Exempting Low-Hazard Wastes from Solid Waste Regulations

PUB-WA 1645 June 2015



Waste & Materials Management P.O. Box 7921 Madison, WI 53707-7921

Background

Some wastes pose fewer hazards to human health or the environment than other wastes. Wisconsin law recognizes this and gives waste generators the opportunity under s. 289.43(8), Wis. Stats., or s. NR 500.08(4), Wis. Adm. Code, to request their waste be exempted from solid waste regulation if managed properly. This guidance addresses these "low-hazard waste grant of exemption" requests.

Other Types of Exemptions

Low-hazard waste grant of exemptions are distinct from other types of solid waste exemptions and may be applicable when other exemptions cannot be used. Recycling (or beneficial use) of certain industrial wastes is regulated separately under state law. Section 289.43(7), Wis. Stats., and ch. NR 538, Wis. Adm. Code, govern the beneficial use of high-volume industrial wastes. Other administrative code sections, including ss. NR 500.08(5) and NR 502.08(2), Wis. Adm. Code, address beneficial use, recycling, and processing of certain waste materials.

Chapter NR 718, Wis. Adm. Code, governs the management of contaminated soils and some solid waste materials originating at response action sites. Response action is defined in s. NR 700.03(50), Wis. Adm. Code, and means "Any action taken to respond to a hazardous substance discharge or environmental pollution, including emergency or non-emergency immediate actions, investigations, interim actions, and remedial actions". A response action site would include any site subject to jurisdiction under ch. 292, Wis. Stats., whether the person has or has not notified the DNR of the Discharge.

The management of contaminated soil and certain solid wastes as part of a response action must follow the provisions in ch. NR 718, Wis. Adm. Code, "Management of Contaminated Soil or Solid Wastes Excavated During Response Actions" and will be

reviewed by the Remediation and Redevelopment (R&R) Program project manager, and not the Waste and Materials Management Program (WMMP).

There may be limited situations where management of soil generated from a site other than a response action site would be regulated by the WMMP. An example of that would be where excavated soil containing parameters at concentrations greater than background with no known source need to be managed. In such a situation, a low-hazard waste grant of exemption may be an option. The WMMP project manager will consider the provisions in ch. 718, Wis. Adm. Code, to guide the disposal of non-response action contaminated soil at a site other than a licensed landfill.

Low-Hazard Waste Grant of Exemption

Section 289.43(8) provides for four types of low-hazard waste grant of exemptions when the DNR determines that conventional regulation is not warranted. The DNR may:

- (1) Promulgate an administrative rule exempting types of solid waste that need not be disposed of at a licensed solid waste facility (for example clean soil, brick, concrete, unpainted/untreated wood, etc., see ss. NR 500.08(2)(a) through (f), Wis. Adm. Code);
- (2) Exempt types of solid waste facilities on a caseby-case basis (for example dredge material disposed of under s. NR 500.08(3), Wis. Adm. Code);
- (3) Allow unlicensed disposal of specified solid waste from an individual generator; or
- (4) Authorize use of solid waste in public works projects.

The law also allows the DNR to limit the exemption through the imposition of conditions, including periodic testing of the solid waste.

The DNR uses professional judgment in assessing the factors set in statute and code to determine when a low-hazard waste grant of exemption can be issued.

Relevant factors include:

- The potential hazard to public health and the environment.
- The potential that the disposal or reuse activity will cause environmental pollution as defined in s. 299.01(4), Wis. Stats.
- The population of the area being served.
- The amount of waste to be managed.
- The geologic and hydrologic conditions at the facility.
- The physical and chemical characteristics of the waste.
- Any other information which may be relevant.

A low-hazard waste grant of exemption proposal should include a statement that the proposed alternate waste disposal or use will not cause environmental pollution as defined in s. 289.01(8), Wis. Stats., and documentation to support the statement. ("Environmental pollution" means the contaminating or rendering unclean or impure the air, land or waters of the state, or making the same injurious to public health, harmful for commercial or recreational use, or deleterious to fish, bird, animal or plant life).

By issuing a low-hazard waste grant of exemption, the DNR is using its discretion to establish an alternative regulatory approach (approval of a proposal, possibly with added conditions) more appropriate for the relatively low risk posed by the planned disposal or reuse of the solid waste. The DNR's discretion under the low-hazard waste grant of exemption process may be used to limit projects based on their size and similarity to other regulated facilities such as landfills.

A low-hazard waste grant of exemption proposal should identify if the proposed disposal site has been used for other licensed or unlicensed solid waste disposal, including the waste type, volume, location and dates of wastes disposed. Low-hazard waste grant of exemptions typically have an expiration date based on factors such as the applicant's anticipated window of need, the window of waste generation (one-time vs ongoing generation from manufacturing), and knowledge of the waste including past use under a previously issued low-hazard waste grant of exemption; common expiration dates used are two, five, and ten years from the date of approval.

