

Decision Document, draft 5/30/17

Upland Disposal and Management of Dredged Material, Including Sediment

Purpose

Outline the regulatory and management process for the upland disposal of dredged material, including sediment.

Regulatory Authority

Dredged material other than sediment should be managed based on the type of waste it is. For example, clean brick, stone, and concrete not painted with lead based paint and clean wood not painted with lead based paint, treated, or preserved may be managed as “clean fill” under the exemption available in Wis Adm. Code § NR 500.08(2)(a). Treated or painted wood, tires, metal should be disposed of in a landfill unless they can be recycled.

Dredged sediment is a solid waste and may be clean, mildly contaminated, or significantly contaminated. The dredged sediment should be evaluated to determine if the sediment should be managed under Wis. Adm. Code ch. NR 500 as a solid waste, NR 600 as hazardous waste, NR 718 as “other solid waste” or under the federal toxic substance control act. PCB contaminated sediments subject to regulation under TSCA must be managed in accordance with 40 CFR 761.

Sediment dredged for a purpose other than a Wis. Adm. Code ch. NR 700 response action may be disposed of in an active, licensed landfill approved to accept the waste or may be eligible for upland disposal onsite or off-site through a low-hazard waste grant of exemption based on authority granted in Stats. § 289.43(8), issued by the Waste and Materials Management Program, or may be exempt from Waste and Materials Management Program review and licensing under Wis. Adm. Code § NR 500.08(3).

Sediment dredged as part of a Wis. Adm. Code ch. NR 700 response action site may be disposed of in an active, licensed landfill approved to accept the waste or may be eligible for upland disposal onsite (i.e., the property where the original discharge occurred) as “other solid waste,” based on authority granted in Wis. Adm. Code § NR 718.15, or offsite through a low-hazard waste grant of exemption based on authority granted in Stats. § 289.43(8), issued by the Waste and Materials Management Program.

Evaluation of Sediment for Upland Disposal on Properties not Licensed and Approved to Accept Sediment

Due to the physical and chemical similarities between soil and dredged, dewatered sediment proposed for upland disposal, the department recommends that decisions regarding proper management of

sediment follow the same approach as an evaluation for soil management options. For consistency, Remediation and Redevelopment Program project managers (PMs) and Waste and Materials Management Program PMs will consider provisions in statute, code, and guidance of both programs when reviewing requests for upland disposal of sediment.

Thus, where contaminated sediment will be managed via upland disposal, Wis. Adm. Code ch. NR 720 residual cleanup standards (RCLs) for soils may be applied to the contaminated sediment to determine the appropriateness of on-site or off-site management options. Where dewatered, contaminated sediment concentrations attain or exceed the Wis. Adm. Code ch. NR 720 soil RCLs for that land use (i.e., industrial or non-industrial) the DNR may allow the upland disposal of sediment in a location other than a licensed solid waste facility if the sediment contaminants levels do not exceed the Wis. Adm. code ch. NR 720 standards for that landuse/pathway or a performance standard is used to address direct contact and/or groundwater migration, and other provisions of Wis. Adm. Code ch. NR 718 are complied with.

The Waste and Materials Management program will likely consider the locational standards in Wis. Adm. Code § NR 718.12 when reviewing requests for upland disposal of sediment under a Stats. § 289.43(8), low-hazard waste grant of exemption. Low-hazard waste exemptions are explained in more detail in guidance document “Exempting Low-Hazard Waste from Solid Waste Regulations” DNR pub. WA-1645.

Dredged sediment may be handled similarly to soil once it is permanently placed into the site landscape. Subsequent management of this material will be conducted as soil including management of contaminated soil per Wis. Admin. Code § NR 718.12.

Existing Guidance Documents Which May Help in Evaluation

“Waste Determinations and Record Keeping” DNR pub WA-1152

“Management of Contaminated Soils and Other Solid Wastes” DNR pub RR-060

“Exempting Low-Hazard Waste from Solid Waste Regulations” DNR pub. WA-1645

Definitions

Contaminated sediment means sediment that contains a hazardous substance. Stats. § 292.01(1s)

Dredging means any part of the process of the removal of material from the beds of waterways; transport of the material to a disposal, rehandling or treatment facility; treatment of the material; discharge of carriage or interstitial water; and disposal of the material. Wis. Adm. Code § NR 347.03(14)

Dredge material means any solid waste removed from the bed of any surface water. Wis. Adm. Code § NR 500.03(71)

