



Storm Water Phase II Final Rule

Federal and State-Operated MS4s: Program Implementation

Storm Water Phase II Final Rule Fact Sheet Series

Overview

1.0 - Storm Water Phase II Final
Rule: An Overview

Small MS4 Program

2.0 - Small MS4 Storm Water
Program Overview

2.1 - Who's Covered? Designation and
Waivers of Regulated Small MS4s

2.2 - Urbanized Areas: Definition and
Description

Minimum control Measures

2.3 - Public Education and Outreach

2.4 - Public Participation/
Involvement

2.5 - Illicit Discharge Detection and
Elimination

2.6 - Construction Site Runoff Control

2.7 - Post-Construction Runoff
Control

2.8 - Pollution Prevention/ Good
Housekeeping

2.9 - Permitting and Reporting:
The Process and Requirements

2.10 - Federal and State-Operated
MS4s: Program Implementation

Construction Program

3.0 - Construction Program
Overview

3.1 - Construction Rainfall
Erosivity Waiver

Industrial "No Exposure"

4.0 - Conditional No Exposure
Exclusion for Industrial Activity

The program for small municipal separate storm sewer systems (MS4s) under the Storm Water Phase II Final Rule includes, in addition to local government jurisdictions, certain Federal and State-operated small MS4s. Federal facilities were not designated for regulation by the NPDES Phase I storm water program for MS4s. The Phase II Final Rule, however, includes the "United States" in the definition of a small MS4, thereby including Federal MS4 operators in the NPDES Phase II storm water program. Federal and State-operated small MS4s can include universities, prisons, hospitals, roads (i.e., departments of transportation), military bases (e.g., State Army National Guard barracks), parks, and office buildings/complexes.

The small MS4 program, largely designed with municipally-operated small MS4s in mind, raises a number of implementation issues for Federal and State operators of regulated small MS4s who must obtain an NPDES permit that requires the development and implementation of a storm water management program that includes the following six minimum control measures: public education and outreach, public participation/involvement, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and good housekeeping/pollution prevention for municipal operations (for more information on each measure, see Fact Sheets 2.3 through 2.8). This fact sheet highlights potential implementation issues related to the minimum control measures, then discusses the implementation options included in the rule that may resolve these issues.

What Are Some Implementation Concerns?

This section profiles the three most common implementation issues raised in the public comments submitted regarding Federal or State implementation of the small MS4 program.

How Does the Final Rule Account for Unique Characteristics?

Federal and State small MS4s possess a number of characteristics that set them apart from their municipal counterparts. For example, whereas municipally-operated MS4s largely serve resident populations, many Federal or State-operated MS4s, such as medical clinics and departments of transportation (DOTs), do not. Other types of Federal and State MS4s, such as military bases, prisons, and State universities, serve populations that are different from a typical municipal population. Their unique characteristics might lead Federal or State MS4 operators to question either the need to implement the entire suite of minimum control measures or their ability to comply fully with their Phase II storm water permit. Responsibility for developing a storm water program that comprises the minimum measures lies with the operator of the Federal or State MS4.

What If The Operator Lacks Legal Authority?

Three of the minimum control measures (illicit discharge detection and elimination, and the two construction-related measures) require enforceable controls on third party activities to ensure successful implementation of the measure. Some Federal and State operators, however, may not have the necessary legal regulatory authority to adopt these enforceable controls in the same manner as do local governments.





For example, a State DOT that is responsible for the portions of its roads running through urbanized areas may not have the legal authority to impose restrictions on, and penalties against, illicit (i.e., non-storm water) discharges into its MS4 if the source of the discharge is outside the DOT's right-of way or jurisdiction. As in the case of local governments that lack such authority, State and Federal MS4s are expected to utilize the authority they do possess and to seek cooperative arrangements.

How Can the Program Be Implemented in Areas Where There Are Multiple Regulated Entities?

Since the final rule provides automatic coverage of all small MS4s within an urbanized area, regardless of political boundaries, coverage of multiple governments and agencies in a single area is likely. For example, a city government that operates a small MS4 within an urbanized area must obtain permit coverage alongside the county, State, and Federal DOTs if they all operate a portion of the roads (i.e., MS4s) in the city. All four entities are responsible for developing a storm water management program for their MS4s (or portions thereof) within the urbanized area. EPA encourages State and Federal small MS4 operators to establish cooperative agreements with cities and counties in implementing their storm water programs.

Are There Implementation Strategies that Help Facilitate Program Implementation?

This section offers two hypothetical strategies for resolving the implementation issues raised above. The best solution may include a creative combination of strategies.

