

Storm Water Permitting at Solid Waste Landfills

Solid Waste Interested Parties Meeting
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Storm Water Permit Coverage for Solid Waste Facilities

Background

- Industrial and Construction Facilities need Storm Water permit coverage under the federal Clean Water Act (CWA).
- Chapter NR 216 is Wisconsin's Storm water Discharge Permit Code that provides CWA coverage.
 - It establishes the types of permits, depending on the project.
 - It establishes when a permit is needed.
 - It establishes some performance standards that need to be met.

Storm Water Permit Coverage for Solid Waste Facilities

- Solid waste landfills have not been required to obtain a Wisconsin Pollutant Discharge Elimination System (WPDES) permit for storm water:
 - if they are in compliance with another Departmental permit or approval with appropriate storm water controls that are at least as stringent as those in ch. NR 216, Wis. Adm. Code.
- Sections: **NR 504.09 (1)**, NR 506.07 (2), NR 512.14 (1) (e), NR 512.16 (2) (b), NR 514.05 (6) and NR 514.06 (5), Wis. Adm. Code establish storm water control standards for solid waste disposal facilities.
- Landfill soil borrow areas need to comply with the storm water management requirements of s. NR 504.075 (9).
- NR 504.09 (1), Wis. Adm. Code establishes that sediment control measures shall be designed to settle 0.015 mm (15 micron) size particles for all storms up to and including the 25 year, 6-hour storm.

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- Chapter NR 151, Wis. Adm. Code was promulgated in 2002 which establishes performance standards for construction sites.
- Ch. NR 216 has been updated to incorporate ch. NR 151, which references published storm water management technical standards for construction sites.

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- A solid waste landfill itself is considered an industrial activity as provided in s. NR 216.21 (2) (b) 7.
- However, ancillary land disturbances on the facility property are common, such as waste processing or storage, road construction, soil berm construction and soil stockpiling, and are land disturbing construction activities as defined in s. NR 216.002 (14) and construction sites as defined in ss. NR 216.002 (2) and NR 151.002 (7).
 - These activities and/or source areas should meet the applicable storm water management performance standards established in ch. NR 151.
 - Ch. NR 151.11, Construction Site Performance Standard for New Development and Redevelopment, applies.

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- The DNR has developed and published technical standards under s. NR 151.31 to assist with meeting the applicable performance standards.
 - Generally, the technical standards attempt to achieve a percentage of sediment reduction in the storm water runoff, based on the dominant soil type at the site.
- Section NR 504.09 (1) is no longer consistent with some of the storm water performance standards in NR 216 and the technical standards developed pursuant to ch. NR 151.31.
- Section NR 504.09 (1) will not likely be updated in the immediate future.
- Therefore, the practice of not requiring separate NR 216 storm water discharge permits at these facilities may no longer be appropriate.

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- **A couple of significant differences between the ch. NR 151 technical standards and s. NR 504.09 (1):**
 - NR 504.09 requires a basin to be dry (complete drain down over 3 days), whereas, the Wet Detention Pond Technical Standard 1001 requires a permanent pool of 3 feet in depth plus additional depth for sediment storage.
 - NR 504.09 (1) (e) requires that a 15 micron sized particle be settled out while **Standard 1001** is designed for 80% sediment trapping efficiency based on the dominant soil class entering the basin, which is 2 microns for clay, 5 microns for silt, and 20 microns for sandy soils.
 - **Compliance with the technical standards may mean a larger sedimentation basin and will mean a different design than that required by s. NR 504.09 (1).**
- **A couple of significant differences between NR 504.09 (1) and NR 216:**
 - NR 216.28 (2) Annual Site Inspections – Annual facility site compliance inspections shall be performed and documented
 - NR 216.28 (3), Quarterly Visual Inspections – Inspections shall be conducted within the first 30 minutes or as soon thereafter as practical, but not exceeding 60 minutes, after runoff begins discharging at an outfall. The inspections shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen or other obvious indicators of storm water pollution.

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- The Watershed Management Program (WSMP) and the Waste and Materials Management Program (WMMP) are discussing how to best handle this situation, so that facilities maintain compliance with the CWA.
- One option would be for Waste Facilities to obtain a separate General Tier 2 Industrial Storm Water Permit.

Under this scenario:

- Applicants would apply for a General Tier 2 WPDES Storm Water Discharge Permit when the Plan of Operation Report is submitted.
- After the General Tier 2 WPDES storm water discharge permit is reissued in 2016, all landfills would be required to apply for and obtain permit coverage.

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Goals:

- Facilities would have CWA Storm Water Discharge Permit coverage.
- Separate Permitting may lend some efficiency to plan review in that runoff evaluations and control feature designs will be reviewed by staff who know them best.
- Review staff in the WSMP and the WMMP should work together to coordinate and synchronize their reviews so that the approvals from both programs are consistent.
- The Plan of Operation Approval and the Storm Water Permit would be made at about the same time, if practicable.
 - However, owners may propose to start construction prior to the plan of operation approval being issued, in which case they may need to have the storm water discharge permit in hand at that time.
- WMMP staff would still conduct inspections and call out erosional problems or storm water control deficiencies, especially around landfill covers and soil stockpiles.

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