

Disposal of Diamond Grinding/Concrete Slurry Wastewater from WisDOT Directed and Supervised Projects

Interim Strategy - October 2026

Purpose: This interim strategy outlines acceptable options for disposal of concrete slurry wastewater from WisDOT directed and supervised projects, under existing regulations and currently available permitting options. This fact sheet may be updated if other permitting or disposal avenues are identified or if a need to clarify the contents of this document arises.

Concrete Slurry: Concrete slurry (hereafter, “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 (DNR) 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, 151, 200, 203, 205, 207, 213, 214, 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. Asphalt is not considered a concrete product. Any discharge from asphalt will require additional review from DNR.

General Requirements Applicable to All Disposal Options:

- Discharges of material that enter waters of the state are not authorized and are excluded from coverage under this interim fact sheet. Discharges that occur to waters of the state may be subject to spill reporting, call 1-800-943-0003.
- The permittee shall report all instances of noncompliance to the DNR within 24 hours of becoming aware of the noncompliance.
- Any land disturbing activities exceeding 1 acre¹ require Wisconsin Pollutant Discharge Elimination System (WPDES) permit coverage.
 - To streamline processes and avoid delays with additional storm water WPDES permitting for land disturbing construction activities that are part of WisDOT projects, WisDOT and/or its Contractor should seek to permit coverage for land disturbing construction activities (e.g., clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities) under the Transportation Construction Site General Permit (TCGP).
 - For sites where slurry disposal will occur at a Tier 1 or Tier 2 industrial facility (to determine whether a disposal site has a Tier 1 or Tier 2 stormwater permit,

¹ Placement of over excavated material /berm construction is included as disturbed land. If constructing multiple evaporation ponds not covered under the TCGP that each individually disturb <1 acre and are located >1/4 mile apart, a WPDES stormwater permit is not required. Construction Site General Permit coverage is required for multiple evaporation ponds not covered under the TCGP or an industrial stormwater permit that in total disturb >1 acre and will be located within ¼ mile from one another.

applicants can search this database:

<https://apps.dnr.wi.gov/swampereporting/Stormwater/SearchInd>), modifications to the facility's Stormwater Pollution Prevention Plan (SWPPP) are necessary. The SWPPP should address the wastewater discharge and include source area controls for fines after the discharge ceases.

- 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 chs. NR 500-538, Wis. Adm. Code. Note that, per s. NR 500.08(2)(a), Wis. Adm. Code, disposal of clean concrete is exempt from licensing and requirements of chs. NR 500 to 538, Wis. Adm. Code, in a location that the generator and landowners determine to meet the locational requirement of s. NR 504.04(3)(c) Wis. Adm. Code, and the performance standards of ss. NR 504.04(4)(a-f), Wis. Adm. Code, and that is operated in a nuisance free manner.

For additional information, refer to the [State of US Practice for Disposal and Reuse of Concrete Residuals](#).

Refer to WisDOT's Concrete Slurry Disposal GIS Map for additional information on potential disposal sites - [Concrete Slurry Projects](#)

Note: This map represents potential concrete slurry disposal sites. Please be aware, however, that not all sites shown on the map may be permitted to or willing to accept slurry.

Disposal Options: The following interim practices for handling and disposal of slurry shall be followed to ensure compliance with DNR pollutant discharge requirements:

1. Placement in an Existing Non-metallic Mine Wastewater Storage Structure or Concrete Washout Structure: Slurry may be placed in an existing wastewater storage structure at a non-metallic mine (NMM) site with active coverage under the WPDES [Mineral Mining and/or Processing General Permit](#) (WI-0046515-07-2) or a concrete washout pond with active coverage under the [Concrete Products Operations General Permit](#) (WI-0046507-06-0), provided the following requirements are met:

- The structure into which the slurry will be placed shall:
 - Be designed to contain, without discharge, the expected volume of wastewater (including the slurry) and precipitation from a 10-year, 24-hour storm event². The permittee must submit calculations to DNR demonstrating this requirement will be met.
 - Have berms sufficient to prevent runoff into the structure.
 - Limit infiltration and/or potential for groundwater impacts to the maximum extent practicable by employing one of the following:

² For 10-year, 24-hour storm volumes, see: https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=wi.

