EPA’s Proposed 2020 Multi-Sector General Permit (MSGP) for Industrial Stormwater Discharges

Emily Halter
US EPA
Before We Get Started

Language in this presentation is not the official proposal of the EPA. We have attempted to be accurate as to the contents of the proposed permit. To the extent any difference between the language in this presentation differs from the language in the proposed permit, the permit governs.
Most new proposed requirements were informed by the 2016 settlement agreement and/or the 2019 National Academies study.

The purpose of every proposed requirement is ultimately to minimize discharges of pollutants in stormwater from industrial activity.

Not all requirements will apply to every facility, and even if they apply to you, they might not apply all of the time.

This presentation is just an overview of the proposed permit.

Help us by commenting and providing additional data on pollutants, control measures, and costs.
PERMIT BACKGROUND
How does EPA regulate industrial stormwater discharges?

**Permit:** MSGP

**Regulations:** 40 CFR 122.26(b)(14)

**Statute:** CWA 402(p)
PERMIT:
MSGP

PREPARE
- Meet Eligibility Conditions
- Develop SWPPP

GET COVERED
- Receive NOI Authorization

TAKE ACTION
- Install Control Measures to Meet Effluent Limits
- Conduct Monitoring
- Conduct Inspections

FOLLOW-UP
- Complete Any Corrective Actions and/or AIM As Required
- Complete Reporting
Is there an exclusion?

Conditional Exclusion for “No Exposure”*

If all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff – No MSGP needed

☑ No exposure checklist
☑ Submit certification online

*Some exceptions apply; does not apply to category x.
*EPA will transfer permitting authority to Idaho for stormwater permits in 2021.
How many facilities are there?

~2,400

MA: 788
NM: 627
PR: 308
NH: 293
ID: 270
DC: 49
OK: 19
TX: 18
WA: 13
GU: 12
AK, AS, CO, DE, ME, MW, ND, PA, SD, UT, VT, WI <10
## What sectors are covered?

<table>
<thead>
<tr>
<th>Sector</th>
<th># of Facilities Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Land Transportation</td>
</tr>
<tr>
<td>J</td>
<td>Mineral Mining</td>
</tr>
<tr>
<td>N</td>
<td>Scrap Recycling</td>
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<tr>
<td>E</td>
<td>Glass, Clay, Cement</td>
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<tr>
<td>S</td>
<td>Air Transportation</td>
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<td>Q</td>
<td>Water Transportation</td>
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<td>M</td>
<td>Auto Salvage Yards</td>
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<tr>
<td>D</td>
<td>Asphalt/Roofing</td>
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<tr>
<td>U</td>
<td>Food Products</td>
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<tr>
<td>A</td>
<td>Timber Products</td>
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<tr>
<td>C</td>
<td>Chemical Products</td>
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<tr>
<td>Y</td>
<td>Rubber, Misc. Plastics</td>
</tr>
<tr>
<td>R</td>
<td>Ship/Boat Building, Repair</td>
</tr>
<tr>
<td>AA</td>
<td>Fabricated Metal Products</td>
</tr>
<tr>
<td>AC</td>
<td>Electronic, photo goods</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>G</td>
<td>Metal Mining</td>
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<tr>
<td>AB</td>
<td>Transportation Equip.</td>
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<tr>
<td>B</td>
<td>Paper Products</td>
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<tr>
<td>F</td>
<td>Primary Metals</td>
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<tr>
<td>I</td>
<td>Oil &amp; Gas</td>
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<tr>
<td>V</td>
<td>Textile Mills</td>
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<tr>
<td>H</td>
<td>Coal Mines</td>
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<tr>
<td>X</td>
<td>Printing, Publishing</td>
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<tr>
<td>O</td>
<td>Steam Electric</td>
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<td>T</td>
<td>WWTPs</td>
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<tr>
<td>W</td>
<td>Furniture &amp; Fixtures</td>
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<tr>
<td>L</td>
<td>Landfills</td>
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<tr>
<td>AD</td>
<td>Non-classified</td>
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<tr>
<td>K</td>
<td>Hazardous Waste</td>
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<tr>
<td>Z</td>
<td>Leather Tanning/Finishing</td>
</tr>
</tbody>
</table>
PROPOSED CHANGES
Eligibility & Authorization
Expand **CERCLA eligibility criterion** to all Regions

**2015 MSGP**

Operators discharging to certain CERCLA sites in Region 10 are ineligible for coverage unless the Region reviews SWPPP and confirms that controls are sufficient to ensure that discharges meet WQS (and do not re-contaminate the site).

**Proposed 2020 MSGP**

Propose the same eligibility criterion for operators discharging to certain CERCLA sites in **all Regions**.

