



Guidance: Contaminated Sediment Fact Sheet

Purpose

This fact sheet is a brief outline of the typical approaches that are used to navigate through Wisconsin Statutes (Wis. Stat.) ch. 292 and Wisconsin Administrative Code (Wis. Admin. Code) chs. NR 700 to 799 with respect to the investigation and remediation of contaminated sediment. Readers who need more information are encouraged to refer to the cited regulations and to consult applicable guidance documents.

Wis. Stat. ch. 292 applies to response actions taken by responsible parties to address hazardous substance discharges or environmental pollution that have impacted the lands and waters of the state, including contaminated sediments.

Wis. Stat. ch. 292 provides specific exemptions to some parties. Users of this fact sheet who may be an exempt party are urged to review the statute citations listed in the right sidebar. Discharges regulated under another DNR program does not exempt the party from clean up liability.

Liability Exemptions

A person may be in possession (e.g., own a property) or control of contaminated sediment but be otherwise exempt from taking certain actions pursuant to both Wis. Stat. § 292.11 and Wis. Admin. Code chs. NR 700 to NR 799. The exemptions include the following:

- Off-site Exemption, Wis. Stat. § 292.13(1m)
- Voluntary Party Liability Exemption, Wis. Stat. § 292.15
- Local Government Unit Exemption, Wis. Stat. § 292.11(9)(3)
- Lender Exemption, Wis. Stat. § 292.21

What is Sediment?

Sediment means particles in the bed of a navigable water up to the ordinary high water mark (OHWM) 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. (Wis. Stat. § 292.01(17g))

Contaminated sediment, defined in Wis. Stat. § 292.01(1s), means sediment that contains a hazardous substance. 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 (Wis. Stat. § 292.01(5)).

Wisconsin law¹ defines the OHWM as “the point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation or other easily recognized characteristic.” The OHWM does not change with temporary fluctuations in water levels, nor is it always at or near open water.

The DNR has the authority to make OHWM determinations. The water management specialists within the DNR’s Waterways Program are trained to make OHWM determinations through on-site investigation and analysis of physical and biological indicators on a case-by-case basis.

Overview of Wis. Admin. Code ch. NR 700

Notification of Discharge – ch. NR 706

The discharge of a hazardous substance to the environment is required by law to be reported to the DNR pursuant to Wis. Stat. § 292.11 and Wis. Admin. Code ch. NR 706. All persons are required to report the hazardous substance discharge to the DNR unless the discharge is authorized and within the limits of a valid permit under Wis. Stat. ch. 283. A person reporting the discharge of a hazardous substance is not automatically designated as the responsible party (RP).

However, persons not identified as RPs are still responsible for properly managing any sediment, soil and/or groundwater in accordance with applicable laws.

Assessment and Investigation – ch. NR 716

After a discharge is reported, the criteria in Wis. Admin. Code § NR 706.05(1) defines whether a site investigation is needed. Wis. Admin. Code ch. NR 716 guides the investigation of a hazardous substance discharge and/or environmental pollution that contaminated the environment, including contaminated sediment and surface water.

A site investigation must include an evaluation of potential pathways for migration of the contamination, including drainage improvements, utility corridors, bedrock and permeable material or soil along which vapors, free product or contaminated water may flow (Wis. Admin. Code § NR 716.11(5)(a)). The investigation should

Wis. Admin. Code chs. NR 347 and NR 716

Sediment assessments and investigations are commonly conducted using Wis. Admin. Code ch. NR 347 and/or Wis. Admin. Code ch. 716. These independent codes have different purposes for assessing and investigating sediment. In general, Wis. Admin. Code ch. NR 347 guides the assessment of sediment as part of a dredging permit application and is typically limited to sediment within the proposed dredging area, while Wis. Admin. Code ch. NR 716 guides the investigation of a hazardous substance discharge and/or environmental pollution. While there are similar processes, the purpose of the two codes is different.

Wis. Admin. Code ch. NR 347 is:

- Tied to an application process associated with the removal and disposal of sediment.
- Limited in scope to the geographic area covered by the application.
- Focused more on the management of the sediment material.

The sampling and analysis conducted under Wis. Admin. Code ch. NR 347 may identify a hazardous substance discharge that requires notification in accordance with Wis. Stat. § 292.11 and Wis. Admin. Code ch. NR 706. This could trigger additional site investigation requirements under Wis. Admin. Code ch. NR 716.

Wis. Admin. Code ch. NR 716 is:

- Triggered by the notification or discovery of a discharge of a hazardous substance to the environment or presence of environmental pollution.
- Requires the investigation of the degree and extent of the impact of the contamination.

