

DRAFT rule revisions for 10/1/2019 Rule Development Meeting

Subject matter (group/subgroup): Other / Emerging Contaminants

Author(s): Gena Larson, Michael Prager, Molly Schmidt

Changes (include treatment, list in order of rules):

NR 700.03 (43g) is amended to read:

NR 700.03 (43g) "Phase I environmental site assessment" means an assessment ~~of that, at a minimum, follows ASTM standard practice E1527, includes hazardous substances as defined in NR 700.03 (25) and environmental pollution as defined in NR 700.03 (19), and is conducted for a site property to identify all potential, suspected or known areas of environmental contamination.~~ This assessment may include reviewing records, interviewing persons, and conducting physical inspections of the site property.

Note: Under NR 700.03, "contamination" means: (a) Where the air, land or waters of the state have been affected by the discharge of a hazardous substance; or (b) Where environmental pollution exists.

NR 700.03 (43r) is amended to read:

NR 700.03 (43r) "Phase II environmental site assessment" means an assessment ~~of that, at a minimum, follows ASTM standard practice E1903, includes hazardous substances as defined in NR 700.03 (25) and environmental pollution as defined in NR 700.03 (19), and is conducted for a site property to physically confirm that contamination exists in potential, suspected or known areas of environmental contamination identified in the Phase I environmental assessment, but not to determine the nature, degree and extent of contamination.~~ This assessment may include field sampling of media, laboratory analysis of samples and visual confirmation of environmental contamination at the site property.

Note: The department recommends that, at a minimum, the current ASTM standards standard practices be followed when conducting Phase I and Phase II environmental assessments. The department may require information or sampling that is additional to ASTM standard practices, depending upon on the property conditions and the applicable regulatory authority (e.g., at a property for which a person is seeking the voluntary party liability exemption pursuant to s. 292.15, Stats.). When a person is seeking liability protections under CERCLA the person should follow EPA's requirements contained in 40 CFR Part 312. See EPA's web page at: www.epa.gov for more information.

NR 712.07 (1) is amended to read:

NR 712.07 (1) Submittals that are prepared to satisfy the requirements of s. NR 708.11 (4) or 708.13 or chs. NR 716 to 754, which require the performance of engineering services or scientific evaluations, including phase I and phase II environmental site assessments shall be prepared by or under the supervision of a professional engineer, hydrogeologist, or scientist, except as provided in s. NR 712.11. All phases of work necessary to obtain data, develop conclusions, recommendations and prepare submittals shall be conducted or supervised by the professional engineer, hydrogeologist, or scientist.

~~Note: The department recommends that at a minimum, ASTM standards be followed when conducting Phase I and Phase II environmental site assessments. EPA's requirements contained in 40 CFR Part 312 must be followed in order to be eligible for the liability protections contained in CERCLA.~~

NR 725.05 (2) (a) is amended to read:

NR 725.05 (2) (a) Groundwater contamination which attains or exceeds ch. NR 140 enforcement standards or exceeds any site-specific groundwater contamination standards developed for the site and approved by the department remains after completion of the remedial action.

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NR 725.05 (2) (b) is amended to read:

NR 725.05 (2) (b) Soil contamination which attains or exceeds ch. NR 720 residual contaminant levels or exceeds any site-specific soil contamination standards developed for the site approved by the department remains after completion of the remedial action.

NR 726.05 (4) is amended to read:

NR 726.05 (4) Response action goals. For sites or facilities considering closure under this chapter, the closure request shall document that the remaining level of contamination is not likely to:

- (a) Pose a threat to public health, safety, or welfare or the environment.
- (b) Cause a violation of ch. NR 140 groundwater quality enforcement standards or other site-specific standards that have been developed for the site and approved by the department at any applicable point of standards application, except where the department has granted an exemption under s. NR 140.28 for a specific hazardous substance or the criteria under s. NR 726.05 (6) are met.
- (c) Cause a violation of surface water quality standards in chs. NR 102 to 106 or other site-specific standards that have been developed for the site and approved by the department.
- (d) Cause a violation of air quality standards contained in chs. NR 400 to 499 or other site-specific standards that have been developed for the site and approved by the department.
- (e) Cause a vapor action level in indoor air to be attained or exceeded.