STRATEGY #1

A Focus on Choosing Appropriate BMPs

The final rule requires the permittee to choose appropriate best management practices (BMPs) for each minimum control measure. In other words, EPA expects Phase II permittees to tailor their storm water management plans and their BMPs to fit the particular characteristics and needs of the permittee and the area served by its MS4. Therefore, the Federal or State operator of a regulated storm sewer system can take advantage of the flexibility provided by the rule to utilize the most suitable minimum control measures for its MS4. Below is an example of tailored activities and BMPs that Federal or State operators can implement for each measure:

Public Education and Outreach. Distribute brochures and post fliers to educate employees of a Federal hospital about the problems associated with storm water runoff and the steps they can take to reduce pollutants in storm water discharges. For example, employees could be advised against carelessly discarding trash on the ground or allowing their cars to leak oil/fluids in the parking lot.

Public Participation/Involvement. Provide notice of storm water management plan development and hold meetings at which employees of a Federal office complex are encouraged to voice their ideas and opinions about the effort. Request volunteers to help develop the plan.

Illicit Discharge Detection and Elimination. Develop a map of the storm sewer system on a military base. Perform visual dry weather monitoring of any outfalls to determine whether the storm sewer system is receiving any non-storm water discharges from the base. If a dry weather flow is found, trace it back to the source and stop the discharge. Should a Federal military base identify an illicit discharge, the source of which is traced to the boundary of its system, the Federal operator should refer the discharge to the adjoining regulated MS4 for further action.

Construction Site Runoff Control. Require the implementation of erosion and sediment controls, and control of waste, for any Federal or State DOT road construction. The DOT would review site plans for proper controls, perform inspections, and establish penalties in the construction contract if controls are not implemented. If construction is done directly by the regulated DOT instead of a private contractor, the DOT could be penalized by the NPDES permitting authority for non-compliance with its small MS4 permit in the event that controls are not properly implemented.

Post-Construction Runoff Control. Require the implementation of post-construction storm water controls for any new construction on the grounds of a prison. This can be required as part of a construction contract, instituted as internal policy, and considered during site plan review.

Pollution Prevention/Good Housekeeping for Municipal Operations. Train maintenance staff at a State university to employ pollution prevention techniques whenever possible. For example, routinely pick up trash/litter from the university grounds, use less salt on the parking lots and access roads in the winter, perform any maintenance of university vehicles under shelter only, limit pesticide use to the minimum needed, use vegetative buffer strips in the parking lots to filter runoff, and keep dumpster lids closed.



STRATEGY #2
Working with Other Entities

There may be instances when the Federal or State permittee has limited capabilities to satisfy one or more of the minimum control measures. As discussed above, the permittee may lack the proper legal authority to enforce controls (although it should try to obtain the necessary legal authority if at all possible).

In the case of limited capabilities, the permittee can work with neighboring operators of regulated small MS4s, preferably on a watershed basis, to form a shared storm water management program in which each permittee is responsible for activities that are within individual legal authorities and abilities. The final rule allows the permittee to rely on other entities, with their permission, to implement those minimum measures that the permittee is otherwise unable to implement. Three examples are:

- A State DOT with limited regulatory legal authority can reference a local sewer district's illicit detection and elimination program in its permit application, provided the program sufficiently addresses illicit discharges into the DOT's storm sewer system.
- The permittee or NPDES permitting authority can reference such programs as coastal non-point pollution control programs, State or local watershed programs, State or local construction programs, and environmental education efforts by public or private entities.
- The permittee can become a co-permittee with a neighboring Phase I MS4 through a modification of the Phase I MS4's individual permit. This may be the most logical and preferable option for those Federal and State entities located in close proximity to Phase I MS4s.

Choosing to work with other governmental entities as a co-permittee, or referencing parts of each other's plans, can help resolve issues that may arise where multiple regulated jurisdictions exist in the same area. Permittees can avoid duplicative efforts, as well as territorial or regulatory disputes, by working together to implement the storm water program. See Fact Sheet 2.9 for more information on permitting options for regulated small MS4s.



