

PDHonline Course C826 (8 PDH)

USEPA's 2015 Multi-Sector General Permit for Storm Discharges Associated with Industrial Activity

Instructor: Jeffrey R. Sotek, PE, CSP, CIH

2020

PDH Online | PDH Center

5272 Meadow Estates Drive Fairfax, VA 22030-6658 Phone: 703-988-0088 www.PDHonline.com

An Approved Continuing Education Provider

EPA's Industrial Stormwater (SW) Permit

Multi-Sector General Permit (MSGP)

Presenters: Bryan Rittenhouse rittenhouse.bryan@epa.gov

Erika Farris

farris.erika@epa.gov



Guide to Webinar

To Ask a Question:

 Type question in the Question Pane in the Attendee Control Panel & click **Send** to submit

Complete Survey:

After you exit the webinar, please complete the short survey

To View the Archived Webinar:

 EPA will post an archive of this webinar within a couple of weeks at www.epa.gov/npdes/training

MSGP Basics

- Nat'l Pollutant Discharge Elimination System (NPDES) permits are good for 5 years
- MSGP 1st issued in 1995
- Reissued in 2000, 2008 & June 4, 2015
 - Continuing facilities have been operating under 2008 MSGP; new facilities who contacted Region have been operating under EPA's No Action Assurance memo
 - Operators must submit their NOI within 90 days, i.e., by Sep 2
- Only applies in 4 states (ID, NM, MA, NH), DC, territories (e.g., PR), Indian Country lands, certain states with federal operators
- www.epa.gov/npdes/stormwater/msgp

MSGP Basics

Bottom line:

Your discharge must be controlled as necessary so it does not cause or contribute to an exceedance of applicable water quality standards (WQS) in any affected states*

*The MSGP's primary water quality-based effluent limitation

29 Sectors of Industrial Activity (App. D)

A: Timber Products

B: Paper Products

C: Chemical Products

D: Asphalt/Roofing

E: Glass, Clay, Cement

F: Primary Metals

G: Metal Mining

H: Coal Mines

I: Oil & Gas

J: Mineral Mining

K: Hazardous Waste

L: Landfills

M: Auto Salvage Yards

N: Scrap Recycling

O: Steam Electric Facilities

P: Land Transportation

Q: Water Transportation

R: Ship/Boat Building, Repair

S: Air Transportation

T: Treatment Works (WWTPs)

U: Food Products

V: Textile Mills

W: Furniture & Fixtures

X: Printing, Publishing

Y: Rubber, Misc. Plastics

Z: Leather Tanning/Finishing

AA: Fabricated Metal Products

AB: Transportation Equip.

AC: Electronic, photo goods

AD: Non-classified facilities 5

Activities / Areas the MSGP Covers

Discharges from:

- Industrial plant yards
- Immediate access roads & rail lines
- Material handling* sites
- Refuse sites
- > Sites used for the application or disposal of process waste waters
- > Sites used for the storage & maintenance of material handling equipment
- > Sites used for residual treatment, storage or disposal
- Shipping & receiving areas
- Manufacturing buildings
- Storage areas (inc. tank farms)
- Areas where industrial activity has taken place in the past & significant materials remain & are exposed to SW

^{*} Material handling activities include: storage, loading & unloading, transportation or conveyance of any raw material, intermediate product, final product, by-product or waste product

Components of the MSGP

- Eligibility conditions for facilities & types of discharges (SW & non-SW)
- Notice of Intent (NOI)
- Effluent Limits
- Stormwater Pollution Prevention Plan (SWPPP)
- Monitoring (for certain subsectors / facilities)
- Inspections
- > Reporting
- Permit termination

No Exposure Exclusion

- > For facilities that would otherwise need the MSGP
- You do not have to get permit coverage when you have "no exposure" of ALL industrial materials / operations to SW
- Must complete the "No Exposure Checklist" and submit a certification that you meet the no exposure requirements
 - Checklist has 11 questions to determine whether exposure exists
 - See Appendix K



How to Obtain Coverage Under the MSGP

Read the Permit!