Note: Vapor action level is defined in s. NR 700.03 (66p) as "the concentration of vapors from volatile compounds is at or above the 1-in-100,000 (1×10^{-5}) excess lifetime cancer risk or is at or above a hazard index of 1 for non-carcinogens."

Note to readers: please see additional related changes in the draft rule titled "Notification and Closure", which will also be presented along with this draft rule at the October 1, 2019, Rule Development Meeting.

NR 726.05 (6) is amended to read:

NR 726.05 (6) Criteria for closure for sites or facilities with groundwater contamination. For sites or facilities with groundwater contamination that attains or exceeds ch. NR 140 enforcement standards at the time that case closure is requested, including sites with residual contamination where other site-specific standards have been developed for the site and approved by the department and sites or facilities contaminated with petroleum products discharged from a petroleum storage tank that are eligible for closure under ch. NR 726, the responsible party or other person requesting closure shall submit a case closure request to the agency for the site that documents that all of the following criteria are satisfied, if applicable:

- (a) Adequate source control measures have been taken which include all of the following:
 - 1. Whether regulated or registered under ch. ATCP 93 or not, all existing underground storage tanks have been removed, permanently closed or upgraded to prevent new discharges of hazardous substances to the groundwater that would violate ch. NR 140. The same requirement applies to all new and replacement underground storage tanks not regulated under ch. ATCP 93.

Note: The intent of this requirement is to ensure that source control measures are taken which prevent new or continuing releases, regardless of whether or not the tank is regulated under ch. ATCP 93.

- 2. All new and replacement underground storage tanks regulated under ch. ATCP 93 have been constructed and are being monitored in accordance with ch. ATCP 93.
- 3. All other existing tanks, pipes, barrels or other containers which may discharge a hazardous substance have been removed, contained or controlled to prevent, to the maximum extent practicable, new discharges of hazardous substances to the groundwater that would violate ch. NR 140.

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4. Where applicable, immediate and interim actions have been taken in accordance with ch. NR 708 to protect public health, safety, or welfare or the environment.

5. Free product has been removed in accordance with the criteria in s. NR 708.13.

6. The concentration and mass of a substance and its breakdown products in groundwater have been reduced due to naturally occurring physical, chemical and biological processes as necessary to adequately protect public health and the environment, and prevent groundwater contamination from migrating beyond the boundaries of the property or properties which are required to be entered onto the department database.

(b) Natural attenuation will bring the groundwater into compliance with ch. NR 140 groundwater quality standards or other site-specific standards that have been developed for the site and approved by the department, within a reasonable period of time, considering the criteria in s. NR 722.07.

(c) The groundwater plume margin is stable or receding, and after case closure, groundwater contamination attaining or exceeding ch. NR 140 preventive action limits or other site-specific standards that have been developed for the site and approved by the department will not migrate beyond the boundaries of any property that falls into either one of the following categories:

1. Properties for which a preventive action limit exemption has been granted.

2. Properties that have been identified as having existing groundwater contamination that attains or exceeds ch. NR 140 enforcement standards and that will be included on the department database.

(d) There is no existing or anticipated threat to public health, safety, or welfare or the environment.

(e) Except for ch. NR 140, all applicable public health and environmental laws, including chs. NR 141 and 700 to 754, have been complied with.

NR 726.09 (2) (e) is amended to read:

NR 726.09 (2) (e) Where the agency has required groundwater quality sampling to be conducted, results from a minimum of 8 successive quarterly rounds of sampling to demonstrate compliance with either the applicable requirements of ch. NR 140, site-specific standards that have been developed for the site and approved by the department or the requirements of s. NR 726.05 (6), unless otherwise directed or approved by the agency.