**Bottom Line**

Facilities discharging to certain CERCLA sites in all areas where MSGP applies would need to have the EPA Region review their SWPPP, instead of just in Region 10.
### New eligibility criterion related to coal tar sealcoat use

<table>
<thead>
<tr>
<th>2015 MSGP</th>
<th>PROPOSED 2020 MSGP</th>
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<tbody>
<tr>
<td>No equivalent requirement</td>
<td>Propose for comment an eligibility criterion for operators who, during their coverage under the MSGP, will use coal tar sealant to initially seal or to re-seal pavement and thereby discharge polycyclic aromatic hydrocarbons (&quot;PAHs&quot;) in stormwater are not eligible for coverage under the MSGP and must either eliminate such discharge or apply for an individual permit.</td>
</tr>
</tbody>
</table>

**Bottom Line**

Facilities who need NPDES permit coverage and use coal tar sealcoat would be ineligible for MSGP coverage and would have to eliminate the discharge or apply for an individual permit.
Extended **NOI review time** for facilities with a pending enforcement action

<table>
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<tr>
<th>2015 MSGP</th>
<th>PROPOSED 2020 MSGP</th>
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<tbody>
<tr>
<td><strong>EPA holds all facilities’ NOIs for 30 days</strong> to allow the Agency, Endangered Species Services, and the public an opportunity to review the facility’s NOI (not a public comment period)</td>
<td><strong>Request comment on whether EPA should hold a facility’s NOI for 30 additional days to review the integrity of the SWPPP and controls for a facility not previously covered under the MSGP that also has a pending industrial stormwater related enforcement action.</strong></td>
</tr>
</tbody>
</table>

**BOTTOM LINE**

EPA would review the NOI for new MSGP facilities with a pending enforcement action for 60 days instead of 30 days.
## Post a sign of permit coverage

### 2015 MSGP

No equivalent requirement in MSGP (but is in CGP and other NPDES permits)

### Proposed 2020 MSGP

Propose that facilities must **post a sign of permit coverage** at a safe, publicly accessible location in close proximity to the facility, including information that informs the public on how to contact EPA if stormwater pollution is observed in the discharge.

### Bottom Line

Facilities would need to post a sign that includes facility information and how to obtain their SWPPP.
CONTROL MEASURES
Consider implementing **enhanced measures to mitigate asset and community impacts from stormwater discharge from major storm events**

<table>
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<th><strong>2015 MSGP</strong></th>
<th><strong>PROPOSED 2020 MSGP</strong></th>
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<tr>
<td>No equivalent requirement</td>
<td>Propose that facilities would be required to consider implementing enhanced measures such as structural improvements, enhanced pollution prevention measures, and other mitigation measures (permit gives examples) for facilities located in areas that could be impacted by stormwater discharges from major storm events that cause extreme flooding conditions.</td>
</tr>
</tbody>
</table>

**BOTTOM LINE**

Facilities at risk for extreme flooding conditions would be required to consider other measures, e.g., elevate materials, temporarily reduce outdoor storage, delay deliveries.
MONITORING
**All facilities** conduct benchmark monitoring for pH, TSS, and COD

**2015 MSGP**
Benchmark monitoring currently applies to 55% of MSGP facilities. The other 45% do not have any benchmark monitoring requirements.

**Proposed 2020 MSGP**
Propose that all facilities have “universal benchmark monitoring” of pH, TSS, and COD on a quarterly basis throughout the permit term.

**Bottom Line**
Facilities that did not have benchmark monitoring for pH, TSS, and COD previously would now need to monitor for those 3 “universal benchmark” parameters.
Increase **impaired waters monitoring** for 2 additional years but potentially narrow list of parameters

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<th>2015 MSGP</th>
<th>PROPOSED 2020 MSGP</th>
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<tr>
<td>Operators discharging to impaired waters must monitor once/year for <strong>all pollutants</strong> causing impairments and can discontinue monitoring if not detected or not expected in the discharge.</td>
<td>Propose that operators discharging to impaired waters must monitor once/year for <strong>only pollutants that are both causing impairments AND associated with the industrial activity or are benchmarks</strong>. After 3 years of monitoring, if not detected, can discontinue for remainder of permit term.</td>
</tr>
</tbody>
</table>

**BOTTOM LINE**

Facilities would monitor for 3 years for pollutants associated with industrial activity or are benchmarks that are also causing impairments, instead of monitoring for 1 year for all pollutants causing impairments.
**Update** some benchmark values, **add** flexibility and/or **suspend** others based on latest toxicity information

### 2015 MSGP

Existing benchmarks for Selenium, Arsenic, Aluminum, Cadmium, Magnesium, Iron, and Copper are based on outdated WQ criteria and/or toxicity data.