Step 1. Establish Your Eligibility to Use the MSGP (Part 1)

- ➤ To determine whether you are eligible to use the permit, you must consider:
 - The nature of your discharges
 - If your new facility is subject to certain restrictions (e.g., for facilities discharging to impaired receiving waters or high quality waters referred to as Tier 2, 2.5 or 3 waters)
 - If your facility is subject to restrictions because of discharging to specific CERCLA (Superfund) sites in ID & WA - new
 - Requirements relating to the protection of historic properties (installed controls must not adversely affect historic properties)
 - Requirements relating to the protection of endangered species

What Discharges are Eligible?

- You must consider what's in your discharges because there are restrictions:
 - SW discharges associated with industrial activity: OK
 - Certain non-SW discharges: OK*
 - E.g., uncontaminated condensate from air conditioners, emergency fire fighting discharges
 - For exclusive full list see Part 1.1.3.1
 - Wastewater: Not OK
 - SW + wastewater: Not OK
 - SW discharges associated with construction: Not OK
 - Exception: mining sectors

^{*}Any discharges not expressly authorized in this permit cannot become authorized... by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), or during an inspection.

New Discharges to Impaired Waters

Eligibility - CERCLA (Superfund)

- New provision that applies only for the specific sites listed in Appendix P in ID & WA (EPA Region 10)
- The MSGP does not authorize SW discharges to certain sites that are or have undergone CERCLA cleanups UNLESS first approved by the Region.
- Must notify the EPA Region in advance:
 - Region will determine and then inform you that you are eligible for coverage
 - They may evaluate whether your controls / procedures are adequate to ensure you will not recontaminate the site (i.e., cause or contribute to an exceedance of water quality standards)
 - May impose extra monitoring, or controls, or other actions to prevent recontamination



Eligibility - Endangered Species

- You must establish eligibility regarding the protection of threatened & endangered species:
 - Appendix E has the new procedures you must follow: http://water.epa.gov/polwaste/npdes/stormwater/upload/msgp2015_appendixe-2.pdf
 - Guidance: http://water.epa.gov/polwaste/npdes/stormwater/Multi-Sector-General-Permit-Threatened-and-Endangered-Species-Eligibility.cfm
- Operators must meet one of five criteria in order to be eligible for 2015 MSGP coverage
 - A No species in action area
 - B Another operator has certified eligibility under the 2015 MSGP for your discharges
 - C Discharges are not likely to adversely affect listed species
 - D Discharges were addressed in a separate ESA section 7 consultation
 - E Discharges were the subject of an ESA section 10 (take) permit

Eligibility - Endangered Species

- Criteria B, D & E are eligibility selections that are the result of actions undertaken by you or others outside of MSGP procedural requirements / guidance
- Criteria A & C are selections that are made as a result of your own investigations based on the requirements in Appendix E
- Your endangered species eligibility criterion selection must be supported and documented in your SWPPP and you must include a statement supporting your eligibility on the NOI form

Eligibility - Endangered Species

- Except for operators qualifying under Criterion B, D, or E, you must determine if there are species in your action area*
 - For National Marine Fisheries Service (NMFS) species, see maps at http://water.epa.gov/polwaste/npdes/stormwater/Multi-Sector-General-Permit-Threatened-and-Endangered-Species-Eligibility.cfm
 - For Fish & Wildlife (FWS) species, use the FWS mapping tool IPaC at http://ecos.fws.gov/ipac
 - Contact the local NMFS & FWS field offices for more information
- If no species are present, you are eligible under Criterion A
- > If species are present, you must submit the "Criterion C Eligibility Form"

*Action area includes areas where stormwater discharges originate & flow, areas upstream & downstream that may be affected by discharges, & areas where BMPs may be installed & operated

Eligibility - Endangered Species Criterion C Eligibility Form

- When you have species in your action area, you must submit the Criterion C Eligibility Form
 - Found in Appendix E at: http://water.epa.gov/polwaste/npdes/stormwater/upload/msgp2015_appendixe-2.pdf
- You must enter info onto the form necessary to evaluate potential effects on listed species from your discharges and discharge-related activities:
 - See Appendix E for list of info needed on form
- Form must be submitted for review 30 days prior to submitting your NOI at msgpesa@epa.gov
 - EPA may require additional measures that must be implemented to avoid or eliminate likely adverse effects on listed species from discharges / discharge-related activities
 - If no response after 30 days, operator may file NOI for MSGP coverage

