

# Understanding Industrial Stormwater Laws and Regulations

*Presented by: Dianne R. Phillips  
Holland & Knight LLP*

April 26, 2024

For educational purposes only. Not legal advice. Opinions are my own, not my firm's or my client's.

# Federal industrial stormwater management requirements: Overview

- Federal Water Pollution Control Act of 1972 a/k/a Clean Water Act
- Section 402: Point source discharges must be permitted
- Created National Pollutant Discharge Elimination System (NPDES)
- Subsection (p) added in 1987: Stormwater discharge permitting phased in over time
- 1990 regulations for Industrial stormwater discharges
- First Multi-Sector General Permit (MSGP) issued in 1995

# National Pollutant Discharge Elimination System (NPDES) Permit

- Permitting Authority delegated to the States *except* in Massachusetts, New Hampshire, New Mexico, DC, Puerto Rico, and most territories, Indian Country Lands, and federal projects in several states throughout the U.S. where EPA is the permitting authority
- Individual permits and General permits, each permit term not exceeding 5 years
- EPA's Effluent Limitation Guidelines (ELGs): Sector-specific regulations applicable to both state and federal NPDES permits
  - MSGP Section 4.2.3.1 & Part 8

# 2021 Multi-Sector General Permit for Industrial Stormwater Discharges (EPA)

- Applies where EPA is the NPDES permitting authority
  - 788 facilities in MA and 293 facilities in NH
- Signed January 15, 2021
- Published in the Federal Register February 19, 2021
- Became effective March 1, 2021 with minor modifications effective Sept. 29, 2021
- Notice of Intent (NOI) filing deadline: At least 30 days prior to commencing discharge for new facilities
- Annual reports due January 30<sup>th</sup>, beginning in 2022 (for existing permittees)

# Summary of Key Changes from 2015 MSGP

- **Permit Streamlining**, including **reordering** the parts (Monitoring, followed by Corrective Actions and “Additional Implementation Measures” (AIM), then SWPPP requirements), simplifying and clarifying permit language.
- Adding a **new requirement for signage** and making the **SWPPP publicly available** as an attachment to the NOI electronically filed or on a public website.
- Addition of **new Part 2.1.1.8** which requires consideration of enhanced stormwater control measures for facilities that could be impacted by **major storm events**, such as hurricanes, storm surge, and flood events.
- Monitoring changes including **indicator monitoring** (report only) for pH, Total Suspended Solids (TSS), and Chemical Oxygen Demand (COD) for certain subsectors which do not have benchmark monitoring requirements; indicator monitoring for polycyclic aromatic hydrocarbons (PAHs) for certain subsectors and operators; **updated benchmark monitoring** (values and schedule); and **impaired waters monitoring**.
- Additional corrective action measures called “**Additional Implementation Measures**” (**AIM**) for benchmark monitoring exceedances in 3 tiers.

# Permit Streamlining

- Part 1: Eligibility Conditions
  - Geographic area
  - Discharge type
    - Authorized non-stormwater discharges
    - No construction
    - No individual permit
    - Not subject to Effluent Limitations Guidelines (ELGs) (except as noted)
    - No Endangered Species Act impact (Appendix E)
    - Meet National Historic Preservation Act requirements (Appendix F)
    - New dischargers comply with specific “impaired waters” requirements
  - Notice of Intent (NOI) procedures
    - Prior to submission requirements
    - Develop Stormwater Pollution Prevention Plan (SWPPP) (post, submit or describe)
    - Install Required Control Measures
    - Post a sign

# Part 2 Control Measures and Effluent Limits

- Technology-Based Effluent Limits (T-BELs)
  - Minimize discharges to the extent achievable in accordance with best industry practice
  - Control measures must be selected, designed, installed and implemented in accordance with good engineering practices and manufacturer's specifications
  - Include documentation and rationale in SWPPP
  - Address Stormwater Run-On
  - Review & Document Specific Design Considerations from 2.1.1 in SWPPP (6.2.4)
- New Requirement for Major Storm Events (2.1.1.8)
  - Determine if facility subject to flooding by reference to FEMA, NOAA, or USGS flood map products
  - Implement Structural Improvements
  - Implement enhanced/resilient pollution prevention measures
  - Other mitigation measures (consult list a. through g.)
  - Conduct specific staff training
  - Document in SWPPP (6.2.4)