Note: Under ch. NR 722, alternate sampling schedules may be proposed, based on site geology, contaminants of concern, remedial action applied and redevelopment plans. The department expects that more monitoring may be necessary at complex sites, or where statistical analysis will be used for data evaluation. Conversely, less post-remediation monitoring may be appropriate for certain sites with significant source removal, readily degradable compounds or other well-established site conditions.

NR 726.11 (5) (d) is amended to read:

NR 726.11 (5) (d) For sites or facilities where groundwater attains or exceeds any ch. NR 140 enforcement standard or other site-specific standards that have been developed for the site and approved by the department at the time that case closure is requested:

1. A geologic cross section, if one was required under ch. NR 716, that includes the vertical extent of residual contamination in soil and groundwater, the location and extent of the source of the contamination, isoconcentrations for all groundwater contamination attaining or exceeding ch. NR 140 preventive action limits or other site-specific standards that have been developed for the site and approved by the department that remains when case closure is requested, water table and piezometric elevations, location and elevation of geologic units, bedrock and confining units, if any.

2. An isoconcentration map of the contaminated properties within the contaminated site boundaries, if such a map was required under ch. NR 716. An isoconcentration map shall show the areal extent of groundwater contamination attaining or exceeding ch. NR 140 preventive action limits and the areal extent of groundwater contamination attaining or exceeding ch. NR 140 enforcement standards or other site-specific standards that have been developed for the site and approved by the department, with

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the groundwater flow direction indicated, using the most recent data, with sample collection dates identified. If an isoconcentration map was not required under ch. NR 716, submit a map showing the horizontal extent of contamination exceeding applicable standards based on the most recent data; or where standards have not been promulgated, the horizontal extent of contamination remaining after the remedial action.

3. A groundwater flow map, representative of groundwater movement at the site. If groundwater flow direction varies by more than 20 degrees over the history of water level measurements at the site, 2 groundwater flow maps showing the maximum variation in groundwater flow direction shall be submitted.

NR 726.11 (6) (a) is amended to read:

NR 726.11 (6) (a) Soil. For sites or facilities where soil contamination exceeds residual contaminant levels as determined under ch. NR 720 or other site-specific standards that have been developed for the site and approved by the department at the time that case closure is requested include a table of the analytical results showing results for the most recent samples, for all contaminants found in pre-remedial sampling, with sample collection dates identified.

NR 726.11 (6) (b) is amended to read:

NR 726.11 (6) (b) Groundwater. For sites or facilities where groundwater attains or exceeds any ch. NR 140 enforcement standard or other site-specific standards that have been developed for the site and approved by the department at the time that case closure is requested, include:

1. A separate table of only the 8 most recent analytical results from all monitoring wells, and any potable wells for which samples have been collected, with sample collection dates identified.
2. A table including, at a minimum, the previous 8 water level elevation measurements from all monitoring wells, with the date measurements were made. If free product is present at the site, it shall be noted in the table.
3. A completed groundwater monitoring well information form.

NR 726.13 (1) (a) 2. is amended to read:

NR 726.13 (1) (a) 2. It has been documented, in the case closure request that is submitted to the agency in compliance with the requirements of s. NR 726.09, that all applicable public health and environmental laws, including chs. NR 700 to 754, have been complied with, or where ch. NR 140 enforcement standards or other site-specific standards that have been developed for the site and approved by the department are the only standards that are attained or exceeded, that the criteria in s. NR 726.05 (6) are satisfied.

NR 726.13 (1) (b) is amended to read:

NR 726.13 (1) (b) The agency may not close a case under this chapter if, at any time in the future, the remaining level of contamination is likely to do any of the following:

1. Pose a threat to public health, safety, or welfare or the environment.
2. Cause a violation of a ch. NR 140 groundwater quality enforcement standard or other site-specific standards that have been developed for the site and approved by the department at any applicable point of standards application, except where the department has granted an exemption under s. NR 140.28 for a specific hazardous substance or the criteria under s. NR 726.05 (6) are met.
3. Cause a violation of surface water quality standards in chs. NR 102 to 106 or other site-specific standards that have been developed for the site and approved by the department.
4. Cause a violation of air quality standards contained in chs. NR 400 to 499 or other site-specific standards that have been developed for the site and approved by the department.

