

ISSUE: Emerging contaminants

Rule Subgroup: Other / emerging contaminants

BACKGROUND

This paper addresses proposed revisions to Wis. Admin. Code chapters NR 700, NR 706, NR 708, NR 716, NR 722, NR 725, NR 726, NR 749, and NR 750, Wis. Adm. Code regarding “emerging contaminants”, which is used herein to refer to hazardous substances or environmental pollution for which there are no specific environmental standards assigned for some or all environmental media.

PROPOSED CHANGES

RR program included this item in its scope statement for permanent rulemaking with the intention of reviewing certain code chapters to ensure that the rules provide sufficient direction for addressing emerging contaminants. Following review, RR program concludes that (1) generally, the administrative rules provide sufficient direction with regard to emerging contaminants; however, (2) specific items within code warrant further consideration as to whether rule revisions may provide further clarity. Input is requested on both of these conclusions, which are discussed in further detail below.

(1) The code provides sufficient direction for addressing emerging contaminants

The central purpose of the NR 700 rule series is the investigation and remediation of hazardous substances and/or environmental pollution. The statutory and administrative code definitions of “hazardous substance” and “environmental pollution” may apply to emerging contaminants; therefore, the code is generally applicable to emerging contaminants; and individual requirements also apply to emerging contaminants. For example:

- Wis. Admin. Code § NR 706.05, regarding general requirements for responsible parties, references “hazardous substances” in discharge notification requirements (Wis. Admin. Code § NR 706.05(1)(a)).
- Wis. Admin. Code § NR 708.05, regarding immediate actions, states that responsible parties “shall immediately take action to halt a hazardous substance discharge or environmental pollution” (Wis. Admin. Code § NR 708.05(1)).
- Wis. Admin. Code § NR 708.11, regarding interim actions, states that interim actions “shall be taken where it is necessary to contain or stabilize a discharge of a hazardous substance or environmental pollution” (Wis. Admin. Code § NR 708.11(1)(a)).
- Wis. Admin. Code § NR 716.07, regarding site investigation scoping, directs the responsible party to evaluate all relevant items, and “responsible party” is defined in code to include any person that is required to conduct a response action under Wis. Stat. ch. 292, and “response action” as defined in code means “means any action taken to respond to a hazardous substance discharge or to environmental pollution...” (Wis. Admin. Code §§ NR 700.03(50), NR 700.03 (51), and NR 716.07). This chapter of the code also uses the term “contamination”, which is defined to include areas where the air, land or waters of the state have been affected by the discharge of a hazardous substance; or areas where environmental pollution exists (Wis. Admin. Code § NR 700.03(7)).
- Wis. Admin. Code § NR 716.13(12) regarding sampling and analysis requirements also directs responsible parties to comply with code requirements and refers to contaminants, which would include emerging contaminants.
- Wis. Admin. Code ch. NR 720, regarding soil cleanup standards, also directs responsible parties to comply with code requirements and refers to contaminants, which would include emerging contaminants.

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- Wis. Admin. Code ch. NR 722, regarding standards for selecting remedial actions, also directs responsible parties to comply with code requirements and refers to contaminants, which would include emerging contaminants.

Many other sections of code reference terms that encompass emerging contaminants through the definitions of “hazardous substance” and/or “environmental pollution”.

2. Specific items may be considered further

While it is clear that the code applies broadly to emerging contaminants, the program is considering whether certain provisions in code may lack clarity or direction with regard to addressing emerging contaminants at specific steps in the investigation and remediation process.

Emerging contaminants definition: whether a definition of “emerging contaminants” at Wis. Admin. Code § NR 700.03 would be beneficial or provide further clarity.

- The program is not likely to pursue a definition for “emerging contaminants”. Emerging contaminants are included under the definitions of “hazardous substance” and/or “environmental pollution”, both of which are defined consistently in statute and in rule. If an emerging contaminant is not included under one of these definitions, it is not likely that this program would have authority to conduct or direct cleanup of these contaminants under the NR 700 rule series. Introducing this definition as a separate concept may cause confusion regarding these authorities.

Reporting: whether it is clear that reporting requirements include hazardous substances in all media regardless of whether a promulgated standard exists.

- Wis. Admin. Code § NR 706.05, regarding general requirements for responsible parties, references “hazardous substances” in discharge notification requirements (Wis. Admin. Code § NR 706.05(1)(a)).
- While this section of code currently applies to all contaminants, it may be possible to clarify further the applicability to all media by adding a note that states that responsible parties need to report any discharge, regardless of whether there is a groundwater, soil, or water quality standard.

Environmental standards: whether changes are needed to the definition and/or uses of “environmental standards” in code, specifically at Wis. Admin. Code §§ NR 722.09 and NR 720.12.