Examples of wastes from individual generators that have received a low-hazard waste grant of exemption include the following:

- wood wastes from manufacturing processes (as livestock bedding);
- high-salt wastewaters from food manufacturing facilities (as highway deicers);
- lead-painted concrete from building demolition (as fill material) see
 https://dnr.wi.gov/files/PDF/forms/4400/4400-274.pdf;
- dredged sediment (as fill material);
- coal combustion products (as a dam sealant);
- screened street sweepings (as fill);
- processed container glass (as fill, aggregate, blasting media etc.) - see
 https://dnr.wi.gov/files/PDF/pubs/wa/WA1540.pdf
 and
- shredded tires (as drainage aggregate).

Application Process

Applying for a low-hazard waste grant of exemption requires the applicant to provide sufficient information to document the proposal will not cause environmental pollution. The DNR relies on the content and quality of information submitted by the applicant to conduct a timely review and issue an approval. Applicants are encouraged to discuss their project with DNR staff before submitting an exemption request, which may result in a smoother and faster review.

The proposal should include the applicant's description of the waste and how it will be managed. The more information included in the exemption request, the more timely the request can be reviewed. A more detailed description of information that may be in a proposal is listed later in this document.

If the proposed use of the waste is to reclaim a non-metallic mine (gravel pit, quarry, etc.) the use must be allowed in the mine's reclamation plan, if not the reclamation plan should be modified first. Please include a copy of the reclamation plan with the exemption request. Please identify if the non-metallic mine has been dewatered for mining and indicate what the natural groundwater level is expected to be when dewatering is terminated and if the proposed use of the waste would be below or within 10 feet of the water table.

Anyone wishing to submit an application for a low-hazard waste grant of exemption for dredged material should follow PUB-FH-061-2004, "The State of

Wisconsin Approval Process for Dredging Commercial Ports," and other DNR guidance as relevant, and should work with the Water Program staff assigned to the dredging project.

Restrictions: Projects involving large-scale disposal or which may include or require items such as a liner system, leachate treatment and an engineered cap, or projects proposing to place the material below the groundwater table, are beyond the scope of this guidance. Check with DNR staff before submitting such a proposal.

National Heritage Inventory (NHI)

An NHI screening is required if the proposed lowhazard waste grant of exemption would have the potential to impact endangered resources, including the potential to impact lands, wetlands or water bodies. The NHI Public portal

https://dnr.wi.gov/topic/ERReview/PublicPortal.html is an online tool that provides users with an instant response and documented preliminary assessment regarding whether or not a full Endangered Resources Review is necessary to ensure compliance with Wisconsin's Endangered Species Law. When necessary the preliminary assessment should be included with low-hazard waste grant of exemptions.

DNR Review Process

Review of low-hazard waste grant of exemption requests will be conducted on a case-by-case basis. It is the applicant's responsibility to demonstrate to the DNR the lack of, or extent of, potential hazards to public health or the environment posed by the waste as it is proposed to be managed. Requests typically include a cover letter and technical report. Upon receipt of a low-hazard waste grant of exemption request, the DNR will send the applicant an acknowledgement letter with an estimate of the review time that will be needed, along with an invoice for the plan review fee (see below). The Waste and Materials Management Program may request review assistance from other programs that administer regulations related to the project. The DNR may request additional information from the applicant if it is necessary to complete the review of the proposal.

Fees

The DNR charges a plan review fee of \$550 to cover its costs for reviewing a low-hazard waste grant of exemption and other exemption requests, as specified in s. NR 520.04, Wis. Adm. Code.

Review Timeline

The DNR has 65 business days (90 calendar days) to approve, deny, or deem an exemption request incomplete. Some low-hazard waste grant of exemption requests may be reviewed more quickly than 90 calendar days, depending on DNR workload and the completeness and complexity of the request.

If the request is deemed incomplete, the DNR will reply in writing specifying the information needed to continue the review.

If the request is denied, the DNR will reply in writing stating why it was denied, and provide information on appeal rights.

If the request is approved, the DNR will reply in writing with a cover letter and legal notification, which includes Findings of Fact, Conclusions of Law, Project Conditions, and Notice of Appeal Rights.

As part of its review, the DNR may conduct a site inspection to examine the waste material and the proposed location of the disposal or reuse activity.

The DNR may also impose conditions on an approval, such as on-going monitoring and reporting, construction inspection(s), receipt of satisfactory construction documentation, and completion of a solid waste land disposal site affidavit, deed notification, or adding the facility to the R&R program's GIS registry (BRRTS). The DNR may set an expiration date for the exemption and may require a renewal to continue the activity.

