



## What is Stormwater?

- **“Stormwater” means runoff, snow melt runoff, and surface runoff and drainage.**
  - **Formal definition can be found at 40 CFR 122.26(b)(13).**
  - **Generated from rain and snow melt events that flow over land or impervious surfaces (e.g., paved streets, parking lots, rooftops) and does not soak into ground.**
- **National Pollutant Discharge Elimination System (NPDES) stormwater program regulates stormwater discharges from three potential sources:**
  - **MS4s**
  - **Construction activities**
  - **Industrial activities**





## Industrial Discharge



**Pollutant → Conveyance → Discharge to Waters of the State**



## Effects of Stormwater Runoff on Water Quality

- **Pollutants enter storm sewer systems and pollute stormwater through:**
  - **Urban/residential activities (e.g., roadways, landscaping).**
  - **Industrial activities exposed to stormwater.**
  - **Construction activities exposed to stormwater.**
  - **Illicit discharges (e.g., dumping used oil).**
  - **Illicit connections (e.g., Improper link between pipes carrying wastewater and a storm sewer system).**
- **Stormwater flows with untreated industrial contaminants going into receiving waters create waterbody impairments and negatively impact water quality. Many of these pollutants will not settle out or get treatment at the entry point to the water bodies, but may remain in the system for quite some time/distance.**





## Effects of Stormwater Runoff

Developed and disturbed land contributes to:

- **Water *quality* Impacts.**
  - **Pollutants** – lead to toxicity, acidity/alkalinity, oxygen consumption, others effects.
  - **Warmer water temperature.**
  - **Turbidity**
- **Water *quantity* impacts.**
  - **Increased runoff/reduced infiltration.**
  - **Changes to stream geomorphology.**
  - **Disturbed aquatic habitat.**
- **Can lead to impaired value or loss of use.**



## Pollutants That Affect Water Quality



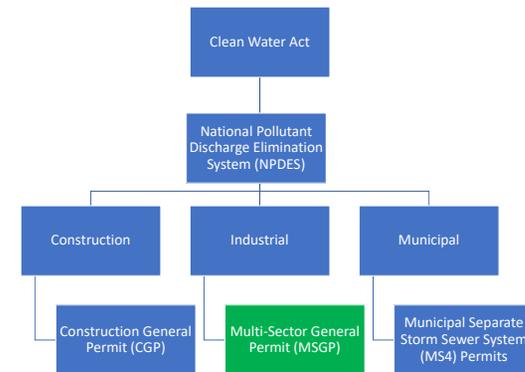


## Other Pollutants of Concern

- Can come from product or waste materials.
- Total suspended solids.
- Chemical and biochemical oxygen demanding substances.
- Heavy metals
- Nutrients
- Toxic organic chemicals
- Low/high pH
- Fats, oils and grease
- Soaps, detergents and surfactants
- Pharmaceuticals
- Other chemicals and substances – “biodegradable/environmentally friendly” may or may not be!



## MSGP Overview





## MSGP Overview

- **EPA Generic Permit for Storm Water Discharges Associated with Industrial Activities:**
  - Florida currently uses 1995 version.
  - Authorizes discharge of industrial stormwater and authorized non-stormwater discharges to Waters of the State.
  - Requires implementation of BMPs.



## Activities Covered by the MSGP

- 40 CFR 122.26(b)(14) defines “storm water associated with industrial activity” and identifies facility types subject to permitting.
- Primarily determined by Standard Industrial Classification (SIC) code.





## MSGP- 30 Sectors

A – Timber Products	P – Land Transportation
B – Paper & Allied Products	Q – Water Transportation
C – Chemicals & Allied Products	R – Ship & Boat Building
D – Asphalt Products	S – Air Transportation
E – Glass, Clay, Cement, Concrete, and Gypsum	T – Treatment Works
F – Primary Metals	U – Food Products
G – Metal Mining	V – Textiles, Fabric, Leather
H – Coal Mines	W – Furniture & Fixtures
I – Oil & Gas Extraction/Refining	X – Printing & Publishing
J – Mineral Mining	Y – Rubber, Plastic & Misc.
K – Hazardous Waste	Z – Leather Tanning/Finishing
L – Landfills	AA – Fabricated Metal
M – Auto Salvage Yards	AB – Transportation Equipment
N – Scrap Recycling	AC – Electronic, Electrical, Photographic, Optical goods
O – Steam Electric Generation	AD – Non-Classified Facilities