# Specific Non-Numeric T-BEL Requirements

- Minimize exposure (2.1.2.1)
- Good Housekeeping (2.1.2.2)
- Maintenance (2.1.2.3)
- Spill prevention and response (2.1.2.4)
- Erosion and Sediment control (2.1.2.5)
- Manage stormwater (diversion, infiltration, re-use) (2.1.2.6)
- Salt piles (2.1.2.7)
- Employee training (2.1.2.8)
- Non-stormwater discharges (2.1.2.9)
- Vehicle tracking (dust generation) (2.1.2.10)
- **PLUS Sector Specific Requirements found in Part 8**
- **Document All in SWPPP**



# Table 2-1 Numeric Effluent Limitations from ELGs

- 9 Specific ELGs Applicable to Specific Sectors
  - Sector A Timber Products (spray down of logs)
  - Sector C Agricultural Chemical Manufacturing (fertilizer exposure)
  - Sector D Asphalt Paving and Roofing Manufacturing (runoff)
  - Sector E Cement Manufacturing (runoff)
  - Sector J Mineral Mining (dewatering)
  - Sector K Hazardous Waste TSD (runoff)
  - Sector L Non-Haz Landfills (runoff)
  - Sector O Steam Electric Generating (coal storage discharge)
  - Sector S Airports which use deicing (runoff)
- Details Found in Part 8
- Monitoring Requirements found in 4.2.3.1

# Water Quality-Based Effluent Limits (WQBELs)

- State Water Quality Standards (WQS) – Narrative Requirement
  - Presumed that Permit Compliance Meets State WQS
- Check State Water Quality Certifications in Part 9 for Additional Requirements
- Impaired Waters Specific Requirements
  - New dischargers have higher hurdles
  - Need to identify the first water of the U.S. into which facility is discharging
  - Special requirements for TMDLs
  - Impaired Waters Special Monitoring Requirements
    - Annual monitoring for all impaired pollutants in Year 1
    - Annual monitoring for facility-specific pollutants in year 4
    - Continued annual monitoring if pollutant detected in either case

# Part 3 Inspections and Visual Assessments

- Two Distinct Categories
- Qualified Personnel –
  - Trained member of stormwater pollution prevention team or consultant (accompanied by a member of SWPP Team)
- Areas which must be inspected
  - Based upon prior year's results
  - Specific areas designated in SWPPP
  - Materials/activities exposed to stormwater
  - Spills or leaks
  - Discharge points
  - Control Measures
- Specific List from Permit of what to look for (3.1.3)
- At least quarterly (and more frequent if needed)
- Document findings (avoid template/boilerplate language; include photos) & keep with SWPPP

# Visual Assessments

- Quarterly
- Grab samples
- Collected within first 30 minutes of storm event discharge, if possible (and explain why not)
- Document details & keep with SWPPP
- Look for specific characteristics listed in permit (3.2.2.4) and document
- Initiate Corrective Action whenever evidence of stormwater pollution

# Monitoring Requirements - More complicated

- Every facility now has some sort of monitoring
  - Indicator Monitoring – Report Only for pH, TSS, COD on quarterly basis for entire term
  - Certain facilities (by sector & seal-coat) – Bi-annual PAHs in years 1 and 4
  - Benchmark monitoring by Sector (quarterly) in at least year 1 and 4 (Part 8)
  - Numeric ELG monitoring by Sector & activity annually (exceedance = violation)
  - Impaired Waters with or without TMDL
  - State or tribal requirements (Part 9)
  - Site-specific requirements when notified by EPA
- Benchmark Monitoring results directly implicate Corrective Action
  - Additional Implementation Measures (AIM) Tiered Response (Part 5.2)
  - Quarterly for first 4 quarters, unless exceedance (in which case must reset/continue)
  - Average over 4 quarters or less than 4 samples but exceed 4x benchmark
  - If no exceedance, then can skip until year 4 (4 quarters)
- Impaired Water Monitoring must continue if pollutant detected