### PROPOSED 2020 MSGP

Propose to/request comment on:

- Revising selenium, arsenic, aluminum, cadmium benchmarks based on new FINAL EPA WQ criteria.
- Removing magnesium benchmark due to lack of documented toxicity.
- Suspending the iron benchmark due to lack of documented acute effects.
- Allowing facilities to conduct site-specific risk analysis for copper exceedances.

**Bottom Line**

The permit would include updated benchmark values based on revised WQ criteria, while other parameters would be suspended or have more flexibility.
Monitoring for 3 benchmark parameters **throughout the permit term**

### 2015 MSGP

Benchmark monitoring can be discontinued after 1 year if average does not exceed benchmark threshold.

### PROPOSED 2020 MSGP

Propose that facilities monitor and report for pH, TSS, and COD on a quarterly basis for the entire permit term to ensure facilities have current indicators of the effectiveness of their stormwater control measures throughout the permit term.

**BOTTOM LINE**

Facilities would be required to monitor for the 3 “universal benchmark” parameters of pH, TSS, and COD throughout the permit term.
Add benchmark monitoring for some sectors based on new scientific information

<table>
<thead>
<tr>
<th>2015 MSGP</th>
<th>PROPOSED 2020 MSGP</th>
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</thead>
<tbody>
<tr>
<td><strong>No benchmarks for:</strong></td>
<td><strong>Propose to add benchmarks:</strong></td>
</tr>
<tr>
<td>• Sector I: Oil and Gas</td>
<td>• Sector I: O&amp;G – ammonia, nickel, lead, nitrate-nitrogen, and zinc.</td>
</tr>
<tr>
<td>• Sector P: Land Transportation</td>
<td>• Sector P: Land Transportation – lead and mercury.</td>
</tr>
<tr>
<td>• Sector R: Ship &amp; Boat Building</td>
<td>• Sector R: Ship &amp; Boat Building – chromium, copper, lead, nickel, and zinc.</td>
</tr>
</tbody>
</table>

**BOTTOM LINE**

Approximately 530 facilities would now have these sector-specific benchmark monitoring requirements.
ADDITIONAL IMPLEMENTATION MEASURES (AIM)
**Additional Implementation Measures (AIM) for benchmark exceedances**

### 2015 MSGP

If a benchmark is exceeded, operators must review the control measures to see if modifications are necessary and continue monitoring until no exceedance.

### PROPOSED 2020 MSGP

- **Tier 1**: Benchmark exceeded by certain low thresholds, review the control measures to see if modifications are necessary and continue monitoring until no exceedance.

- **Tier 2**: Benchmark exceeded (or continually exceeded) by certain moderate thresholds, implement all feasible controls in EPA’s MSGP sector-specific fact sheets and continue monitoring until no exceedance.

- **Tier 3**: Benchmark exceeded (or continually exceeded) by certain high thresholds, install permanent structural source and treatment controls or consider infiltration and continue monitoring until no exceedance.

### BOTTOM LINE

Facilities would implement more robust controls for continued and/or significant exceedances. Exceptions for natural background sources and run-on are still available, in addition to two more for catastrophic event and no WQS exceedance.
# Additional Implementation Measures (AIM) for benchmark exceedances

## Tier 3

**Triggers:** If benchmark is exceeded (or continually exceeded) by certain **high thresholds**

- Install permanent controls
- Option to infiltrate
- Continue monitoring

**Responses:**

- Implement all feasible SCMs in EPA fact sheets (Appendix Q)
- Continue monitoring

**Deadlines:**

- 30 days; if infeasible, 90 days

**Exceptions:**

- Natural background sources
- Run-on
- Discharge does not result in exceedance of WQS

## Tier 2

**Triggers:** Benchmark is exceeded (or continually exceeded) by certain **moderate thresholds**

- Implement all feasible SCMs in EPA fact sheets (Appendix Q)
- Continue monitoring

**Responses:**

- Review SCMs
- Implement additional SCMs
- Continue monitoring

**Deadlines:**

- 14 days; if infeasible, 45 days

**Exceptions:**

- Natural background sources
- Run-on
- Single event was an aberration

## Tier 1

**Triggers:** Benchmark is exceeded by certain **low thresholds**

- Review SCMs
- Implement additional SCMs
- Continue monitoring

**Responses:**

- Review SCMs
- Implement additional SCMs
- Continue monitoring

**Deadlines:**

- 14 days; if infeasible, 45 days

**Exceptions:**

- Natural background sources
- Run-on
**AIM Tier 1 Triggers**

- **A**
  - 1 annual average over the benchmark
  - Graph showing average concentration for Year 1, with a benchmark threshold.