NOTE: Filing an application for a low-hazard waste grant of exemption does not authorize any person to transport, move, or use any waste until the DNR issues a written exemption for the specific solid waste material and use.

LOW-HAZARD WASTE GRANT OF EXEMPTION EXAMPLE PROPOSAL FORMAT

Cover Letter

The cover letter should provide a brief summary of key information relating to the low-hazard waste grant of exemption request, including the following:

- Name of waste generator and contact information;
- Type, volume and rate of production of waste;
- Location and type of disposal or reuse being proposed;
- Expected start and end dates;
- Type of low-hazard waste grant of exemption sought and legal basis for the exemption;
- Brief statement of why a low-hazard waste grant of exemption is warranted; and
- Desired DNR action.

Optional: If the proposed management of the material will result in positive environmental or societal impacts (i.e. used in place of virgin material, effectively replace a more expensive manufactured product, save a generator money, create jobs, reduce the carbon footprint, etc.), please include a discussion of this in the submittal.

Certification Statement

The DNR recommends that reports and plan sheets for projects with significant engineering aspects, bear the seal of a licensed professional engineer or geologist as applicable (The DNR uses discretion to accept proposals signed by other Wisconsin licensed professionals such as hydrologists and soil scientists, or non-licensed individuals). Include the following statement(s) as needed:

the following statement(s) as needed:	
"I,	, hereby certify that I am a licensed professional engineer in the State of
in accordance with knowledge, all info	dance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my ormation contained in this document is correct and the document was prepared in compliance with rements in chs. NR 500 to 538, Wis. Adm. Code."
accordance with th involved any unpro knowledge, all info	hereby certify that I am a licensed professional geologist in the State of Wisconsin in requirements of ch. GHSS 2, Wis. Adm. Code; that the preparation of this document has not offessional conduct as detailed in ch. GHSS 5, Wis. Adm. Code; and that, to the best of my formation contained in this document is correct and the document was prepared in compliance with rements in chs. NR 500 to 538, Wis. Adm. Code."

Report Content

The purpose of the report is to provide the DNR reviewer and, where applicable, the public, with a detailed description of the proposed project and to demonstrate that the material qualifies for a low-hazard waste grant of exemption. The following information should be considered for inclusion in the report:

Contact Information

- Owner and Generator Contact
 - Name, organizational affiliation, address, telephone number and e-mail address of the generator and owner who is responsible for the waste.
- Disposal or Reuse Site Contact
 - Name, organizational affiliation, address, telephone number and e-mail address of the owner and operator of the site where the waste will be disposed or utilized.
- Project Contact Person(s)
 - Name, title, organizational affiliation, address, telephone number and e-mail address of the person who will be working with the DNR on the proposed low-hazard waste grant of exemption request.

Project Description

• Provide a detailed description of the process that generated the waste for which an exemption is being requested. Include a description and map indicating the location of where the waste is generated.

- Provide a site map showing where the waste was generated, plotted on a USGS topographic contour map.
 Include the street address and legal description (including the quarter-quarter section) of the generation site if applicable.
- o Describe any environmental or public health regulatory compliance or enforcement activities conducted by the DNR or other agency related to the waste, generator and disposal or reuse site.
- Provide a detailed description of how the waste material is proposed to be managed, including any plans for reuse. Include specific locations at which disposal or reuse is proposed.
 - O Provide a project site map(s), drawn to scale not larger than 1 inch equal to 100 feet, of the location where the waste is to be managed showing wetlands, floodplain, surface water boundaries, USGS topographic contours, roads and buildings. Include the legal description (including the quarter-quarter section or GPS coordinates) of the proposed site.
 - o Provide a description of the proximity of the disposal area to the following areas. If the distance is greater than the indicated distance listed here, you may state that without specifying the exact distance.
 - i. Within a floodplain (yes/no)
 - ii. Wetland or critical habitat area (100 feet)
 - iii. Navigable river, stream, lake, pond, or flowage (300 feet),
 - iv. On-site water supply well (100 feet),
 - v. Off-site water supply well (300 feet),
 - vi. High groundwater level (3 feet),
 - o Provide a description of the disposal or reuse site's current and historic land use including any available information regarding environmentally sensitive areas.
 - o Identify if the disposal site has previously been used for licensed or unlicensed solid waste disposal or use, and state the types, volumes, locations, and dates of the waste disposed.
 - o Describe any design criteria related to the disposal site.
 - Describe any activities (i.e., regulatory, enforcement, or inspections) conducted by the DNR or any other agency at the waste's destination site.
- Discuss disposal of wastes not included within the exemption, such as rejects, off-specification waste, off-season disposal of waste, and alternative disposal plans.
- Describe any quality assurance procedures used to identify off-specification waste, reject materials or other indications of waste variability used to monitor the process and/or the generated waste.