World Scope Improvement Products

Suggested Steps for Working with Other Entities

- (1) Identify the boundaries of the urbanized area (see Fact Sheet 2.2 for more information on urbanized areas)
- (2) Identify the operators of storm sewer systems or portions of the systems within the urbanized area such as local, State, Tribal or Federal governments or other entities.
- (3) In seeking permit coverage:
 - (A) Identify where another entity's program may satisfy one or more minimum control measure. If a program has requirements that are equivalent to a minimum control measure's required elements, the operator of the regulated small MS4 may reference the program in its permit application, provided the other entity gives it permission to do so. While such an arrangement relieves the operator from performing the minimum measure itself, the operator remains ultimately responsible for the measure's effective implementation (see Fact Sheet 2.9 for more information on this option)

OR

 - (B) Team with an operator of a Phase I MS4 and become a co-permittee on its existing Phase I individual permit (see Fact Sheet 2.9 for more on this opinion)

For Additional Information

Contact

- U.S. EPA Office of Wastewater Management
- Phone: 202 260-5816
 - E-mail: SW2@epa.gov
 - Internet: www.epa.gov/own/sw/phase2

Reference Documents

- Storm Water Phase II Final Rule Fact Sheet Series
- Internet: www.epa.gov/own/sw/phase2

- Storm Water Phase II Final Rule (64 FR 68722)
- Internet: www.epa.gov/owmsw/phase2
 - Contact the U.S. EPA Water Resource Center
 - Phone: 202 260-7786
 - E-mail: center.water-resource@epa.gov



Fugitive Dust Requirements

For Control of Fine Particulate Matter (PM-10)
From Construction, Demolition, Excavation,
and Extraction Activities (Rule 8020)

1.0 Purpose

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, and related activities.

2.0 Applicability

This rule applies to any construction, demolition, excavation and water mining related disturbances of soil, including land clearing, grubbing, scraping, ground excavation, land leveling, grading, cut and fill operations, travel on the site, travel on access roads to and from the site, and demolition activities. The Rule is also applicable to the initial construction of landfills prior to commencement of landfill operations.

3.0 Definitions

- 3.1 Blasting: any excavation or demolition conducted with the use of explosives.
- 3.2 Excavation: any digging, trenching, quarrying, extraction, or tunneling.
- 3.3 Extraction: removal of minerals, aggregate, or fossil fuels from the earth by excavation: including mining, surface stripping, open pit excavation, or tunneling.
- 3.4 Visible Dust Emissions (VDE): visible dust of such opacity as to obscure an observer's view to a degree equal to or greater than an opacity of 40%, for a period or periods aggregating more than three (3) minutes in any one (1) hour, except as set forth in Rule 8030 section 5.1.2
- 3.5 Water Mining: activities related to the production, diversion, storage or conveyance of water, including irrigation canals, but excluding irrigation ditches within agricultural fields.

4.0 Exemptions

In addition to the exemptions established in Rule 8010, the following exemptions are established for the Rule:

- 4.1 Any brush or timber clearing, grubbing, scraping, ground excavation, land leveling, or grading activity conducted for the purpose of preparing land for growing of crops or the raising of fowl or animals. This does not exempt grading, land leveling, or scraping for the purpose of constructing structures intended for agricultural use or for the purpose of water mining.
- 4.2 Activities for which mitigation programs for the control of fine particulate matter (PM-10) through the control of fugitive dust have been approved to the effective date of this Rule.
- 4.3 Blasting activities as defined in section 3.1
- 4.4 Construction or demolition activities for which bids have been awarded, building permits issued, or for which the construction or demolition work has commenced prior to the effective date of this Rule.
- 4.5 Maintenance or remodeling of existing buildings and additions to existing buildings where total budding area is not increased by more than fifty percent, or 10,000 square feet, whichever is less; but not including ancillary construction such as expanding parking lots. All additions to single family residential buildings.
- 4.6 Renovation of ground water recharge basins to restore permeability, but not including other water mining activities.
- 4.7 Solar drying and the harvesting of sedimentary calcium carbonate precipitates from settling/evaporation ponds for the purpose of processing recycling and reuse of the precipitate.



5.0 Requirements

Sections 5.1 sets forth requirements for any area of a construction site on which land preparation activities are occurring. The provisions of section 5.2 are applicable to inactive disturbed areas of a construction site. Section 5.3 applies to unpaved on-site roads and off-site-unpaved access roads. Section 5.4 sets forth requirements for the prevention and removal of mud and dirt carryout. Section 5.5 sets forth requirements for storage of construction vehicles, equipment, and materials.

- 5.1 No person shall undertake any land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill operations, or demolition activities, without utilizing appropriate dust control measures, such as the effective application of water or pre-soaking, during the land preparation, demolition, excavation or extraction.
- 5.1 - 1. Operations employing use of wrecking balls or other wrecking equipment to raze or demolish buildings shall not be required to limit Visible Dust Emissions (VDE) as defined in section 3.4 of this Rule, from the employment of such equipment for wrecking operations, provided water is applied to the building surface as follows:
 - 5.1.1.1 All exterior surfaces of the building up to six stories in height shall be wetted when commencing use of the wrecking ball or equipment and shall be maintained adequately wetted thereafter while operations continue.
 - 5.1.1.2 Wetting shall not be required with use of wrecking balls when employed on that part of a building or structure in excess of six stories in height.
 - 5.1.1.3 Material resulting from razing and demolition operations shall be wetted during off-site removal loading operations.

