

WisDOT Directed and Supervised Projects That Include Diamond Grinding/Concrete Slurry
Wastewater* Disposal

Interim Strategy April 2026

**This document is intended to provide recommendations for Wastewater and Stormwater Program requirements only.*

Concrete slurry:

Concrete slurry is a liquid by-product generated by activities such as diamond grinding or saw cutting associated with Wisconsin Department of Transportation (WisDOT) transportation infrastructure projects, subject to regulation under the Wisconsin Department of Natural Resources (WDNR) delegated Clean Water Act (CWA) Authority under chs. 281 and 283, Wis. Stats., which are promulgated under relevant state administrative code in chs. NR 102, 103, 104, 105, 106, 108, 200, 203, 205, 207, 213, 216, 218, 219, and 269, Wis. Adm. Code. The wastewater from this type of material could contain pollutants such as high pH, metals and other pollutants from the road surface. Note: Asphalt is not considered a concrete product. Any discharge from asphalt will require additional review from WDNR.

Regulation:

WDNR currently does not have a wastewater general WPDES permit that specifically covers this type of discharge, so the department has drafted an interim strategy until a formal permit and/or guidance is developed. The following interim practices for handling and disposal of concrete slurry wastewater shall be followed to ensure compliance with WDNR pollutant discharge requirements:

Disposal Options:

1. Slurry may be placed at a nonmetallic mine (NMM) site with **active coverage** under the WPDES *Mineral (Nonmetallic) Mining and/or Processing* General Permit No. WI-0046515-07-2, the Permittee must demonstrate if the following requirements (A-D) are met:
 - A. Wastewater Requirements for Site(s):
 - I. All wastewater from this material must be placed within a treatment practice/best management practice (BMP) that is designed to contain, without discharge, the expected volume of wastewater and direct precipitation from a 10-year, 24-hour storm event¹, and is constructed with berms sufficient to prevent runoff from entering the device.
 - II. The following groundwater protections must be implemented:
 - a) Limit infiltration to the maximum extent practicable. Place the practice or BMP in one of the following USDA soil classifications: Sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay or clay and conduct site modification (e.g. compaction) to limit infiltration **or** use a liner which is compatible with the material stored, such as HDPE or LLDPE.
 - b) Where the requirements in a) cannot be achieved, there is a potential for infiltration to occur. Adjust the pH prior to placement within the treatment BMP with an acidic or basic solution so the discharge is between 6-9 s.u. pH should be measured by placing a calibrated meter's probe or test strips at the surface of the liquid. pH samples shall

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be taken at least once daily throughout the entire project. A log shall be kept of the additive usage and include such information as: date/time of additive use, type of additive, amount of additive used, estimated volume of slurry receiving the additive, and pH results before and after additive addition. This log should be made available to WDNR upon request. The permittee shall report all instances of noncompliance to the WDNR within 24 hours of becoming aware of the noncompliance.

Note¹: WDNR Wastewater Program staff may verify that the BMP contains adequate storage, the soils information is accurate, and the method for compaction or pH adjustment meets applicable regulations and guidance.

Permittees must provide:

- The location of the BMP shown on a map with details on berms and dimensions (LxWxD) of the BMP.
- Direct precipitation calculations based on the rainfall amount for the 10-year, 24-hour rainfall event (see https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=wi).
- The expected volume of wastewater intended for disposal.
- Calculations showing the dimensions of the treatment BMP are sufficient to control the volume of wastewater and direct precipitation.
- USDA Web Soil Survey information ([Web Soil Survey - Home](#)) or liner information

B. Storm Water Requirements for Site(s):

- I. The slurry containment practice/BMP is placed inside an internally drained NMM²; Or
- II. If the site is not internally drained, found to not meet internally drained status, or the NMM Permittee or Authorized Representative is unable to prepare calculations to demonstrate internal drainage, the permittee will need to provide a SWPPP or an amended Storm Water Pollution Prevention Plan (SWPPP) to WDNR Storm Water Program staff that identifies the location where the slurry BMP will be constructed, or any other changes to the base drainage map or operations as part of the disposal.^{2,3}

Note²: WDNR Storm Water Program staff may request technical information to verify internal drainage for the 25-year, 24-hour storm event for the NMM facility in compliance with Section 3 of

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the [NMM General Permit](#). Internal drainage means all storm water that contacts disturbed areas, or excavated material is directed to onsite infiltration areas that are entirely confined and retained within the property boundaries of the site. (Note: This also includes compliance with sections 3.1 and 3.2 or internally drained sites)

Information needed by WDNR staff may include but is not limited to the following:

- Runoff and volume calculations based on the rainfall amount for the 25-year, 24-hour rainfall event (see https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=wi)
- Associated drainage areas outside the mine sites contributing to run-off and areas within the mine site.
- Maps with the most recent topographic data to supplement calculations.
- A demonstration showing the volume of the mine site is able to contain or infiltrate without discharge the anticipated volumes.
- If staff determine the site is not internally drained, or the operator is unable to prepare this documentation, B. II. applies.

Note³: The SWPPP narrative may also require updates to reflect changes to operations, maintenance inspections or other activities which have the potential to contaminate storm water. Refer to the [NMM General Permit](#) Section 3 for a complete list of requirements associated with the SWPPP.