- Wis. Admin. Code § NR 722.09 (b)(2) addresses the use of site-specific water quality criteria.
- Wis. Admin. Code § NR 720.12 addresses determining residual contaminant levels based on protection of human health from direct contact with contaminated soil.

Site investigation scoping: whether revisions should clarify that emerging contaminants must be evaluated in a specific manner during the site investigation scoping.

- As stated above, this section of code applies to emerging contaminants through the definitions of “responsible party” and “response action”, and also through the definition of “contamination”.
- While this section of code currently applies to all contaminants, it may be possible to clarify whether specific actions or procedures are required for emerging contaminants.

Soil cleanup standards: whether revisions should clarify that emerging contaminants must be addressed in a specific manner under Wis. Admin. Code ch. NR 720, with regard to soil RCLs.

- This section of code applies to emerging contaminants through the definitions of “responsible party” and “response action”, and also through the definition of “contamination”.
- While this section of code currently applies to all contaminants, it may be possible to clarify whether specific actions or procedures are required for emerging contaminants.

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Standards for selecting remedial action: whether emerging contaminants are addressed sufficiently under Wis. Admin. Code ch. NR 722, regarding selection of a remedial action, specifically, at NR 722.09(2)(b)(2), which addresses groundwater contaminants that do not have an established standard.

- Wis. Admin. Code § NR 722.09(2)(b)(2) states:
For substances which do not have an established standard in ch. NR 140, the department may take or require the responsible parties to conduct any necessary actions, such as developing site-specific environmental standards in cooperation with the department of health services, to protect public health, safety, or welfare or to prevent a significant damaging effect on groundwater or surface water quality for present or future consumptive or non-consumptive uses.
- This chapter of code, including the language above, went into effect in 2013; in light of the relatively recent nature of this language the program may review whether changes or clarifications are needed.

Environmental Investigations for the Voluntary Party Liability Exemption (VPLE) program: whether the terms “Phase I” and “Phase II” need further definition.

- At Wis. Admin. Code § NR 750.03(2m), the definition of “environmental investigation of the property” includes a reference to “a Phase I and Phase II environmental assessment and a site investigation”.
- Generally, standards for performing a Phase I and Phase II are established by the US EPA and based on ASTM standards. ASTM references EPA’s Hazardous Substance List as the basis for determining recognized environmental conditions (RECs). To be consistent with Wis. Stat. ch. 292; however, code should require, at a minimum, that parties subject to these requirements must meet ASTM requirements *and* include evaluation of any “hazardous substances” and “environmental pollution” as those terms are defined in code and statute.
- Several notes in code (at Wis. Admin. Code §§ NR 700.03(43r) and NR 712.07(1)) recommend that, at a minimum, ASTM standards be met when conducting a Phase I or Phase II environmental site assessments. The program may propose rules that make these recommendations mandatory. Additionally, the program may review the applicability of these standards to emerging contaminants and consider whether their approach or definitions are in alignment with the Wis. Stat. ch. 292 definition of “hazardous substances” and may consider revisions to notes or rule language based on this determination. Definitions at Wis. Admin. Code §§ NR 700.03 (43g) and (43r) may be revised to ensure that performance of a Phase I and Phase II includes the use of ASTM standards and an evaluation of hazardous substances and environmental pollution, as those terms are defined in statute and code. The related rule notes within Wis. Admin. Code § NR 700.03 and at Wis. Admin. Code § NR 712.07(1) may be revised accordingly.

Regulation by class: whether revisions are needed to code to clarify that contaminants may be regulated as a class—that is, whether revisions are needed to clarify the authority for the department to group certain chemical compounds by shared similar features, structures, or uses when they are the subject of certain regulatory requirements throughout code. For example:

- The definition of “hazardous substance” (at Wis. Stat § 292.01(6) and Wis. Admin. Code § NR 700.03(25)) refers to a “substance” or “combination of substances” that have certain characteristics that present substantial hazards to human health or the environment.
- Minute changes to the chemical structure of a compound may result in it being deemed a separate compound despite sharing the same hazardous characteristics of compounds that are established hazardous substances.
- The program is exploring whether any revisions are needed in code to clarify that contaminants may be addressed as class rather than by each individual compound.

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Closure and continuing obligations: whether closure requirements and continuing obligations in Wis. Admin. Code chs. NR 726 (case closure) and NR 725 (notifications), and NR 727 (reopening and post-closure modifications), and related language regarding fees within Wis. Admin. Code ch. NR 749, are sufficient with regard to emerging contaminants.