An investigation conducted under Wis. Admin. Code ch. NR 716 is typically more extensive than under Wis. Admin. Code ch. NR 347, requiring full characterization of the nature and extent of contamination, and may extend beyond the bounds of an NR 347 project/application area.

If an interim or remedial action is proposed that involves dredging of contaminated sediment, the RP would need to follow the Wis. Admin. Code ch. NR 347 process and obtain a permit required under Wis. Stat. § 30.20. It is also possible to use the sampling and analysis data collected under either the Wis. Admin. Code chs. NR 347 or NR 716 processes to supplement information required under the other code. DNR staff in the Waterways and the Remediation and Redevelopment (RR) Programs can assist users through the applicable codes and sediment investigations.

also evaluate the impacts of the contamination upon receptors (e.g., plant and animal species, humans, sensitive environments and habitats, water supply wells) and resources (e.g., plants, fish, wildlife) (Wis. Admin. Code § NR 716.11(4)(b) and (c)).

Remedial Action Options Report (RAOR) and Remedy Selection – ch. NR 722

The RAOR is used to identify and evaluate options to address contamination. The report also evaluates the expected outcome of actions to restore the environment to the extent practicable and to minimize the harmful effects from the discharge to the air, lands or waters of this state.

Wis. Admin. Code § NR 722.09 allows the DNR to require the cleanup of contaminated sediment impacted by a discharge of a hazardous substance and/or environmental pollution. The DNR may work with the RP to establish site-specific cleanup standards under Wis. Admin. Code § NR 726.09(2) to meet the obligations of Wis. Stat. § 292.11(3). In general, upon review of proposed cleanup values, the DNR considers the complexity of a site and the hazards posed to human health and the environment by contaminated sediment.

The DNR publication RR-088, *Consensus-Based Sediment Quality Guidelines: Recommendations for Use & Application*, is a useful reference for sediment assessment (visit dnr.wi.gov, search “RR-088”). The guidelines are not cleanup numbers but can assist in making an initial evaluation of sediment sampling results. The guidelines are one line of evidence along with other information and data to support sediment management decisions for a site in a weight of evidence approach.

Surface waters impaired due to contaminated sediment should be restored to achieve surface water quality standards contained in Wis. Admin. Code chs. NR 102 to NR 106 and to support animal, plant and aquatic life. In general, the complexity of a RAOR will depend on the complexity of the hazardous substance discharge and/or environmental pollution.

Remedial and Interim Action – ch. NR 724

Wis. Admin. Code ch. NR 724 specifies the requirements for the design, implementation, operation, maintenance and monitoring of remedial actions. This chapter describes plans, reports and submittal requirements.

Notification Requirements – ch. NR 725

Requirements for notification to affected parties of residual contamination and continuing obligations are contained in Wis. Admin. Code ch. NR 725. Property owners, occupants and others may need to be notified of residual contamination. Wis. Stat. § 292.12 requires the notice to include the location and description of any engineering control or residual contamination on the site.

Case Closure – ch. NR 726

The minimum requirements and conditions for the DNR to grant closure for a case related to the discharge of a hazardous substance and/or environmental pollution are specified in Wis. Admin. Code ch. NR 726. This chapter of code also describes the requirements for documentation for the DNR’s database for contaminated sites.

For sites or facilities with sediment contamination, sampling data is needed to demonstrate that the remedial action selected in accordance with Wis. Admin. Code ch. NR 722 restored the environment to the extent practicable and minimized the harmful effects of the hazardous substances and/or environmental pollution to the environment. This may include fish and wildlife tissue, sediment and surface water sampling.

Wis. Stat. § 292.12 authorizes the DNR to require financial assurance when engineering controls are utilized at contaminated sediment sites.

Continuing Obligations and Reopening Cases – ch. NR 727

The responsibilities for continuing obligations and the criteria for reopening closed cases are described in Wis. Admin. Code ch. NR 727. Changing site conditions, including site usage, may trigger requirements to notify and obtain approval from the DNR (Wis. Admin. Code § NR 727.07 and Wis. Stat. § 292.12(6)). Future information

available to the DNR related to conditions at the site that pose a threat to public health, safety or welfare, or the environment may lead to a reopening of the case for additional response actions (Wis. Admin. Code § NR 727.13).

Enforcement and Compliance Authorities – ch. NR 728

The tools available to the DNR to ensure compliance with state law are described in Wis. Admin. Code ch. NR 728.

¹ Diana Shooting Club v. Husting (1914), 156 Wis. 261, 272.

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