# Corrective Action & AIM Tiered Response

- Corrective Action is required when
  - Unauthorized release or discharge
  - Violation of numeric ELG effluent limit
  - Control Measures are not stringent enough to meet narrative WQS or requirements of the permit
  - Control measures need repair/maintenance
  - Visual assessment shows evidence of stormwater pollution
- AIM Tiered Response
  - Tied directly to benchmark monitoring
  - Evaluated on a per parameter, per discharge point trigger
  - Exceedance means required action goes up a level
  - Deadlines measured from knowledge date (lab results received)
  - Process is sequential & level cannot be skipped
  - Reset to baseline only when AIM responses have been met & continued quarterly monitoring shows no exceedance

# AIM Tiered Response

- Required Action depends upon what level the facility is in when the exceedance occurs
  - Level 1 exceedance (same as 2015 procedure):
    - review SWPPP & Stormwater Control Measures within 14 days
    - Implement additional control measures, if necessary
    - Continue monitoring
    - Reset to baseline after 4 quarters with no exceedance
  - Go to Level 2 if exceedance in Level 1
    - Must implement additional pollution prevention & good housekeeping measures within 14 days
    - Continue monitoring
    - Reset to baseline after 4 quarters with no exceedance
  - Go to Level 3 if exceedance in Level 2
    - Must install additional permanent controls within 60 days (but must identify solution in 14 days)
    - Continue monitoring
    - Reset to baseline after 4 quarters with no exceedance
- Exceptions: natural background, run-on, or abnormal event (5.2.6)

# SWPPP – Part 6

- SWPPP is a living document requiring periodic revision based on observed conditions
- New major storm event design considerations
  - Describe Part 2.1.1.8 analysis used to evaluate risk of major storm events (6.2.4.6)
- Required Contents
  - SWPP Team
  - Site-specific description (details; site map with required elements from 6.2.2.3)
  - Summary of potential pollutant sources
  - Description of stormwater control measures
    - Include Part 8 and Part 9 requirements
  - Schedules & procedures
    - Don't forget employee training
  - Documentation to support eligibility
  - Signature (include delegation authority documentation)
- Public Availability



# Reporting Requirements – Part 7

- Appendix O – Summary of Submittal & Retention Requirements
  - Initial Submittals (Notice of Intent & SWPPP or No Exposure Certification) to NeT-MSGP
  - Changes (submit to NeT-MSGP)
  - Annual Reports due by January 30 to NeT-MSGP
  - Monitoring data to NetDMR (within 30 days of receipt of lab results)
    - Indicator Monitoring: every quarter for entire term
    - PAH Indicator Monitoring: twice a year in years 1 and 4
    - Benchmark Monitoring: 4 quarters in year 1 and 4 PLUS as required by AIM
    - ELG Monitoring (4.2.3): once a year for the entire term
      - PLUS 30 days after exceedance
    - Part 9 (state/tribal) requirements: as designated
    - Impaired Waters: once a year in year 1 and 4 PLUS continued if detections warrant

# Conditional "No Exposure" Exclusion

- Industrial materials and activities protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff eligible for exemption
  - No exposure certification must be provided (electronic submission)
  - Specific Form – Appendix K of the MSGP
  - Recertify every 5 years
  - Does not apply to construction industry subject to Construction General Permit
- Must confirm specified industrial activities are not exposed to precipitation (facility-wide) including using, storing or cleaning industrial machinery or equipment, waste containers, raw materials storage or handling, etc.

# Select EPA Web Links

- [Stormwater Discharges from Industrial Activities-EPA's 2021 MSGP | US EPA](#)
- [Industrial Stormwater Fact Sheet Series | National Pollutant Discharge Elimination System \(NPDES\) | US EPA](#) (Sector Specific-Updated February 2021)
- [Updated Industrial SWPPP Guidance](#) —Provides guidance on developing a SWPPP that meets MSGP requirements (Updated March 2021)
- [Updated EPA Industrial SWPPP Template \(Word\)](#)(27 pp, 117 K, February 2021) —Provides a template that industrial facilities can use to create their SWPPPs.

# Thank You

Dianne R. Phillips

617-573-5818 (o)

339-221-0975 (m)

[dianne.phillips@hklaw.com](mailto:dianne.phillips@hklaw.com)

[Dianne R. Phillips | Professionals | Holland & Knight \(hklaw.com\)](#)