Hazardous substance means any substance or combination of substances including any waste of a solid, semisolid, liquid or gaseous form which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration or physical, chemical or infectious characteristics. This term includes, but is not limited to, substances

which are toxic, corrosive, flammable, irritants, strong sensitizers or explosives as determined by the department. Stats. § 289.01(11)

Sediment means particles in the bed of a navigable water up to the ordinary high-water mark that are derived from the erosion of rock, minerals, soil, and biological materials and from chemical precipitation from the water column and that are transported or deposited by water. Stats. § 292.01 (17g)

Upland disposal means the disposal of dredged materials landward from the ordinary high-water mark of a waterway or waterbody. Wis. Adm. Code §NR 347.03(25)

Other Regulatory Language

Public Meeting Requirement

Note: Stats., § 289.54, does not apply to actions pursuant to Wis. Adm. Code § NR 718.15.

Stats. §289.54, Disposal of certain dredged materials. (2) The department may not approve a request by the operator of a solid waste disposal facility to accept dredged materials that contain PCBs or heavy metals in a concentration of less than 50 parts per million for disposal in the solid waste disposal facility until after the department holds a public meeting in the city, village or town in which the solid waste disposal facility is located. At the public meeting, the department shall describe the nature of the requested disposal and shall solicit public comment.

Dredged Material Exemption

Wis. Adm. Code § 500.08(3), DREDGED MATERIAL EXEMPTIONS. The following facilities are exempt from the licensing and plan review requirements of chs. NR 500 to 538 but shall be developed in accordance with the following requirements:

(a) Facilities for the disposal of nonhazardous dredged material consisting of less than 3000 cubic yards from Lake Michigan, Lake Superior, the Wisconsin river, the Sheboygan river, the Milwaukee river, the Brule and Menominee rivers, the Fox river, the Mississippi river, or from any inland lakes or ponds treated with arsenicals provided the facility complies with the performance standards specified in s. NR 504.04 (4).

(b) Facilities for the disposal of non-hazardous dredged material from rivers not listed in par. (a) provided the facility complies with the performance standards specified in s. NR 504.04 (4).

(c) Facilities for the disposal of nonhazardous dredged material from inland lakes or ponds that have not been treated with arsenicals provided the facility complies with the performance standards specified in s. NR 504.04 (4).

“Clean fill” Exemption; This would only apply if we could call dredged sediment soil.

Wis. Adm. Code § NR 500.08, Exemptions (2) OTHER FACILITIES. The following facilities shall be established in conformance with the locational requirements of s. NR 504.04 (3) (c) and (4) (a) to (f) and shall be operated and maintained in a nuisance-free and aesthetic manner but are exempt from licensing and the requirements of chs. NR 500 to 538:

(a) Facilities where only clean soil, brick, building stone, concrete or reinforced concrete not painted with lead-based paint, broken pavement, and wood not treated or painted with preservatives or lead-based paint are disposed.

Low-hazard waste exemption

Stats. § 289.43, Waivers; exemptions. (8) EXEMPTION FROM REGULATION; LOW-HAZARD WASTE.

(a) The department shall conduct a continuing review of the potential hazard to public health or the environment of various types of solid wastes and solid waste facilities. The department shall consider information submitted by any person concerning the potential hazard to public health or the environment of any type of solid waste.

(b) If the department, after a review under par. (a), finds that regulation under this chapter is not warranted in light of the potential hazard to public health or the environment, the department shall either:

1. Promulgate a rule specifying types of solid waste that need not be disposed of at a licensed solid waste disposal facility.
2. On a case-by-case basis, exempt from regulation under this chapter specified types of solid waste facilities.
3. Authorize an individual generator to dispose of a specified type of solid waste at a site other than a licensed solid waste disposal facility.
4. Authorize use of the solid waste in public works projects.

(c) The department may require periodic testing of solid wastes and impose other conditions on exemptions granted under par. (b).

Response action site exemption

Wis. Adm. Code § NR 718.15, Management of other solid wastes. If solid waste which contains waste other than contaminated soil is replaced at the site or facility from which it was excavated, as part of a response action conducted in compliance with all of the applicable requirements in chs. NR 700 to 754, and the department has granted prior written approval for the action, the replacement of that solid waste on the site or facility from which it was excavated is exempt from the requirements of ch. 289, Stats., and chs. NR 500 to 538.