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5. Cause a vapor action level in indoor air to be attained or exceeded.

6. Cause a violation of drinking water standards set forth in ch. NR 809 and ch. NR 812 or other site-specific standards that have been developed for the site and approved by the department.

NR 727.09 (4) is amended to read:

NR 727.09 (4) Removal from the department database. For cases that have been included on the department database under s. NR 708.17, 722.15, or 726.13, the responsible party, property owner or other party may apply to the agency for removal of the site or facility or property, as applicable, from the department database. A site may not be removed from the database until all applicable standards have been met and all requirements imposed have been satisfied or nullified. A request may be submitted to the agency at any time after any of the following have been achieved:

(a) Groundwater contaminant concentrations are below ch. NR 140 enforcement standards or other site-specific standards that have been developed for the site and approved by the department.

(b) Soil contaminant concentrations are below ch. NR 720 soil standards or other site-specific standards that have been developed for the site and approved by the department.

(c) Other requirements or continuing obligations imposed have been satisfied or nullified.

NR 727.09 (5) is amended to read:

NR 727.09 (5) Modification of the department database. For cases that have been included on the department database under s. NR 708.17, 722.15, or 726.13, the responsible party, property owner or other party may request that the department modify information on the department database at any time after any of the following have been achieved:

(a) Groundwater contaminant concentrations are below ch. NR 140 enforcement standards or other site-specific standards that have been developed for the site and approved by the department.

(b) Soil contaminant concentrations are below ch. NR 720 soil standards or other site-specific standards that have been developed for the site and approved by the department.

(c) Other requirements or continuing obligations imposed have been satisfied or nullified.

Note to readers: revisions may be proposed to Wis. Admin. Code NR 749 to clarify that database fees may apply at sites with exceedances of site-specific standards. If these revisions are included, they will be part of the first draft of rules regarding revisions to ch. NR 749.

NR 750.03 (2m) is amended to read:

NR 750.03 (2m) "Environmental investigation of the property" means a study of the entire property, including any discharges that have or may have migrated off the property, ~~and approved by the department, consisting of a Phase I and Phase II environmental assessment~~ phase I environmental site assessment and a phase II environmental site assessment and a site investigation, based on information documented in these environmental assessments.

Note: NR 700.03 (43g) defines "Phase I environmental site assessment" as an assessment of that, at a minimum, follows ASTM standard practice E1527, includes hazardous substances as defined in NR 700.03 (25) and environmental pollution as defined in NR 700.03 (19), and is conducted for a property to identify all potential, suspected or known areas of environmental contamination. This assessment may include reviewing records, interviewing persons, and conducting physical inspections of the property.

Note: NR 700.03 (43r) defines "Phase II environmental site assessment" as an assessment that, at a minimum, follows ASTM standard practice E1903, includes hazardous substances as defined in NR 700.03 (25) and environmental pollution as defined in NR 700.03 (19), and is conducted for a property to physically confirm that contamination exists in potential, suspected or known areas of environmental contamination, but not to determine the nature, degree and extent of contamination. This assessment may

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include field sampling of media, laboratory analysis of samples and visual confirmation of environmental contamination at the property.

Plain language explanation/analysis:

An explanation of the rule revisions above is available in the [white paper](#) on this topic that was presented at the June 4, 2019, Rule Development Meeting.

Comparable state or federal rules or policies:

A short discussion of comparable policies is available in the [white paper](#) on this topic that was presented at the June 4, 2019, Rule Development Meeting.

Economic impact comments:

This rule revision is not likely to introduce economic impacts since it would only clarify requirements that are currently applicable under statute.