## MSGP Overview

- **The final 2021 permit was signed and issued on January 15, 2021**
- **The permit became effective on March 1, 2021**
  - **MA, NH, NM, ID, DC, Puerto Rico, other territories, Indian country lands, some federal facilities**
- **The permit is not effective in Florida until we adopt it**



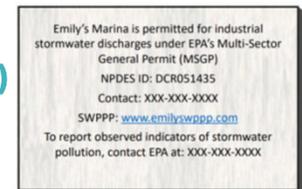
## 2021 MSGP Updates

- Changes may vary from sector to sector
- Changes may not be comprehensive of every detail
- Nothing will replace reading the permit and sector language



## Publicly Post Coverage

- Facilities must now post signage of permit coverage on/near the property for the public (Part 1.3.5)
  - Including facility contact information, how to obtain the stormwater pollution prevention plan (SWPPP), and how to contact the regulating agency





## Site Specific Records

Endangered/Threatened Species and Historic Preservation

- Facilities must maintain documentation with the SWPPP regarding Historic Properties Preservation, Endangered and Threatened Species, and Critical Habitat Protection (Parts 1.1.4 and 1.1.5)



## Enhanced Storm BMPs

- Facilities must now consider enhanced stormwater control measures to minimize impacts from major storm events (Part 2.1.1.8.)
  - Examples: elevate materials, delay deliveries, temporarily reduce outdoor storage





## Sampling Updates

Indicator Monitoring for pH, TSS, and COD

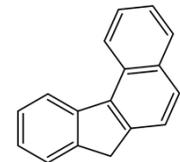
- **Facilities without benchmark monitoring must conduct “report-only” indicator monitoring for pH, total suspended solids (TSS), and chemical oxygen demand (COD) quarterly throughout the entire permit cycle (Part 4.2.1.)**
  - **Sectors B, C, D, E, F, I, J, L, N, O, P, R, T, U, V, W, X, Y, Z, AB, AC, AD**



## Sampling Updates

Indicator Monitoring for PAHs

- **Some facilities must conduct “report-only” indicator monitoring polycyclic aromatic hydrocarbons (PAHs) bi-annually throughout the 1<sup>st</sup> and 4<sup>th</sup> year of the permit (Part 4.2.1.)**
  - **Sectors A, C, D, F, H, I, M, O, P, Q, R, S**
  - **Facilities that use coal-tar seal coat**





## Sampling Updates

### Updated Benchmark Values

- Facilities that previously sampled for aluminum, copper, selenium, and cadmium may see updated benchmark values (Part 4.2.2.2.)
- Iron and magnesium have been removed as benchmark samples due to lack of documented toxicity.
- Facilities may be allowed to conduct site-specific risk analysis for aluminum and copper exceedances (Part 5.2.6.4.)



## Sampling Updates

### Updated Benchmark Monitoring Schedule

- Benchmark monitoring required quarterly during the first four quarters of permit coverage (Part 4.2.2.)
  - If below threshold limit, the facility can discontinue until the 4<sup>th</sup> year when quarterly monitoring is required again.
- \* *Previously* the facility was able to waive this 4<sup>th</sup> year monitoring if the results were low enough.





## Sampling Updates

### Monitoring for Discharge to Impaired Waters

- **Facilities discharging to impaired water bodies with or without a TMDL must monitor once during the 1<sup>st</sup> year of permit coverage for all pollutants causing impairment (Part 4.2.3)**
- **The facility must monitor again once during the 4<sup>th</sup> year of the permit for only pollutants associated with their industrial activities.**
- **If pollutants are not detected the facility can discontinue monitoring.**



## AIM for Benchmark Exceedances

### Additional Implementation Measures (AIM)

- **Level 1: If an exceedance occurs the facility must review the SWPPP and control measures, implement additional measures if necessary, and continue monitoring until they do not have an exceedance (Part 5.2.3.)**





## AIM for Benchmark Exceedances

### Additional Implementation Measures (AIM)

- **Level 2: If an exceedance occurs again while the facility is in Level 1, the facility must implement additional pollution prevention measures, follow good house keeping, and continue monitoring until they do not have an exceedance (Part 5.2.4.)**



## AIM for Benchmark Exceedances

### Additional Implementation Measures (AIM)

- **Level 3: If an exceedance occurs again while the facility is in Level 2, the facility must install permanent structural source and treatment controls and continue monitoring until they do not have an exceedance (Part 5.2.5.)**





## **Additional Resources**

- **2021 MSGP**
  - Includes the permit, sector language, forms, appendices, etc.
- **Florida Division of Historical Resources**
- **Florida Fish and Wildlife Conservation Commission**
  - Information for Planning and Consultation tool can assist with critical species identification.



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