately reach a water of the U.S., and
- (b) Are put to multiple uses or beneficial reuse, in accordance with section VI. of the Order, prior to surface water discharge.

E. Increase in Monitoring Requirements

The Deputy Director may increase the monitoring or frequency at any time to ensure the protection of beneficial uses of the receiving water. Any requirement for increased monitoring will be based on site-specific data or information that indicates a site-specific discharge threatens to cause or contribute to an exceedance of a receiving water quality criteria or objective.

III. RECEIVING WATER MONITORING REQUIREMENTS DURING NON-COMPLIANCE WITH THIS ORDER

The receiving water must be monitored for all direct planned discharges that do not comply with the requirements contained in section IV of the Order and the discharge potentially causes or contributes to an adverse effect or impact to beneficial uses. Receiving water monitoring shall be conducted during or immediately after the Discharger became aware of a non-compliant discharge that adversely effects or impacts beneficial uses of the receiving water. The Discharger shall monitor the point of confluence of the discharge and the receiving water. If the receiving water presents hazards to the monitoring personnel, visual monitoring shall be conducted using telephoto lenses and binoculars. If further hazards exist beyond such measures, monitoring is not required, and the hazards shall be documented in the corresponding monitoring report.

Receiving water monitoring shall consist of digital photographs and documentation of observed effects and impacts the discharge has on the receiving water body including the presence or absence of:

- a. Erosion;

- b. Floating or suspended matter;
- c. Discoloration;
- d. Impact on aquatic life;
- e. Visible films, sheens, or coatings; and
- f. Potential nuisance conditions.

Photographs and documented observations of the receiving water conditions shall be included in the annual monitoring report, and made available to State and Regional Water Board staff upon request.

Receiving water monitoring is not required for emergency discharges.

IV. POST-NOTIFICATION OF EMERGENCY OR NON-COMPLIANT DISCHARGES THAT ADVERSELY EFFECT OR IMPACT BENEFICIAL USES

Within 24 hours of the Discharger becoming aware of an adverse effect(s) or impact on beneficial uses of the receiving water body due to non-compliance with this Order, or due to a system failure or emergency involving a discharge from its drinking water system, the Discharger shall notify the corresponding Regional Water Board and the MS4 operator if applicable, and shall confirm this notification in writing within five days.

The notification shall include all of the following:

- a. The location and extent of non-compliance or emergency discharge;
- b. The cause of the non-compliance or emergency discharge;
- c. The date, time and expected duration of the non-compliance or emergency discharge;
- d. The estimated volume of discharge;
- e. The applicable receiving water body; and
- f. The corrective actions taken (or being taken) to prevent future non-compliance or repair the system failure.

V. PRE-NOTIFICATION OF LARGE PLANNED DISCHARGES GREATER THAN ONE ACRE-FOOT (325,850 GALLONS)

Three (3) days prior to initiation of a planned discharge (or retroactively within 24-hours after the Discharger is informed to conduct an urgent planned discharge) of a volume equal to or greater than one acre-foot (325,850 gallons), the Discharger shall notify the MS4 operator if applicable, and the appropriate Regional Water Board and provide:

- a. The start date of discharge
- b. The location of discharge and the applicable receiving water
- c. The estimated volume of discharge, and
- d. The reasons for discharge

VI. REPORTING AND RECORDKEEPING REQUIREMENTS

A. Self-Monitoring Report Requirements

1. Self-monitoring reports including compliant and non-compliant discharge monitoring information shall be maintained in the Discharger's main office and made available upon request of State and Regional Water Board staff.
2. Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table E-5 below. Each discharge event that meets the conditions in section II and Table E-1 of this MRP shall be monitored.

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period	Record Keeping Due Date
1/Event or Year	January 1 thru December 31	1 March

3. The Discharger shall arrange and summarize any reported numerical data in a tabular format. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
4. If no discharge occurred during the reporting period, the monitoring report shall report that there was no discharge.
5. Authorized Dischargers shall maintain the results for all monitoring specified in this Monitoring and Reporting Program and as specified in this Order. If a Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the self-monitoring report.

B. REPORTING REQUIREMENTS TO STATE WATER BOARD

1. Dischargers shall report to the State Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
2. By March 1 of every year, all non-compliant discharge monitoring information contained in the Discharger's self-monitoring report for the past calendar year shall be submitted to the State Water Board annually and shall include all non-compliant monitoring results required in this Monitoring and Reporting Program. All non-compliant discharge monitoring information shall be accompanied by the corrective actions the Discharger has taken to return the discharge to compliance. Dischargers shall also submit the annual discharge volume monitoring requirements specified in section II.C of this Attachment.

3. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify discharge events of non-compliance with the permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified non-compliance shall include a description of the requirement that was violated and a description of the violation.
4. Monitoring reports shall be submitted to the State Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

State Water Resources Control Board
Division of Water Quality
NPDES Permitting Unit
1001 I Street, 15th Floor
Sacramento, CA 95814

5. At any time during the term of this permit, the Deputy Director may notify authorized Dischargers to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, each Discharger shall submit a hard copy of its monitoring reports. Subsequent guidance will be provided to the Discharger upon the Deputy Director's notification for electronic submittal of reports. (Direction and guidance for electronic SMR submittals is currently available on the CIWQS Web site at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml)