Industrial Stormwater Inspections

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Storm Water Permits

- There are three general stormwater permits:
  - The general construction permit (ILR10), which was reissued July 30, 2013
  - The Small Municipal Separate Storm Sewer Systems (MS4) permit (ILR40), which is under final review at IEPA
  - The general permit for storm water associated with industrial activities (ILR00), which is currently under review for renewal at the USEPA
Possible future permits

- Agency is considering separate general MS4 permits for permittees that discharge to Lake Michigan or to the Fox River Basin
  - These permits would focus on TMDL requirements for these two watersheds
Comparing Requirements

- The following slides will compare monitoring and inspection requirements related to MS4 communities and the industrial sector.
MS4 Requirements relating to Industry

- MS4 permittees need an enforceable program to detect and eliminate illicit discharges in their community
- This program needs to include:
  - Educating businesses on illicit discharges and on reporting of releases and spills to the storm sewer system
  - Developing a storm sewer map and identifying outfalls
  - Inspecting outfalls for illicit discharges and non-stormwater discharges and conducting follow-up if found
  - Identifying industries that have potential for causing storm water pollution in their community
Industrial Permittee Requirements

- Industries that have been identified by their sector as having the potential to cause storm water pollution are required to be covered under the general industrial storm water permit.

- These industries are supposed to inform the MS4 community if they have a permit, but not all of them do.

- You can check if an industry is currently covered at: http://dataservices.epa.illinois.gov/NoticesOfIntent/IndustrialQuickSearch.aspx
Industrial Permittee Requirements

• In general, industrial permittees need to do the following:
  • Prepare a Storm Water Pollution Prevention Plan (SWPPP) for their site, including maps, narrative description and best management practices, etc.
  • Confirm that they don’t have industrial waste or process water mixing with storm water
  • Quarterly monitor their storm water discharges
  • Do an annual inspection of their facility and report this to the IEPA
Exceptions

- Some industries require an individual permit or sector permit instead. This includes industries that are subject to effluent limitations, such as coal mines, fertilizer manufacturers, hazardous waste treatment facilities, etc.
- Some industries can also get an exemption if they do not store materials where they are exposed to storm water, but they have to apply for this and certify that they meet the requirements.
Monitoring Requirements
New MS4 monitoring requirements

- New MS4 permit is going to require upstream and downstream monitoring of major waterways for:
  - Total suspended solids
  - Total Phosphorus
  - Total Nitrogen
  - Fecal Coliform
  - Chlorides
  - Oil and Grease
  - Any other pollutants identified if the receiving water is identified as impaired

- You can partner with upstream & downstream communities for this.
New monitoring requirements for industries

- Industries covered under the general industrial permit are going to have benchmark monitoring.
- Parameters to be monitored will be based on their industrial sector.
- Exceedance of a benchmark parameter will only be considered a violation if they do not correct the cause of the exceedance, or if it can be proved to be caused by natural factors or a run-on source.
- An attachment to the new permit will list the benchmark monitoring parameters by sector.
Benchmark Monitoring Requirements

- Four quarterly samples taken during runoff events for parameters identified for the industrial sector, and then averaged.
- If the average does not exceed the benchmark value listed, then no additional monitoring is required.
- If the average exceeds the benchmark value, then industry needs to take corrective actions and test for an additional four quarters.
Benchmark Monitoring Examples

- Sector C: Chemicals and Allied Products
  - Subsector C3: Soaps, Detergents, Cosmetics & Perfumes
    - Test for Nitrates, Nitrites, Total Nitrogen, & Zinc
- Sector D: Asphalt Paving & Roofing Materials and Lubricant Manufacturing
  - Subsector D1: Asphalt Paving & Roofing Materials
    - All facilities, test for TSS
    - Emulsion facilities, test for TSS, pH and Oil & Grease
- Sector M – Auto Salvage Yards
  - Test for TSS, Aluminum, Iron and Lead
Inspections
MS4 Industrial Inspections

- Focus on industries that have the potential to cause water pollution
- Look for materials stored outside, staining, spilled materials, unusual colors or sheens in and on water
- Look for fuel tanks, outdoor storage containers, etc.
- Do they salt their parking lots and pavements in winter?
- Look at adjacent ponds and outfalls for evidence of illicit discharges
- Be prepared to sample, if needed. Benchmark parameters in new industrial permit could be used as a guide.
Examples
Examples
Examples
Examples
IEPA Industrial Inspections

- Focus is on compliance with industrial SW permit
  - Do they have a SWPPP?
  - Is the SWPPP complete and appropriate for the site?
  - Is the SWPPP up to date?
  - Are they conducting their quarterly monitoring?
  - Are they conducting an annual inspection and submitting their report?
  - Are they doing WQ monitoring, and if so, what are the results?
  - Does the site walk through indicate any concerns?
IEPA Industrial SW Checklist

- Checklist includes the following categories
  - Basic info (name, location, type of business, contacts)
  - Plan Prep & Submittal (Plan complete? E- Submittal?)
  - Topo Map, including site location and adjacent waterways and potable wells
  - Site Map, including pervious/impervious areas, loading docks, outside material storage, drainage patterns, etc.
  - Narrative description of facility’s activities and types of pollutants on site
  - SWPPP personnel
IEPA checklist, cont.

- Preventative Maintenance
- Good Housekeeping
- Spill Prevention & Response
- SW Management Practices
- Sediment & Erosion Protection
- Employee Training
- Inspection Procedures
- Non-Storm Water Discharges, if any
- Inspection Reports
- Any additional requirements imposed by MS4?
For More Information:

- IEPA SW permits and related information
  - [http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/index](http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/index)
- USEPA industrial permit information
- Springfield contacts:
  - Cathy Demeroukas & Melissa Parrott
  - Permit Section 217-782-0610
Questions?

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