



BUREAU OF WATERSHED MANAGEMENT PROGRAM GUIDANCE

WATERSHED MANAGEMENT TEAM

Wisconsin Department of Natural Resources
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Storm Water Discharge Permit Coverage at Solid Waste Landfills

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This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

APPROVED:

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A. Applicability

This guidance is intended for use by DNR staff in the DNR Storm Water Management Program (SWMP) and the Waste and Materials Management Program (WMMP), landfill owners and operators, and consultants who work on landfills. The guidance applies to all active and proposed landfills¹, and non-commercial soil borrow sites for landfills regulated under the ch. NR 500 series of the Wis. Adm. Code.

Maintenance or remediation work at closed solid waste landfills, construction and operation of dredge material and low-hazard exemption land disposal facilities, and work at non-landfill solid or hazardous waste facilities may require coverage under a construction site and/or industrial storm water discharge permit.

B. Summary of Guidance

New Landfills or Landfill Expansions: Applicants for new landfills or landfill expansions are required to obtain coverage under the Tier 2 general industrial storm water discharge permit under ch. NR 216, Wis. Adm. Code, prior to construction and operation of the landfill or expansion.

Closed Landfills: Under s. NR 216.21(5)(d), Wis. Adm. Code, inactive, closed or capped landfills that have no potential for contamination of storm water are excluded from industrial storm water permit coverage. Therefore, closed landfills with no source areas of storm water contamination do not require coverage under the Tier 2 general industrial storm water permit. Determinations of the contamination potential of a closed landfill will be made on a case-by-case basis by the DNR.

C. Background

Sections NR 216.21(4) and 216.42(6), Wis. Adm. Code, authorize the DNR to determine that a facility is in compliance with permit coverage required under s. 283.33, Wis. Stats., and will not be required to hold a separate permit if storm water discharges are in compliance with another DNR permit or approval that includes storm water control requirements at least as stringent as those in subch. II of ch. NR 216, Wis. Adm. Code, for industrial facilities and subch. III of ch. NR 216, Wis. Adm. Code, for construction sites.

In 1997, shortly after the storm water regulations were adopted in Wisconsin, the SWMP and the WMMP agreed on an approach to permitting that would streamline storm water management requirements for landfills regulated under the ch. NR 500 code series and reduce regulatory redundancy. Invoking the provisions of ss. NR 216.21(4) and 216.42(6), Wis. Adm. Code, the DNR did not require separate storm water discharge permit coverage under subchs. II or III of ch. NR 216, Wis. Adm. Code, for proposed, active, or closed landfills or non-commercial landfill soil borrow sites. Instead, landfills and non-commercial landfill borrow sites were required to comply with the storm water management requirements of ss. NR 503.10 (3) (f), 504.09 (1), 506.07 (2), 512.14 (1) (e), 512.16 (2) (b), 514.05 (6), and 514.06 (5), Wis. Adm. Code. Landfill non-commercial soil borrow sites were to comply with the storm water management requirements of s. NR 504.075 (9), Wis. Adm. Code.

Landfills proposed after 1997 were approved by the DNR with storm water management systems designed to meet the performance standards contained in s. NR 504.09 (1), Wis. Adm. Code. The proposed storm water management plan and engineering details were written into landfills plan of operation reports and approved with conditions as needed. Compliance inspections were performed by WMMP staff.

¹ Section NR 500.03 (120), Wis. Adm. Code, defines “landfill” as a land disposal facility, not classified as a landspreading facility or surface impoundment facility, where solid waste is disposed on land by utilizing the principles of engineering to confine the solid waste to the smallest practical area, to reduce it to the smallest practical volume, and to cover it with a layer of earth or other approved material as required.

In 2011, the USEPA notified the DNR that as a result of its WPDES program review, the discretion allowed the DNR under ss. NR 216.21 (4) and 216.42 (6), Wis. Adm. Code, is not consistent with federal law. Second, the SWMP adopted ch. NR 151, Wis. Adm. Code, which establishes performance standards for construction sites and post-construction activities. As a result, formal compliance with the construction site and post-construction performance standards in subch. III of NR 151, Wis. Adm. Code, is required under ch. NR 216, Wis. Adm. Code, and the associated construction site general permit.

D. Storm Water Regulations Applicable to Landfills

Landfills are subject to three areas of storm water regulation:

- The operation of a landfill is considered an *industrial* activity as provided in s. NR 216.21 (2) (b) 7, Wis. Adm. Code, and subject to industrial storm water permitting. An industrial permit is an operational permit under which a Storm Water Pollution Prevention Plan, or SWPPP, is developed and implemented to address not just erosion/sediment control issues, but also any other storm water material exposure issues.
- In addition, common construction activities for ancillary land disturbances of one acre or more on landfill properties such as waste processing or storage, road construction, soil berm construction and soil stockpiling are *land disturbing construction* activities as defined in s. NR 216.002 (14), Wis. Adm. Code. Therefore, these ancillary activities and construction of a landfill itself are considered construction sites as defined in s. NR 216.002 (2), Wis. Adm. Code, and must meet the applicable construction site and post-construction performance standards established in ch. NR 151.
- The storm water management standards in s. NR 504.09 (1), Wis. Adm. Code, are different than the requirements of chs. NR 216 and 151, Wis. Adm. Codes; however, the NR 504.09(1) standards still apply, in addition to the NR 216 and NR 151 requirements.

Although landfills could be required to obtain both an industrial storm water permit and a construction site storm water permit when initially constructed, the storm water program regulates erosion and sediment control issues through the industrial storm water permit if land disturbance is an ongoing characteristic of an industrial operation. Solid waste landfills are extensive in area, conduct multiple construction and industrial types of operations, are decisively not residential activities, are conducted over extended timeframes, and may have continuing obligations for care and maintenance for decades after closure. In contrast, a construction site storm water permit is meant to regulate construction activity of a limited time period, usually less than 3 years in duration.

Since a landfill is typically active far beyond 3 years, has soil exposure as an ongoing characteristic, has exposure of material beyond soil, and its sediment control practices are more static than other types of development, landfills are more appropriately covered under an industrial (in this case, a Tier 2) storm water permit rather than the construction site storm water permit.

Note that the internal drainage within a landfill that is captured and treated through the leachate collection system is managed as a wastewater, not storm water. The regulatory framework described below does not apply to any area where all drainage at all times is captured and treated through the landfill leachate collection system.

E. Guidance

Ensuring Compliance with NR 151 Performance Standards: The current Tier 2 general industrial storm water permit contains a requirement to comply with the applicable construction site and post-construction performance standards in ch. NR 151, Wis. Adm. Code, to address ongoing land disturbance activities at landfills.

The DNR anticipates sites needing separate construction site storm water permit coverage would be an exception, but it is possible that some non-commercial soil borrow sites will have a higher likelihood of needing

construction site permit coverage since they involve mass soil excavation and movement away from the landfill site.

Coordination: Both SWMP and WMMP staff will coordinate and synchronize their review activities as much as possible so that the approvals from both programs are timely and consistent. Generally, this means that a storm water permit will be issued approximately in conjunction with issuance of a solid waste plan of operation approval.

Since WMMP staff has more routine interactions with landfill operations, the WMMP will conduct inspections and document erosion and storm water management issues. Compliance oversight will be shared by both DNR programs. In cases where there are violations of the approved plan of operation or solid waste codes, the WMMP may take the lead on enforcement. In cases involving violations of the storm water permit or code, the SWMP may take the lead on enforcement. In some cases, joint program enforcement may be warranted. As needed, WMMP staff will seek assistance from storm water staff with storm water technical and compliance issues.

New Landfills or Landfill Expansions: Applicants for new landfills or landfill expansions are required to obtain coverage under the Tier 2 general industrial storm water discharge permit under ch. NR 216, Wis. Adm. Code, prior to construction and operation of the landfill or expansion. Applicants should apply for Tier 2 general industrial storm water discharge permit coverage or to expand their permit coverage for landfill expansions when the plan of operation is submitted. Permit coverage should be in place prior to initial construction activities (e.g. clearing and grubbing) and prior to DNR issuance of a plan of operation approval.

Closed Landfills: Under s. NR 216.21(5)(d), Wis. Adm. Code, inactive, closed or capped landfills that have no potential for contamination of storm water are excluded from industrial storm water permit coverage. Therefore, closed landfills with no source areas of storm water contamination do not require coverage under the Tier 2 general industrial storm water permit. Determinations of the contamination potential of a closed landfill will be made on a case-by-case basis by the DNR. The operator of a closed landfill that has received a DNR closure approval letter may terminate the Tier 2 general industrial storm water permit coverage by submitting a completed Notice of Termination (Form 3400-170) to the DNR. Long-term closure requirements and subsequent follow-up will be handled as it is now by the solid water program. Maintenance or remediation work at closed landfills is not uncommon and may result in exposed erodible soil surfaces. If one acre or more of land will be disturbed for such work, coverage under the construction site storm water permit is required.

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