2. Develop / Update SWPPP (Part 5)

- A stormwater pollution prevention plan must be completed before obtaining coverage
- Must be developed by a "qualified person" & certified (signature requirements are in Part 5.2.7)
- Permit contains non-numeric (i.e., technology-based) effluent limits that require you to implement control measures (BMPs) to minimize pollutant discharges
 - "Minimize" means "reduce and/or eliminate to the extent achievable using control measures that are technologically available & economically practicable & achievable in light of best industry practice"
 - Describe how you meet the effluent limits in SWPPP

Effluent Limits (Part 2)

10 technology-based effluent limits requiring SW controls or other actions:

- Minimize exposure
- Good housekeeping
- Maintenance of controls
- Spill prevention & control
- Erosion & sediment control
- Management of runoff
- Enclose / cover salt piles
- Employee training
- Eliminate (or permit separately) non-SW discharges
- Dust generation & vehicle tracking of pollutants

Effluent Limits

Water quality-based effluent limits (WQBELs):

- Water quality standards (see Slide 4)
- Discharges to water quality impaired waters:
 - Existing discharger to an impaired water with a Total Maximum Daily Load (TMDL): EPA will tell you if you must do something extra
 - Existing discharger without a TMDL: Must meet WQS & do monitoring
 - New dischargers / new sources: Have special eligibility conditions
 & monitoring
- New dischargers / new sources / increased discharge to highquality waters: EPA may impose extra requirements or an individual permit

SWPPP Components

- SW pollution prevention team
- Site description
 - Includes industrial activities, location map, site map showing locations of potential pollutant sources, SW controls, etc.
- Summary of potential pollution sources
- Description of control measures
- Schedules & procedures
 - Schedules for doing good housekeeping, maintenance, inspections, etc.
 - Procedures for handling spills, employee training, monitoring, etc.
- Documentation to support eligibility for endangered species & historic properties

Other SWPPP Components & Features

- Signatures
- Modified when corrective actions are required
- Must be available to employees, EPA, state, etc.
- SWPPP info accessibility:
 - Post on internet or provide salient info with NOI
- Other documentation:
 - Maintenance & repairs of controls
 - Inspection reports
 - Corrective actions taken
 - Etc.

3. Submit an NOI

- The Notice of Intent signifies you are eligible for the MSGP & have complied with its requirements (e.g., developed & implemented a SWPPP)
 - EPA may disagree
- Fill out & submit NOI electronically
 - Paper version OK if EPA Region assents to a request
 - NOI provides enough info to characterize the facility & potential discharges
- A 30-day wait period is mandatory to allow review of NOI info (all stakeholders can view NOIs)
- Can check NOI status & content online

Ongoing MSGP Requirements

Inspections (Part 3)

- Routine facility inspections must be done at least quarterly (no more annual "comprehensive" inspection)
 - There are exceptions for inactive & unstaffed sites
- Must inspect:
 - Areas where industrial materials/activities are exposed to SW
 - Areas identified in SWPPP & that are potential pollutant sources
 - Areas where spills & leaks have occurred in the past 3 years
 - Discharge points
 - SW controls implemented to comply with the effluent limits
- May need to do corrective actions as a result

What to look for during an inspection









Quarterly Visual Assessment (Part 3)

- Every quarter, grab a sample of your discharge from your discharge point* & scrutinize it for evidence of pollution
- Must wait 72 hours from last rain event & collect within 30 min (in general) of the beginning of a discharge
- Don't have to do for "substantially identical" discharge points (outfalls)
- Tainted sample requires corrective actions

^{*} Discharge point: the location where collected & concentrated SW flows are discharged from the facility such that the first receiving waterbody into which the discharge flows, either directly or through a separate storm sewer system, is a water of the U.S.

