NPDES Storm Water Permits For WWTPs

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NPDES Permit Coverage

Required for storm water discharges associated with industrial activities

Storm Water Discharges Associated with Industrial Activities are:

- Plant yards, manufacturing buildings, access roads/call lines, material handling sites, refuse/disposal sites, material handling equipment storage, maintenance areas, shipping/receiving areas, material storage areas, and areas where industrial activity has taken place in the past and significant materials remain.

Except where a condition of No Exposure exists.

NPDES or NOE?

Potential Discharge to Surface Water or Storm Sewer System?

- "No" = No further action

Facility falls under the SIC codes or narratives in 40 CFR 122.26?

- "No" = No further action

Exposure of industrial materials or activities to storm water?

- "No" = Submit No Exposure Cert. (NOE) Maintain condition of no exposure. Resubmit NOE every 5 yrs.
- "Yes" = Submit NPDES application

No Exposure

"All industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff."

- Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, by-products, final products, and waste products.

- Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. Past sources of storm water contamination that remain on site cause condition of exposure.

- Storm-resistant shelters include completely roofed and walled buildings, or structures, as well as structures with only a top cover but no side coverages, provided material under the structure is not otherwise subject to any run-on and subsequent runoff of storm water.

No Exposure

- Tarps are temporary. To be eligible for NOE, only allowed during renovations/construction

- Available on a facility-wide basis only

- Industrial materials from prior activities = exposure

Courtesy of Dan Bogoevski, Ohio EPA
Prevent & Minimize Discharge of Pollutants thru Best Management Practices (BMPs)

Develop Storm Water Pollution Prevention Plan (SWP3)

• Drawings and Narrative
  - ID Potential Sources of Pollution
    - What BMPs are implemented?
    - Where are they isolated?
    - When are they performed?
  - Require BMP implementation for:
    - Good Housekeeping, Preventative Maintenance, Spill Prevention and Response, Inspections, Employees Training, Sediment & Erosion Controls, Storm Water Management
    - Assess for Non Storm Water discharges
    - Annual Evaluation of site and SWP3
    - Document!

Still develop SWP3, implement BMPs, but has industry (Sector) specific language

• Sector T: Treatment Works
  - i.e. Show sludge drying bed and septage receiving on site map
  - Inspections: minimum quarterly (calendar) facility inspections of areas where industrial materials or activities are exposed and all storm water control measures.
    - One each year conducted when storm water discharging
    - Sector T: Include access roads/rail lines, grit/housings, and other solids handling/storage/disposal areas; sludge drying beds; sludge piles; compost piles, septage or hauled waste receiving station

Quarterly visual assessments are conducted on grab samples taken during a storm event

- Color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, any other obvious pollution indicator.
- Allowed to sample one outfall when have "substantially identical"

Annual Employee Training

- Sector T: petroleum product management & fueling, process chemical management, spill prevention and control, good housekeeping, fertilizer & pesticide management.

Spills and leaks of process materials & chemicals

- Sludge handling/transfer
- Septage handling/transfer
- Equipment & vehicle maintenance/storage
- Grounds maintenance (pesticides, fertilizer, erosion)
- Other municipal activities:
  - Spoil piles, bone yards, compost yard waste, recycling stations, street sweepings/catch basin cleaning, and yes, even road kill

Divert runoff from sludge handling/storage and grit handling areas

- Promptly clean-up any spilled material

Secondary containment

- Double wall tanks
- Aeming
- Spill kits, sewer shut off valves
Vehicle Maintenance
- Perform indoors
- Use drip pans, funnels
- Spill kits/promptly clean-up spills
- Hot drain oil (filters 12 hr. min)
- Store wastes properly
- Label containers
- Waste oil = onsite heating or offsite recycler
- Make sure sinks/floor drains go to sanitary!

Equipment/Vehicle Washing BMPs
- Perform indoors & drain to sanitary
- Commercial wash facility
- Outdoors: dam and pump pipe/plastic tarp/wet vac
- Small quantities: may be able to wash over grassy area; infiltrate

Tank BMPs
- Level alarms
- Secondary containment
- Observe material transfer
- Routine inspections/Maintenance
- Drain seals/valves
- Spill kits
- Drip pans - empty please!

Waste Material BMPs
- Develop a written disposal plan for materials
- Materials removed from MS4
- Treat as solid waste
- May be hazardous waste
- Train employees on proper storage and disposal

Waste Material BMPs
- Store inside
- Clean up after loading/unloading
- Use lids, tarp, or rolling covers
- Sealed bins

Street Sweeping & Catch Basin Cleaning BMPs
- Don't mix with soil/sediment
- Solid Waste = Landfill
- Dewatering pad
- Covered/sealed rolloffs
- No discharge to surface water
- See "Equipment Washing"
**Erosion Control**
- Matting
- Temporary Seeding & Mulching
- Stone Haul Road

**Sediment Control**
- Inlet Protection
- Silt Fence Barriers
- Sediment Pond

**Composting/Yard Waste**
- Can not discharge leachate
- Use berms/cover to minimize & control
- Recirculate leachate

**Other Sources**
- Bone Yards:
  - If you don’t need it, dispose of it
  - Rinse = wastewater ➔ sanitary
  - Concrete
  - Paint brushes
  - Pesticide/ fertilizer applicators
  - Batteries – store under cover
  - Drums – keep in good condition and securely closed

**Material Handling**
- Load/unload inside
- Sweep up spilled material immediately
- Store materials away from catch basins/surface water
- Keep salt covered
- Do not use broken asphalt to stabilize channels
- Asphalt based sealants – not coal-tar

**Sediment & Erosion BMPs**
- Stabilize ASAP, even spoil piles
- Some kind of cover
- Watch slopes & high traffic areas
- Inlet protection & Silt fence
- 1 to 2 Road Construction General Permit
Storm Water Management BMPs

- Reduce imperviousness
- Infiltrate
- Treat
- Green in between

Some BMPs involve capital investment, but more involve changes in procedures, behavior, and awareness.
This isn’t the time to start thinking about storm water...

Questions?