- A liner which is compatible with the material stored, such as high-density polyethylene (HDPE) **OR** linear low-density polyethylene (LLDPE), **OR**
- A base of sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay (as shown on the [USDA Web Soil Survey](#), if using native soil) that is compacted or similarly limits infiltration, **OR**
- A base/walls of watertight concrete, **OR**
- Adjustment of the pH of the slurry to 6-9 s.u. prior to placement within the structure.
 - Measure pH by placing a calibrated meter's probe or narrow range test strips at the surface of the liquid.
 - pH samples shall be taken at least once after pH adjustment to verify the required range of 6-9 s.u. has been achieved. Samples may be taken in a well-mixed slurry storage structure at the project site, within each tanker truck used to transport the slurry (at the slurry origin or disposal location), or at the disposal (mine) site prior to discharge into a storage structure.
 - A log shall be kept of the pH adjustment 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 must be available to DNR upon request.
- Be authorized as an active process wastewater sampling point (003, 004, or 006) under the WPDES Mineral Mining and/or Processing General Permit (WI-0046515-07-2) unless completely sealed with no discharge to surface water or groundwater. See map of permitted process wastewater structures at NMMs and of concrete products sites that may have acceptable concrete washout ponds: <https://wisdot.maps.arcgis.com/apps/instant/nearby/index.html?appid=8538db4c2dac44748af300ae6c134ac5&sliderDistance=20>.
- Project Level Review and Approval:
 - DNR Approval: The permittee should notify the Department of Natural Resources at least 14 days prior to disposal of slurry at the site. Department staff will process these requests within 14 business days to align with the ECIP 14 business day review timeframe to prevent delays.
 - Send sufficient documentation to demonstrate compliance with each of the above requirements via email to the Regional DNR [Storm Water Industrial Staff](#) and [Wastewater NMM Staff](#), and carbon copy [EA Transportation Liaison Staff](#) and WisDOT Project Manager.
 - The email subject shall include the WisDOT Project ID and the NMM or concrete operation's FIN number.
 - Example: "REQUEST FOR CONCRETE SLURRY DISPOSAL: WisDOT Project ID; Route; Project Limits; NMM FIN# 01234"

- If requirements are satisfied, DNR Wastewater Staff will authorize the disposal of slurry via a response email. If needed, DNR Wastewater Staff will contact the permittee to resolve any concerns or missing information.
- DOT Approval: Contractor shall submit ECIP information for permitted sites, in accordance with s. Trans 401.08, Wis. Adm. Code, and shall include written concurrence from DNR authorizing the disposal of the slurry at the site.
 - Contractor shall coordinate all requirements under this section with site owner/operator and DNR prior to ECIP submittal.
- Permittees are responsible for obtaining any other local, state, or federal permits or approvals that may be required for the project, including reclamation approvals. Slurry disposal at a NMM or concrete operation may require additional approvals from the reclamation authority in compliance with ch. NR 135, Wis. Adm. Code.
 - No SWPPP amendment is needed for disposal of slurry into existing wastewater storage structures that meet the above criteria, so long as there are no associated land disturbances or changes to the site's drainage, and the SWPPP accounts for process wastewater as a source of pollutants in the storage structure³.

2. Construct a new or expanded lined lagoon/storage structure: Slurry may be placed into a lagoon or storage structure while it evaporates, with any remaining clean concrete disposed of in a landfill or used as fill in a location that meets the locational requirement of s. NR 504.04(3)(c), Wis. Adm. Code, the performance standards of s. NR 504.04(4)(a-f), Wis. Adm. Code, and is operated in a nuisance-free manner. This may include the site of the lagoon.

New or expanded structures constructed for this purpose must meet the following requirements:

- Temporary evaporation structures disturbing <1 acre during construction:
 - Must meet the intent of ch. NR 213, Wis. Adm. Code (Lining of Industrial Lagoons and Design of Storage Structures).
 - To obtain approval, the applicant must submit the following information to DNR, with DOT cc'd. Self-certification (automatic approval) can be obtained by filling out the attached *Temporary Diamond Grinding Slurry Storage Structure Approval Form* and submitting it via email to DNRHoldingTankReview@wisconsin.gov.
 - Site map showing locations of all proposed evaporation ponds.
 - Certification that the pond locations do not impact wetlands or waterways.
 - Dimensions and containment volume of the proposed pond(s). Certification that the pond will not be located in a floodway.

³ Note: SWPPPs for externally drained NMMs with process wastewater outfalls authorized for coverage under sampling points 003, 004, or 006 in the NMM WPDES permit should already account for acceptance of process wastewater into wastewater storage structure(s), meaning a SWPPP amendment should not be necessary unless the SWPPP is not up to date.