Quarterly Visual Assessment

- Visually inspect sample for the following:
 - Color
 - Odor
 - Clarity
 - Floating solids
 - Settled solids
 - Suspended solids
 - Foam
 - Oil Sheen, and
 - Other obvious indicators of stormwater pollution



Corrective Actions (Part 4)

- Certain occurances will require you to review & revise, as appropriate, your SWPPP:
 - An unauthorized release or discharge (e.g., wastewater)
 - Discharge that violates a numeric effluent limitation in Table 2-1
 - Controls are not stringent enough to meet WQS or other effluent limits
 - A required control measure is missing, inoperable, etc.
 - Visual assessment of a discharge shows evidence of pollution

Deadlines

- Immediately take steps to minimize / prevent pollutant discharges until a permanent solution is installed
- More permanent solution: before next storm (best); or 14 days; or 45 days for more involved controls; or >45 days if Region is informed

Corrective Actions

- Certain occurances will require you to review your SWPPP to determine if modifications are necessary:
 - Whenever your facility has construction or a change in design, operation or maintenance that significantly changes the nature or quantity of pollutants discharged
 - For those who must monitor, when your sampling average is above the benchmark (an exceedance does not trigger a corrective action if due to natural background sources):
- You may decide no further corrective actions are necessary (must document why)
- Same deadlines apply as in last slide

Monitoring - Benchmark (Part 6)

- Applies to certain subsectors only (affects about ½ of EPA's permittees)
 - Specific pollutants to be monitored & their benchmark concentrations are in Part 8 (sector-specific section)
- The 72-hour interval; 30-min from start of discharge; & substantially identical discharge points provisions apply
- "Grab samples" taken quarterly in first year
- 4-sample average is compared with benchmark level

Note: There are exceptions to many of the monitoring procedures & requirements—consult the MSGP for details!

Monitoring - Benchmark

- Data is primarily to help you determine the effectiveness of your SW controls
- > A 4-sample avg. below the benchmark: stop monitoring
- > A 4-sample avg. above a benchmark IS NOT a violation
 - Exceedance does require you to consider whether corrective actions are necessary
- Make modifications & continue monitoring until you achieve a 4-sample average below the benchmark
 - You may make a determination that no further reductions can be practicably achieved, in which case just monitor once/year
- Results submitted electronically

Monitoring – Impaired Waters (Part 6)

- For discharges to waters without a TMDL: You must monitor for all pollutants for which the water is impaired once/year at each discharge point (except substantially identical ones)
 - No detection of that pollutant or its presence is due to natural background: Cease monitoring
- For discharges to waters with a TMDL: You are not required to do monitoring unless EPA directs you to
- See MSGP for exceptions

Monitoring – Effluent Limitations Guidelines (Part 6)

- See Table 6-1 for the SW discharges subject to effluent limitation guidelines (ELGs)
- Pollutants & limitation concentration levels are in Part 8
- You must monitor once / year at EACH discharge point (no exceptions)
- An exceedance is a permit violation
 - Must report the exceedance to EPA & do follow-up monitoring

Monitoring – Other (Part 6)

- Your state / tribe / territory may have their own monitoring requirements in addition to EPA's (part of their CWA Section 401 certification)
 - See Part 9 for these requirements
- EPA may notify you of additional discharge monitoring requirements that EPA determines are necessary to meet the permit's effluent limits

Reporting (Part 7)

- All material (unless specifically excepted) must be submitted electronically via the NPDES eReporting Tool (NeT)
 - http://water.epa.gov/polwaste/npdes/stormwater/StormwatereNOI-System-for-EPAs-MultiSector-General-Permit.cfm
 - Exception may be granted if Region assents
 - NOI, No Exposure Cert, Notice of Termination (NOT), Annual Report
- Discharge monitoring reports submitted using the NetDMR system
 - www.epa.gov/netdmr

Reporting – Annual Report (Part 7)

- You must submit an Annual Report by January 30th of every year containing info generated in the past year:
 - A summary of your routine facility inspections documentation
 - A summary of your quarterly visual assessment documentation
 - The rationale why, after an avg. benchmark exceedance, you determined no further pollution reductions are practicably achievable
 - A summary of your corrective action documentation
- Must include a signed, certified statement

Additional Reporting & Recordkeeping (Part 7)

- There are several reports you may have to generate & submit to your EPA Regional office (i.e., not using NeT or NetDMR):
 - See Part 7.9.1 for the list
 - Also submit to your municipal separate storm sewer system (MS4) operator if you discharge to an MS4:
- Recordkeeping requirements: Retain all materials required by the permit for a period of 3 years from the date that your coverage expires / is terminated