5.2 Disturbed areas shall be stabilized for the duration of the construction activity or until construction work resumes on the inactive disturbed area. All disturbed areas of a construction site, including storage piles of fill dirt and other bulk materials, which are not being actively utilized for construction purposes for a period of seven (7) calendar days or more, shall be stabilized using one or more of the following approved sod stabilization methods to effectively limit VDE as defined by section 3.4 of the Rule. Where soil moisture or natural crusting is sufficient to limit visible dust emissions, no action is required.

- 5.2.1 Where water is used as the dust suppressant, watering shall be applied to effectively limit VDE as defined by section 3.4 of this Rule, or
- 5.2.2 Where a chemical dust stabilizer or suppressant is utilized, the stabilizer or suppressant shall be applied to effectively limit VDE as defined by section 3.4 of this Rule. Or
- 5.2.3 Where planting of trees and vegetative ground cover is utilized, vegetation shall be planted in sufficient density and watered with sufficient frequency to effectively stabilize the disturbed area and limit VDE as defined by section 3.4 of this Rule.
- 5.3 All operations described in section 2.0 shall effectively limit VDE as defined by section 3.4 of this Rule from on-site-unpaved roads and offsite unpaved access roads using one or more of the following stabilization methods. Road stabilization shall be maintained for the duration of the activity. Where soil moisture is sufficient to meet this requirement, no action is required.
 - 5.3.1 Where water is used as the dust suppressant, watering shall be applied to effectively limit VDE as defined by section 3.4 of this rule.
 - 5.3.2 Where a chemical dust stabilizer or suppressant is used, the stabilizer or suppressant shall be applied to effectively limit VDE as defined as section 3.4 of this Rule.
- 5.4 All operations described in section 2.0 shall limit or remove the accumulation of mud or dirt from public paved roads, including shoulders, adjacent to the site at the end of the work day, or at a minimum of once every twenty-four hours when operations are Occurring.
 - 5.4.1 In addition to restrictions imposed by local agencies, the use of dry rotary brushes for the removal of deposited mud/dirt carryout from a paved road is expressly prohibited, except where preceded or accompanied by sufficient wetting to limit the VDE as defined by section 3.4 of the Rule.
 - 5.4.2 For the purpose of this section, the use of blower devices for removal of deposited mud/dirt carryout from subject paved roads is expressly prohibited.
 - 5.4.3 Use of paved access aprons, gravel strips, wheel washers, or other measures designed to limit mud and dirt deposits on public paved roads are strongly encouraged to minimize the need for removal of mud and dirt from paved public roads.
- 5.5 All areas used for storage of construction vehicles, equipment, and materials shall comply with the provisions of the Rule 8070

6.0 Alternative Compliance Plan

If special conditions exist which will unreasonably prevent compliance with the requirements in section 5.0 of this Rule, the owner/operator may submit and request approval of and request approval of an Alternative Compliance Plan in accordance with section 6.0 of Rule 8010. The Alternative Compliance Plan must specify the special circumstances which unreasonably prevent compliance and provide an alternative program of control measures. Failure to implement control measures specified in an approved Alternative Compliance Plan constitutes a violation of this Rule.

CONSTRUCTION NOI

1. How do I know if I need this permit?

Discharges of storm water associated with construction activity (storm water discharges) that results in the disturbance of five acres or more of total land area or which is a part of a larger common area of development or sale must be permitted. Construction activity includes clearing, grading, excavation, and reconstruction of existing facilities involving removal and replacement. Construction activity does not include routine maintenance maintain original line and grade, hydraulic capacity, or original purpose of the facility.

2. Who must apply?

The owner of the land where the construction activity is occurring is responsible for obtaining a permit. Owners may obtain coverage under the General Storm Water Permit to Discharge Storm Water Associated With Construction Activity (General Permit) by filing a NOI in accordance with the following instructions. Coverage for construction activity conducted on easements (e.g., pipeline construction), or on nearby properties by agreement or permission, shall be obtained by the entity responsible for the construction activity.

3. Are there other requirements when applying for this permit?

Storm water discharges in the Lake Tahoe Hydrologic Unit will be regulated by a separate permit(s) adopted by the California Regional Water Quality Control Board, Lahontan Region, and may not seek coverage under the State Water Board's general permit. Storm water discharges on Indian lands will be regulated by the U.S. Environmental Protection Agency.