- **B**
  - 1 sample over 4 times the benchmark
  - Graph showing concentration for samples 1 through 4, with a benchmark threshold.
AIM Tier 2 Triggers

2nd annual average over the benchmark

2nd sample in 2-years over 4x the benchmark

1 sample over 8x the benchmark
**AIM Tier 3 Triggers**

**A**
- 3rd annual average over the benchmark

**B**
- 2 samples in 3-years each over 8x the benchmark

**C**
- 3rd sample in 3-years over 4x the benchmark

**D**
- 4 consecutive samples over benchmark & the average more than 2x benchmark
1. Eligibility related to use of cationic chemicals
2. Change NOI paper form
3. New acronym for the No Exposure Certification (NOE to NEC)
4. Alternative approaches to benchmark monitoring
5. Inspection-only option in lieu of benchmark monitoring
6. Information about polycyclic aromatic hydrocarbons (PAHs)
7. Modifying the method for determining natural background pollutant contributions
8. Clarifications to Sector G monitoring requirements
REQUEST FOR COMMENT #11: INSPECTION-ONLY OPTION IN LIEU OF BENCHMARK MONITORING

PROPOSED 2020 MSGP

- "light manufacturing" facilities
- 2 inspections per permit term
- Inspections conducted by a PE
**Key Cost Assumptions:**
- Many controls already implemented
- Cost calculation input factors
- Requirements are not uniform across facilities
- Discharge points and pollutants varies
- MSGP does not collect data on facilities that are small businesses
- Others
WHERE CAN I FIND THE PERMIT AND COMMENT?

COMING SOON TO A **Federal Register** near you…

**60-DAY COMMENT PERIOD**

**www.regulations.gov**

**SUBMIT COMMENTS THROUGH THE DOCKET**

Docket ID # EPA-HQ-OW-2019-0372

**PRE-PUB AVAILABLE ON EPA’S WEBPAGE**

www.epa.gov/npdes/proposed-2020-msgp-public-comment
THANK YOU!

EMILY HALTER

HALTER.EMILY@EPA.GOV

202-564-3324

INDUSTRIAL STORMWATER & CONSTRUCTION STORMWATER
2015 MSGP Litigation

2015 MSGP Issued

Environmental NGOs Challenge the Permit

Two Industry Groups Intervene

Action Stayed

Settlement Negotiations

2016 Settlement Agreement Signed
<table>
<thead>
<tr>
<th><strong>SETTLEMENT AGREEMENT</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>KEY TERM</strong></th>
<th>1) Fund NRC Study and consider recommendations</th>
</tr>
</thead>
</table>

| **PERMIT AUTHORIZATION TERMS** | 2) Expand CERCLA eligibility criterion to all Regions  
|                              | 3) Add new eligibility criterion related to coal tar sealcoat use  
<table>
<thead>
<tr>
<th></th>
<th>4) Extend NOI review time for facilities with a pending enforcement action</th>
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</thead>
</table>

| **MONITORING TERMS** | 5) Require Additional Implementation Measures (AIM) for benchmark exceedances  
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<tr>
<th></th>
<th>6) Increase impaired waters monitoring to 3 years but narrow list of parameters</th>
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</table>

| **OTHER TERMS** | 7) Compare EPA’s MSGP effluent limits with state MSGPs  
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<th></th>
<th>8) Update sector-specific fact sheets with available control measures</th>
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</thead>
</table>
2019 NRC Study

Settlement Agreement
- Fund NRC Study

NRC Study
- "Improving the EPA Multi-Sector General Permit for Industrial Stormwater Discharges" (2019)

Recommendations
- Monitoring
- Data Collection
- Retention

Proposed 2020 MSGP
Regulate non-industrial facilities with industrial activity under the MSGP (p. 26)

All facilities should conduct benchmark monitoring for pH, TSS, and COD (p. 27)

Add benchmark monitoring for some sectors based on new scientific information (p. 29)

Update some benchmark values, add flexibility and/or suspend others based on latest toxicity information (p. 32)

Encourage facilities to collect more stormwater control performance data to inform development of future effluent limits (p. 55)

Did not recommend developing new Numeric Effluent Limits at this time (p. 41)
DATA COLLECTION RECOMMENDATIONS

• Option to use **composite sampling** instead of grab sampling (p. 47)

• Require a **minimum of annual monitoring** for benchmark parameters throughout the permit (p. 49)

• Develop a **certificate program** in stormwater collection and monitoring (p. 51)

• Encourage state adoption of a **CWA national laboratory accreditation program** with a focus on stormwater, periodic interlaboratory calibration (p. 52)

• Implement a **tiered approach to monitoring** within the MSGP, including an inspection-only option for low-risk facilities in lieu of monitoring (p. 53)

• **Enhance electronic data** reporting and visualization (p. 63)
Rigorous site characterization, permitting, and monitoring are needed for any industrial stormwater infiltration to protect GW (p. 72).

National retention standards are infeasible within the current MSGP framework (p. 77).

Consider incentives to encourage infiltration or capture and use where appropriate (p. 79).

Develop guidance for retention and infiltration at industrial stormwater facilities (p. 79).