Summary of MSGP Reporting Deadlines

- Endangered Species Criterion C Eligibility Form: 30 days prior to NOI
- ▶ NOI: For existing dischargers, due no later than September 2, 2015*
- > Annual Report: No later than January 30th for each year of permit coverage
- > **SWPPP Update on NOI:** At least once a year, no later than 45 days after final routine inspection for the year.
- > Monitoring:
 - Benchmark monitoring: Once per quarter beginning October 1 (or the first full quarter after discharge authorization date)
 - Impaired waters monitoring: Once per year (minimum)
 - Numeric effluent limitation monitoring: Once per year (minimum)
 - If there is an exceedance, follow-up monitoring required within 30 days of implementing corrective action
 - If follow-up monitoring in exceedance, monitoring must be conducted quarterly until in compliance
 - Discharge Monitoring Reports (DMRs): 30 days of receiving laboratory results

For the State of Idaho (except Indian country), in the State of Washington (except Indian country) if operated by a federal operator, and on Spokane Tribe of Indians lands NOIs will be due 90 days after the day the permit is available for in these areas.

EPA Industrial Stormwater Guides







EPA 833-B-09-002



Developing Your Stormwater Pollution Prevention Plan

A Guide for Industrial Operators

February 2009









EPA XXX-X-XX-XXX



Industrial Stormwater Monitoring and Sampling Guide

March 2009



MSGP SWPPP Template & Recordkeeping Template

Work documents that permittees can edit to make sure they cover all required elements in SWPPP

1.3 Stormwater Pollution Prevention Team.

Instructions (see 2015 MSGP Part 5.2.1):

The stormwater pollution prevention team is responsible for overseeing development of and any modifications to the SWPPP, implementing and maintaining control measures/BMPs, and taking corrective actions when required. Each member of the stormwater pollution prevention team must have ready access to the 2015 MSGP, the most updated copy of the facility SWPPP, and other relevant documents.

- Identify the staff members (by name and/or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities.
- EPA recommends, but does not require, the stormwater pollution prevention team include at least one
 individual from each shift to ensure that there is always a stormwater pollution prevention team member
 on-site.

Staff Names	Individual Responsibilities
Insert name and/or title of SWPPP team member	Insert explanation of that staff person's responsibilities relating to compliance with the permit
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]
[Repeat as necessary]	[Repeat as necessary]

- Eligibility Requirements
 - Specific Eligibility requirements specified in Part 1.1
- > NEPA Review
 - Industrial discharges subject to NSPS do not have to independently make the determination of "No Significant Impact" under National Environmental Policy Act or if an EIS needs to be completed.

Increased NOI Required Information:

- > Outfalls location information
- Hardness of receiving waterbody (if subject to benchmark monitoring for metals)
- Identify if the facility discharges to a CERCLA site
- > SWPPP General Information
- eNOI will automatically determine if the site discharges to impaired waters

- Electronic Reporting Requirements
 - Paper submittals are only permitted on a case by case basis
- Endangered Species Requirements
 - Eligibility determination procedures are specified in Appendix E (Criterion C form)
- > Effluent Limit Clarifications
 - Greater level of specificity in several effluent limits

- > Inspections
 - Comprehensive Site Inspections & Routine Facility Inspection requirements consolidation
- Corrective Actions
 - Conditions that require a SWPPP review has been clarified
 - Correction Actions reporting requirements clarification
- > SWPPP Documentation
 - Permittee can comply with the documentation requirements regarding specific effluents limits by including the effluent limits verbatim in their SWPPP

- SWPPP Availability: Must either provide a URL for the SWPPP on the NOI form or provide selected information from the SWPPP on the NOI form
 - Onsite industrial activities exposed to stormwater including potential spill & leak areas
 - Pollutant or pollutant constituents associated with each industrial activity exposed to SW
 - Any authorized non-SW discharges listed in Part 2.2.3
 - Control measures implemented
 - Schedules for good housekeeping, maintenance, etc.

- > Benchmark Values
 - Additional non-hardness dependent metals benchmarks for facilities that discharge into saline waters
- Industrial Sector-specific requirements
 - Sector G Metal Mining
 - Sector H Coal Mining
 - Sector J Mineral Mining & Dressing
 - Sector S Air transportation