

Contaminated Sediment Fact Sheet

This fact sheet is a brief outline of the typical approaches that are used to navigate through Wis. Stat. ch. 292 and the Wis. Admin. Code chs. NR 700–799 with respect to the discovery, 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 and/or the Wisconsin Department of Natural Resources (DNR) to address hazardous substance discharges or environmental pollution that have impacted the 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 text box.

What is Sediment?

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. [Wis. Stat. § 292.01(17g)]

Contaminated sediment, defined in Wis. Stat. § 292.01(1s), means sediment that contains a hazardous substance. Hazardous substance, defined in Wis. Stat. § 289.01(11), generally means a substance (solids, semisolids, liquid or gas) which may pose a hazard to human health or the environment.

The Wisconsin Supreme Court defined the ordinary high-water mark (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 DNR’s Watershed Management Program has the authority to make OHWM determinations. The DNR’s Water Management Specialists 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 – 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, including those who are eligible

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 754. These exemptions included the following:

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

for a Wis. Stat. § 292.11 exemption, are required to report the hazardous substance discharge to the DNR.

Reporting the discharge of a hazardous substance does not automatically make you a responsible party.

Persons who discover contaminated sediment while undertaking a dredging project, conducting due diligence as part of a property transaction or other discovery method, and that qualify for one or more of the exemptions listed in Wis. Stat. ch 292, are not considered responsible parties under the Wis. Admin. Code chs. NR 700–754.

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

When a person is deemed to be a responsible party, the DNR uses the criteria in Wis. Admin. Code § NR 706.05(1) to make a professional judgment as to whether or not a Wis. Admin. Code ch. NR 716 site investigation is needed.

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

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 in the proposed dredging area. Wis. Admin. Code ch. NR 716 guides the investigation of a hazardous substance discharges or environmental pollution that have contaminated the waters of the state. DNR staff in the Watershed Management and the Remediation and Redevelopment Programs can assist in guiding users through the applicable codes and sediment investigations.

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 could result in notification of the DNR of a discharge or environmental pollution and trigger additional investigation 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. The investigation under Wis. Admin. Code ch. NR 716 is more extensive than the requirements of Wis. Admin. Code ch. NR 347, requiring full characterization of the nature and extent of contaminants, extending 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 responsible party 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.

Assessment and Investigation – NR 716

Wis. Admin. Code ch. NR 716 guides the investigation of a hazardous substance discharge or environmental pollution that have contaminated the waters of the state.

The site investigation should 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. The investigation should also evaluate whether there is a potential for an adverse effect to public health, safety or welfare from consumption of plants, fish and wildlife.

The text box below explains the difference between Wis. Admin. Code chs. NR 716 and NR 347 investigations.

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

The RAOR is a document that identifies options to address contamination, and evaluates the options and 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(2)(c) and (3), allow the DNR to require the cleanup of contaminated sediment that has been impacted by a discharge of a hazardous substance or environmental pollution. Presently, the DNR does not have promulgated sediment cleanup standards, but does have the authority to establish those on a site-by-site basis. In general the DNR will consider the complexity of a site and the hazards posed to humans and the environment by contaminated sediment in establishing site specific standards.

The DNR's "[Consensus-Based Sediment Quality Guidelines: Recommendations for Use & Application](#)" (RR-088) is a useful reference for sediment assessment. The guidelines assist staff in making an initial evaluation of sediment sampling results but are not meant as cleanup numbers. 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." Technical literature is available to use as references to explore the hazardousness of contaminants and methods used to restore the environment at various cleanup sites. 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 consider animal, plant and aquatic life. In general, the complexity of a RAOR will depend on the complexity of the hazardous substance discharge.

Remedial and Interim Action – 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 – NR 725

Requirements for 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 sediment cover on the site.

Case Closure – NR 726

The minimum requirements and conditions for the DNR to consider closing a case related to the discharge of a hazardous substances are specified in Wis. Admin. Code ch. NR 726. The code describes the DNR's database for contaminated sites and documentation requirements. For sites or facilities with sediment contamination, sampling data demonstrating that the remedial action selected in accordance with Wis. Admin. Code ch. NR 722 has restored the environment to the extent practicable and minimized the harmful effects of the hazardous substances on the air, lands and waters of the state. This may include wildlife sampling, sediment and surface water sampling.

Wis. Stat. § 292.12 authorizes the use of financial assurance for engineering controls for sediment sites.

Continuing Obligations and Reopening Cases – 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 notification requirements to the DNR. Future information available to the DNR related to conditions at the site may lead to a reopening of the case for additional response actions.

Continuing Obligations

Continuing Obligations are imposed when residual contamination remaining requires ongoing maintenance and/or monitoring. A common example of conditions requiring continuing obligations is the placement of sediment caps. Sediment caps are considered an engineering control that requires monitoring, maintenance and financial assurance. A sediment cover is not an engineering control.

Enforcement and Compliance Authorities –NR 728

The tools available to the DNR to ensure compliance with Wis. Admin. Code chs. NR 700 to NR 799 are described in Wis. Admin. Code ch. NR 728. 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.