Waste Description

- While not required, the DNR strongly encourages confirming a waste characterization plan with the DNR prior to analyzing the waste. Characterization may be simple, such as PVOCs for petroleum contaminated soil, or complex, such as for industrial waste with many possible contaminants.
- Provide a narrative description of the waste's characteristics and the process from which the waste was generated. Include any chemical reagents involved in the generation of the waste or other chemicals used at the generating facility that may come into contact with the waste material.
- Provide a narrative description of any other treatments that have been or will be performed on the waste such as wetting (hydration of the waste) or mixing the waste with other materials.
- The waste description section should contain the following:
 - Tables summarizing the results of all chemical, physical or geotechnical analyses of the waste conducted to verify contaminants and hazardous characteristics. Include a scaled site map depicting all sample locations, if appropriate.
 - o Technical data and information about the properties of the waste relevant to the proposed reuse.
 - o The potential for the waste characteristics to change due to ingredient or process changes.

- o If warranted (such as for continuous waste generation), include an ongoing sampling plan for the waste, including sample parameters and sampling frequency.
- If available, also include the following:
 - o Studies or analytical characterizations, Safety Data Sheet, or contaminant risk assessments.
 - Documentation of contaminant profiles, including test results and analyses of exposure or migration pathways.
 - o Results of any trials, experiments, field tests, technical literature findings, staff observations and inspections related to the proposed action.

Comparative Justification

Wisconsin law does not contain numerical criteria for determining if a waste qualifies as "low-hazard," and there are no prescribed standards for managing such materials. Therefore, it is up to the applicant to document how the waste characteristics and proposed management approach will not cause environmental pollution. Some low-hazard waste grant of exemptions requests compare the waste characterization with other waste regulations and standards in the Wisconsin Administrative Code (for example: "The concentrations of metals that leach from the waste are less than the ch. NR 140 preventive action limits (PALs) for groundwater quality protection."). Review of a low-hazard waste grant of exemption request can be greatly facilitated by the inclusion of such comparisons in the application package.

The following are examples of Wisconsin Administrative Code provisions that contain qualitative standards or numerical criteria that may be useful for low-hazard waste grant of exemption proposals:

- NR 140 (Groundwater Quality): Contains groundwater standards which are useful for comparing to water leach test data.
- NR 204 (Domestic Sewage Sludge Management): Contains discharge limits and locational criteria for sludge.
- NR 214 (Land Treatment of Industrial Liquid Wastes, By-Product Solids and Sludges): Contains discharge limits and criteria for liquid wastes and sludge.
- NR 500.05 (General Submittal Requirements): Contains standards for proposal documents.
- NR 503.08 (One Time Disposal Landfills): Contains operation and closure standards.
- NR 504.04 (Landfill Location, Performance and Design Criteria): Contains locational criteria and performance standards.
- NR 518 (Landspreading of Solid Waste): Contains waste analysis criteria.
- NR 528 (Management of Accumulated Sediment from Storm Water Management Structures): Contains contaminant standards and reuse criteria.
- NR 538 (Beneficial Use of Industrial Byproducts): Contains contaminant standards for different reuse categories for high volume industrial waste.
- NR 661 (Hazardous Waste Identification and Listing): Contains information to confirm the waste is not a hazardous waste.
- NR 718 (Management of Contaminated Soil or Solid Wastes Excavated During Response Actions): Contains information for the on and off site disposal of contaminated soil and certain solid wastes.
- NR 720 (Soil Cleanup Standards): Contains standards for non-industrial and industrial land uses.

Additional Attachments

Analytical Package for Contaminant Profile Testing:

Provide a copy of the analytical package for all sampling results submitted to the DNR. The package should
include the chain of custody, sampling methods and QA/QC data along with the results. The package should also
include documentation that the laboratory used for the testing is a Wisconsin certified laboratory. If more than one
sample was analyzed, analytical results should be displayed in a table to help the DNR review your request in a
timely manner.

Paper and Electronic Copies: Unless otherwise specified, send the DNR 2 paper copies and one electronic copy of the report, plan sheets, and drawings.

Contact DNRWasteMaterials@wisconsin.gov for further information.

Exempting Low-Hazard Wastes from Solid Waste Regulations \ Page 6

Disclaimer: 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.

Equal Opportunity Employer and Americans with Disabilities Act Statement: The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C. Street, NW, Washington, D.C. 20240.

This publication is available in alternative format (large print, Braille, etc.) upon request. Please call 608-266-2111 for more information. Note: If you need technical assistance or more information, call the Accessibility Coordinator at 608-267-7490 / TTY Access via relay – 711.