- Certification that the pond will not be closer than 250' to a private potable well, 500' from an inhabited dwelling, and 1,000' from a community water supply well.
 - Certification that there is at least 2' of separation from the bottom of the pond to groundwater or bedrock, whichever is highest.
 - Certification that the pond will have all of the following features:
 - Be lined with at least 6" of compacted clay or a plastic liner with a minimum thickness of 10mil, and which is suitable for storing the material, such as HDPE or LLDPE,
 - Maximum 3:1 side slopes,
 - Berm surrounding the facility is at least one foot high to prevent stormwater runoff from entering the structure.
 - Certification that the pond will only be actively storing this waste for no more than one year.
 - Indication of how the slurry will be disposed of and how the pond will be abandoned. Plastic liners must be removed, and the structure must not accumulate stormwater.
- o To streamline the permitting process and avoid delays, WisDOT and/or its contractor may consider coverage of the construction land disturbances of evaporation pond(s) under the project's Transportation Construction Site General Permit (TCGP) in accordance with s. TRANS 401.06, Wis. Adm. Code, and the contract requirements. If WisDOT does not allow or DNR does not convey coverage under the TCGP, the contractor shall obtain separate coverage under the appropriate WPDES permit; see the permitting options below for permanent structures.
 - o Dried slurry solids may be used as fill in a location that meets the locational requirement of s. NR 504.04(3)(c) Wis. Adm. Code, the performance standards of s. NR 504.04(4)(a-f), Wis. Adm. Code, and is operated in a nuisance-free manner. This may include the site of the pit. Material to be used as fill must have the liquid evaporated to the extent that the material is dried to the point of behaving like pulverized concrete. For plastic-lined pits, the plastic must be removed prior to burial of this material but after the material is dried to the point of behaving like pulverized concrete.
- Permanent evaporation structures and structures disturbing ≥ 1 acre of land:
 - o Must be designed and constructed in accordance with ch. NR 213, Wis. Adm. Code.
 - o Must receive Wastewater Engineering Plan Review Approval. Applicants should submit the required information under the 'Industrial Storage Structure Projects' tab of this webpage:
<https://dnr.wisconsin.gov/topic/Wastewater/AdequateSubmittal.html>
 - o If disturbing >1 acre¹ during construction or if disturbing area already covered by a WPDES stormwater permit (such as a non-metallic mine or other industrial

stormwater site), WPDES permit coverage is required for discharge of stormwater during land disturbance.

- To streamline the permitting process and avoid delays, WisDOT and/or its contractor may consider amending erosion control plans and erosion control implementation plans to facilitate construction of evaporation pond(s) under the project's Transportation Construction Site General Permit (TCGP) in accordance with s. TRANS 401.06, Wis. Adm. Code, and the contract requirements. If WisDOT does not allow or DNR does not convey coverage under the TCGP, the contractor shall obtain separate coverage under the appropriate WPDES permit as outlined below:
- For construction of evaporation pond(s) at a non-metallic mine (NMM) site with active coverage under the WPDES Mineral (Nonmetallic) Mining and/or Processing General Permit (WI-0046515-07-2):
 - The land disturbance may be covered under the NMM's WPDES permit coverage if the NMM has been certified as internally drained by DNR. See map of internally drained NMMs here:
<https://wisdot.maps.arcgis.com/apps/instant/nearby/index.html?appid=8538db4c2dac44748af300ae6c134ac5&sliderDistance=20>.
 - To dispose of slurry at a NMM site that has not been verified as internally drained:
 - A permittee may provide calculations to demonstrate a NMM site is internally drained⁴, or
 - For sites that are not internally drained, the NMM permittee must submit to DNR a current or amended⁵ Storm Water Pollution Prevention Plan (SWPPP) that identifies the location of the structure into which slurry will be placed, as well as any associated changes to the base drainage map.
- For construction at permitted Tier 1 or Tier 2 Industrial Storm Water Permitted facilities (including concrete products operations), a SWPPP amendment is required. The SWPPP should identify the location of the structure into which slurry will be placed, address the wastewater discharge, and include source area controls for fines after the discharge ceases.
- Project Level Review & Approval:

⁴ See section 3 of the [NMM WPDES General Permit \(WI-0046515-07-2\)](#) for details on how to determine whether a NMM is "internally drained." The department may request information including runoff and volume calculations based on a 25-year, 24-hour rainfall event (see https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=wi), topographic maps delineating drainage areas (including off-site areas) contributing to runoff, a demonstration that the mine is able to contain or infiltrate expected volumes without discharge, and a summary of any changes to NMM operations.