4. What is the application fee?

The current annual fee is \$250.00 for each construction site which discharges into a municipal separate storm sewer system regulated by an area wide urban storm water permit and \$500.00 for all other construction sites.

5. Where is the Primary Permit Location?

The NOI should be mailed to the State Water Resources Control Board at the following address:

State Water Resources Control Board
Division of Water Quality
Attn: Storm Water Permit Unit
P.O. Box 1977
Sacramento, CA 95812-1977

6. What are the timelines, for applications/renewals?

Owners of ongoing construction must file a NOI, along with the appropriate annual fee, by September 30, 1992. Owners of new construction (those beginning construction after September 30, 1992) must file a NOI prior to the commencement of construction. For ongoing construction activity involving a change of ownership, the new owner must submit a new NOI within 30 days of the date of change of ownership. Preferably, the NOI should be sent with the revocation prepared by the previous owner.

7. What is the annual fee?

The annual fee will be pro-rated in the second year to account for any over payment from the application fee. Otherwise the annual fee is the same as the application fee.

8. How long is this permit in effect?

Your coverage under the general permit is in effect until you submit a Notice Of Termination (N07) along with the accompanying information.

9. How can I avoid the most common mistakes made in applying for this permit?

10. What are the regulations that apply to this permit? Where can I get copies?

11. Questions? Call



WDID#: _____ SITE/FACILITY NAME: _____

A CHECKLIST TO ASSIST WITH PREPARATION OF THE STORM WATZR POLLUTION PREVENTION PLAN FOR THE GENERAL CONSTRUCTION STORM WATER PERMIT AUGUST 19, 1999				
Date SWPPP was prepared? Date _____/_____/_____ Date Amended _____/_____/_____	PERMIT SECTION	Page No. 1	Implementation Date 2	Comments
Project Information	A. 5. a.			
Vicinity Map (graphic)	A. 5. a. (1)			
Show landmarks which are easily identifiable such as roadways or features	A. 5. a. (1)			
Show site perimeter, geographic features, general topography	A. 5. a. (1)			
Site Map (graphic)	A. 5. a. (2) a.			
Existing and planned paved areas, buildings, roadways, etc.; site perimeter; storm water discharge locations; topography before and after construction	A. 5. a. (2) a.			
Show relevant drainage patterns across site using map inserts, if necessary	A. 5. a. (2) b.			
Design temporary drainages which intercept sheet flow for diversion	A. 5. a. (2) c.			
Pollutant Source and RMP Identification (graphic or narrative)	A. 5. b.			
Show drainage patterns after major grading activity	A. 5. b. (1)			
Show calculations used to design diversion BMPs	A. 5. b. (1)			
Show drainage patterns into each storm water inlet or receiving water	A. 5. b. (2)			
Describe all BMPs to protect storm water inlets	A. 5. b. (2)			
Describe BMPs to eliminate/reduce contamination of storm water from:	A. 5. b. (2)			
<i>Equipment/building/concrete washing areas, saw cutting of concrete/asphalt</i>				
<i>Soil containment by soil amendments</i>	A. 5. b. (2)			
<i>Areas of contaminated soil</i>	A. 5. b. (3)			
<i>Fueling areas</i>	A. 5. b. (4)			
<i>Vehicle maintenance areas</i>	A. 5. b. (4)			
Vehicle parking area	A. 5. b. (4)			

1. Please indicate the page number where the information is located in the SWPPP
If information is not applicable to your site, insert N/A
2. Date that Best Management Practices will be implemented



Common SWPPP Correction Items

Documentation

NO SWPPP

NO Maintenance Log - Not Kept Up Weekly

Clean Up Area

NO Concrete Clean Up Area Posted

DI Protection

NO DI Filters or wrong type of filter such as debris filter without sediment filter. Using Bug Screen, AC Filter

Erosion Control

No undercut back of walk or Filter Roll or Silt Fence and nothing on slopes

Concrete Pumpers

Use of Tarps under pumper and use of absorbent for oil leaks. Shovel not wash.

Stucco/Concrete Work

Keeping spills of concrete/stucco or water mixture from reaching storm drains.

Concrete/Water Trenching Dirt Piles

Keep back of walk or project with tarps/plastic, sandbags and filter rolls,

Portable Restroom Facilities

Portable facilities placed on walks must be located a minimum of 100' from DI, and be protected with tarps or plastic under area and berms or sandbags around edges to contain spills and/or washwater.

Resource. Sacramento County Building Inspectors



World Scape Improvement Products