- C. Documentation: The NMM Permittee or Authorized Representative of a NMM site may prepare these documents as required under A. and B. and provide them to the contacts as identified in D. Requests without documentation for A. and B. as appropriate will not be processed. The site must be identified by FIN# or a copy of the conveyance of coverage letter for WPDES Mineral (Nonmetallic) Mining and/or Processing General Permit WI-0046515-07-2 (Note: This is not the same as a copy of the general permit).

Note⁴: Slurry disposal at a NMM may require additional approvals from the reclamation authority in compliance with ch. NR 135, Wis. Adm. Code.

- D. Notification Requirements:

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- I. NMM Permittee or Authorized Representative Notification: The NMM Permittee or Authorized Representative of the NMM site must prepare and send required documentation via email to their Regional WDNR [Storm Water Industrial Staff](#) and [Wastewater NMM Staff](#), and Carbon Copy [EA Transportation Liaison Staff](#) and WisDOT Project Manager. **Information must be received at least 30 days prior to disposal at the requested site.** In the subject line to the parties listed above include the following along with a request to use the site for concrete slurry disposal:
 - a. WisDOT project ID;
 - b. FIN# of the NMM
 - c. Example: “REQUEST FOR CONCRETE SLURRY DISPOSAL: Big Road Project; NMM FIN# 01234”
- II. WDNR Notification: WDNR will review these proposals and verify information, request additional information, or contact the NMM Permittee or Authorized Representative to resolve concerns. WDNR will request information via a reply to email request to ensure all parties are informed. If no additional information is necessary, WDNR will inform the parties the site has met the requirements specified in this document.

Note⁵: Concurrence may be needed from Wastewater or Storm Water staff depending on site criteria and specifics. If concurrence is needed, that information will be conveyed in the WDNR’s response email.

Note⁶: NMM Permittees are responsible for obtaining any other local, state, or federal permits or approvals that may be required for the project, including reclamation approvals.

2. WisDOT and/or their Contractor shall construct a lined storage facility for evaporation that meets the requirements of ch. NR 213, Wis. Adm. Code, and receives a wastewater plan review approval. Information on the plan review submittal process can be found here: <https://dnr.wisconsin.gov/topic/Wastewater/AdequateSubmittal.html>. Applicants should submit the required information under the ‘Industrial Storage Structure Projects’ tab.
3. WisDOT and/or their Contractor shall contain of slurry in a temporarily placed frac tank** if the slurry is not mixed with any hazardous waste, the manufacturer spec sheet and a site map showing where the tank will be placed is provided to the EA staff, and proper disposal methods of the contents are followed. Disposal at a licensed municipal solid waste (MSW) landfill may be an option if done in accordance with the following. Please consult the landfill to determine if the landfill will accept the proposed waste:

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- A. Waste that fails the paint filter test (e.g., contains free liquids) may only be disposed of at a licensed MSW landfill **authorized to accept free liquids** and the specific liquid waste is allowed under the facility's approved research, demonstration, and development plan.
- B. Waste that passes the paint filter test may be disposed of at any licensed MSW landfill willing to accept the solid waste material in accordance with the facility's special waste acceptance plan.

**Frac tanks used for slurry containment may remain on an approved site during the project term only and must be immediately removed upon completion of the project. If materials from the frac tank are not landfilled, the materials must be disposed of through one of the other options identified above.

4. WisDOT and/or their Contractor shall dispose of the material at a licensed municipal solid waste (MSW) landfill may be an option if done in accordance with the following. Please consult the landfill to determine if the landfill will accept the proposed waste:
 - A. Waste that fails the paint filter test (e.g., contains free liquids) may only be disposed of at a licensed MSW landfill **authorized to accept free liquids** and the specific liquid waste is allowed under the facility's approved research, demonstration, and development plan.
 - B. Waste that passes the paint filter test may be disposed of at any licensed MSW landfill willing to accept the solid waste material in accordance with the facility's special waste acceptance plan.
5. Side cast slurry on the road shoulder as approved by the transportation liaison and WisDOT as long as it meets the following guidelines:
 - A. Thickness of slurry solids, at application, is 1 inch or less. In-slopes must be 3:1 or flatter, should have a recognizable upland back-slope and the slurry must be deposited to prevent runoff into any storm sewers or other conveyances (such as swales, ditches, sloped land, etc.) to surface waters or wetlands.
 - B. Slurry is not placed or discharged adjacent to a waterway or wetland, or in a ditch.
 - C. The vacuumed material shall be spread evenly (not allowed to reach the wetted perimeter of the ditch) on the adjacent in-slopes.
 - D. Slurry may not be side cast if rain is forecast to occur in the next 24 hours.
 - E. The slurry may not be allowed to flow across the roadway into adjacent lanes
 - F. Solids must be properly disposed of in accordance with ch. NR 500, Wis. Adm. Code.

Note⁷: Discharges of material that enter waters of the state are not authorized and are excluded from coverage under this interim guidance. Discharges that occur to waters of the state may be subject to spill reporting, call 1-800-943-0003.

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For additional information refer to the State of US Practice for Disposal and Reuse of Concrete Residuals⁸

In addition to wastewater and storm water requirements, solid waste, including dry grinding residue and solids post-evaporation, must be properly disposed of in accordance with WI DNR Solid Waste regulations per ch. NR 500, Wis. Adm. Code.