⁵ Refer to SWPPP Amendment under section 3.5.1 of the [NMM WPDES General Permit](#),

- Contractor shall coordinate all requirements under this section with the site owner/operator and DNR prior to ECIP submittal.
 - For construction of evaporation ponds at permitted sites not covered under the TCGP, the contractor shall submit ECIP information for permitted sites, in accordance with s. Trans 401.08, Wis. Adm. Code, and shall include written concurrence from DNR for the plan review approval.
 - For construction of evaporation ponds at the DOT Project site under coverage of the TCGP, the contractor shall submit ECIP information for temporary support activity sites, in accordance with s. Trans 401.11, Wis. Adm. Code, and shall include a copy of the plans and specifications for the pond, as well as a site map. WisDOT and DNR will review and approve the ECIP in accordance with Trans 401 requirements.
- DNR TL will provide concurrence that the requirements for internally drained sites and SWPPPs under this section have been met, if applicable.
- WisDOT and DNR will review the ECIP and approve in accordance with ch. TRANS 401, Wis. Adm. Code, and WPDES permit requirements.

3. Temporary Frac Tank: Slurry may be temporarily contained in a temporarily placed frac tank if the following requirements are met:

- Slurry is not mixed with any hazardous waste.
- Frac tanks used for slurry containment must be removed by the project completion date as defined in WisDOT Standard Specification 105.11.2.1.3.
- After temporary use of the frac tank, dispose of contents via another disposal option specified in this fact sheet.
- Project Level Review & Approval:
 - For sites not covered by the TCGP, the contractor shall submit ECIP information for the permitted sites, in accordance with s. Trans 401.08, Wis. Adm. Code, and shall include a copy of the manufacturer's specifications sheet and a site map showing the location of the tank.
 - For sites covered by the TCGP, the contractor shall submit ECIP information for temporary support activity sites, in accordance with s. Trans 401.11, Wis. Adm. Code, and shall include a copy of the manufacturer's specifications sheet and site map showing the location of the tank. WisDOT and DNR will review and approve the ECIP in accordance with Trans 401 requirements.

4. Landfill: Slurry may be disposed of at a licensed municipal solid waste (MSW) landfill if done in accordance with the following. Please consult the landfill to determine if the landfill will accept the proposed waste:

- Waste that fails the paint filter test (e.g., contains free liquids) may only be disposed of at a licensed MSW landfill willing to accept the material and authorized to accept free

liquids and the specific liquid waste is allowed under the facility's approved research, demonstration, and development plan.

- 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. Land application as an agricultural liming agent: DNR is still evaluating the most efficient way of permitting this option, with more guidance on this anticipated in the future. In the interim, those who wish to utilize this disposal should work with DNR to obtain appropriate permit coverage on a case-by-case basis. Disposal projects that can be authorized under a general permit may be completed in 30 days (or less; see language on page 3), and projects that require an individual permit can require 6+ months due to permit drafting and public notice timelines.

6. Sidecast the material: If approved by [DNR EA Transportation Liaison Staff](#) and WisDOT staff and done in accordance with the guidelines below, slurry may be sidecast on the road shoulder for projects under the direction and supervision of the department of transportation (WisDOT) in accordance with s. 30.2022 (1p) and (2), Wis. Stats.:

- In-slopes must be 3:1 or flatter with 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.
- Slurry discharge onto the side slopes should not result in a hydraulic loading rate (volume/sq ft) greater than 3/8 inch (0.23 gal/sq ft) on the side slope. Contractors, DOT, or DNR may propose a different hydraulic loading rate (higher or lower) if appropriate based on site-specific geology and approved by DNR.
- Slurry may not be discharged within 75 feet of a surface water or wetland, as identified on the [DNR Surface Water Data Viewer](#).
- Slurry shall be discharged evenly across the adjacent in-slopes but may not be discharged within 5 feet of a ditch, where the ditch is the area from the bottom of the ditch to 2 vertical feet above the ditch bottom, unless otherwise identified on the plans.
- Slurry may not be side cast if >0.1 inch of rain is forecast to occur in the next 24 hours. Notwithstanding this, any discharges of slurry that enter waters of the state (including those that occur as a result of a rain event of <0.1 inch) are not authorized. It is the permittee's responsibility to ensure that slurry does not reach waters of the state.
- Any discharges that occur to waters of the state must be reported to the DNR Spills Hotline (1-800-943-0003).
- The slurry may not be allowed to flow across the roadway into adjacent lanes.
- Project Level Review & Approval
 - Contractor must submit a Slurry Disposal Plan with the ECIP that includes:
 - A schedule and map showing the proposed locations of side casting. Clearly delineate areas where disposal is not to occur, such as near waterways and wetlands.

- Approximate slurry discharge rates, including the expected thickness and length along the adjacent side slopes.
- Best management practices (BMPs) that will be implemented to prevent slurry from discharge into wetlands, waterways, storm sewers, and other drainage conveyances.
- Means and methods to temporarily store slurry through areas where sidelaying is prohibited.

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