- Wis. Stat. § 292.12, regarding sites with residual contamination, applies to emerging contaminants.
 - Requirements in this section apply to “sites” with residual contamination, and in this section, “site” means a waste site or any area where a hazardous substance has been discharged.
 - The definition of “hazardous substance” may apply to emerging contaminants (“waste site” may also include emerging contaminants); therefore, to the extent that this section is being applied to an area where a hazardous substance has been discharged, it applies to emerging contaminants.
- Wis. Admin. Code chs. NR 725, NR 726, and NR 727 implement some of the requirements set forth under Wis. Stat. § 292.12; however, the language at some provisions within these chapters, as well as language in Wis. Admin. Code ch. NR 749 regarding related fees, does not set forth that same language used in other chapters to address emerging contaminants, in that it does not provide for situations where there are not promulgated standards for a contaminant. For example, see:
 - Wis. Admin. Code § NR 725.05(2)(a) requires written notification for situations where groundwater contamination “which attains or exceeds ch. NR 140 enforcement standards” remains after completion of the remedial action. This section of code may not fully address the mandate at Wis. Stat. § 292.12(4), which requires notification be provided before case closure for “a site that includes any property that has residual contamination and is not owned by the person” -- the rule would exclude contaminants for which no standard is promulgated. One approach to reconciling code with Wis. Stat. ch. 292 would be to add language to include the use of “other site-specific standards developed for the site and approved by department” as an alternative for contaminants without an NR 140 standards.
 - Wis. Admin. Code § 726.05(4) references NR 140 groundwater standards in criteria for response action goals and Wis. Admin. Code § 726.05(6) references exceedance of NR 140 enforcement standards in stating criteria for closure for sites or facilities with groundwater contamination. These references pose an issue similar to that described above. It may exclude contaminants for which no standard is promulgated whereas the statute, at Wis. Stat. 292.12(1)(b) would define “case closure” to include all hazardous substances (including emerging contaminants), rather than solely those for which a standard is promulgated. While Wis. Admin. Code § 726.05(9) states that the department may impose any other condition for case closure “that is necessary to protect public health, safety, or welfare or the environment”, there remains a question as to whether this language provides adequate direction to department staff. One approach to reconciling code with Wis. Stat. ch. 292 would be to add language to include the use of “other site-specific standards developed for the site and approved by department” as an alternative for contaminants without an NR 140 standards.
 - Wis. Admin. Code §§ NR 726.09(2)(e), NR 726.11(5)(d), and NR 726.13(1) regarding closure documentation, database requirements, and approvals, also contain references to NR 140 standards that may exclude contaminants included in the statutory definition of “hazardous substance”. A similar approach to that stated above could be used to provide consistency with the statute.
 - Wis. Admin. Code § NR 727.09(4), regarding removal of properties from the department database (BRRTS), also references enforcement standards as a criterion for removal of a property from BRRTS. Similar to issues stated above, it is possible that this reference to promulgated standards excludes emerging contaminants, unlike the statutory section at Wis. Stat. § 292.12(6), which refers to a “site” in regard to removal from the database, thereby

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- including all hazardous substances (including emerging contaminants), rather than solely those for which a standard is promulgated. A similar approach to that stated above could be used to provide consistency with the statute.
- Wis. Admin. Code ch. NR 749 also specifies fees for listing sites with groundwater contamination that attains or exceeds ch. NR 140 enforcement standards. A similar approach to that stated above could be used to provide consistency with the statute.

Items listed above are the current focus of potential rule revisions; however, the RR program welcomes input on the subject, to the extent that the program is able to address it through the scope of this current rulemaking process.

AFFECTED RULE CHAPTERS

Wis. Admin. Code chapters NR 700, NR 706, NR 708, NR 716, NR 722, NR 725, NR 726, NR 749, and NR 750, Wis. Adm. Code

OTHER RELATED RULE REVISIONS

n/a

COMPARABLE STATE OR FEDERAL POLICIES

The subject rule revisions do not provide an opportunity for direct comparison to state and federal approaches because the revisions are primarily based on providing consistency with Wisconsin statutes; however, general background on the federal approach to emerging contaminants is provided below.

EPA and various other federal agencies refer to emerging contaminants as “contaminants of emerging concern” (CECs). The U.S. EPA uses specific processes for listing contaminants, depending on the authority under which they are being addressed.

For hazardous substance releases regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), authority to address a release relies on the listing of a contaminant such that it is included in the definition of “hazardous substance”, rather than contaminant-specific cleanup standards. Certain provisions of CERCLA may apply to an unlisted contaminant with no standards whereas other provisions rely on listed contaminants. EPA follows certain steps to propose designating emerging contaminants as “hazardous substances” through one of the available statutory mechanisms.

For drinking water contaminants under the Safe Drinking Water Act, EPA maintains a Contaminant Candidate List (CCL) of drinking water contaminants that are known or anticipated to occur in public water systems and are not currently subject to EPA drinking water regulations and periodically makes a regulatory determination on whether to regulate contaminants on the contaminant candidate list.¹

DISCUSSION OF POTENTIAL ECONOMIC IMPACTS

¹ EPA webpage *PFAS Laws and Regulations*, viewed online 4/26/2019 at <https://www.epa.gov/pfas/pfas-laws-and-regulations>.

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

COMMENTS
