

STATEMENT OF SCOPE

Department of Natural Resources

Rule No.: Chapter NR 538, Wisconsin Administrative Code WA-11-15

Relating to: The beneficial use of industrial waste byproducts.

Rule Type: Permanent

1. Finding/nature of emergency (Emergency Rule only):

The rules will be proposed as permanent rules.

2. Detailed description of the objective of the proposed rule:

The Beneficial Use Program in chapter NR 538 originated in 1997, when chapter NR 538 Wis. Adm. Code was first adopted. This code laid out a streamlined process whereby certain industrial byproducts such as coal combustion byproducts, foundry sand, lime-kiln dust, paper mill sludge and other high volume industrial wastes with similar characteristics could be beneficially used in a variety of approved applications. The process was designed to be mostly self-implementing, with byproduct generators responsible for characterization of their material and annual reporting of materials used. For some projects, the rule provided for Department review to evaluate the potential for impacts to human health or the environment.

The program has been generally successful over the years. However, the code is now outdated and needs updating to address new environmental standards, laws and changes in manufacturing and air pollution control processes, while continuing to encourage the beneficial use of waste materials that might otherwise be landfilled.

3. Description of the existing policies relevant to the rule, new policies proposed to be included in the rule, and an analysis of policy alternatives:

The regulation of the beneficial use of industrial waste byproducts was established by rule in ch. NR 538 Wis. Adm. Code. Since the adoption of the rule in 1997 and a minor update in 2006, several guidance documents have been prepared to define department policy in areas that were not specifically addressed in the rule. The code language and our guidance have worked well and have been successful at diverting usable industrial byproducts from landfills, but the time has come to update the code to reflect changes in environmental standards and industry practices and byproducts.

In addition to the more general changes that may be necessary to update the code, we have identified some specific areas that may require revisions:

- New federal rules issued on December 19, 2014 under Subtitle D of the Resource Conservation and Recovery Act (RCRA) governing the regulation of one class of industrial byproducts, coal combustion residuals (coal fly ash, bottom ash and flue gas desulfurization condensate) will require revisions to the definitions of beneficial use and landfilling under ch. NR 538 to ensure consistency. The federal rules may also necessitate a change in the methods of assessing potential risk from the beneficial use of these byproducts.

- The rule may need to be amended to accommodate new or changed byproducts. For example, air pollution control wastes have become more complex and variable due to changes in the Federal Clean Air Act standards. We also need better definition of what characteristics would allow a waste to be characterized as a “similar” waste that could be regulated under ch. NR 538.
- There is a need to better define the analyses required for initial characterizations and re-characterizations of industrial byproduct materials.
- The method of assigning waste materials to categories needs clarification.
- Confined and unconfined byproduct fill sites represent the department’s highest workload. Fill sites require staff oversight to ensure that the performance criteria are complied with and to verify compliance with rules for the protection of wetlands, surface waters and endangered species. Most of these fill projects also require an interpretation of engineering drawings to ensure they meet other code restrictions on byproduct placement. The department may also explore fees to recoup expenses for project reviews/inspections. There may be opportunities to simplify construction requirements by substituting ASTM standards for code language or referencing code requirements in other programs, especially for the management of storm water.
- The Appendix I tables are in need of updating to reflect changes in acceptable levels of contaminants for both ingestion and water quality. For instance, the standards for molybdenum have decreased from 0.05 ppm to 0.008 ppm in ch. NR 140 Wis. Adm. Code.

4. Detailed explanation of statutory authority for the rule (including the statutory citation and language):

S. 289.43(7), Wisconsin Statutes allows the department to exempt facilities from the licensing requirements of ch. 289, Stats. for the purpose of allowing the recycling of high-volume industrial waste (as defined in s. 289.01(17) Stats.).

S. 289.05(4), Wisconsin Statutes directs the department to promulgate rules establishing standards for the beneficial reuse of high-volume industrial waste. The department’s rules are to be drafted with the intent of encouraging the reuse of these materials to the maximum extent possible consistent with the protection of human health and the environment in order to preserve resources, conserve energy and reduce or eliminate the need to dispose of high-volume industrial waste in landfills.

5. Estimate of amount of time that state employees will spend developing the rule and of other resources necessary to develop the rule :

The department estimates that the rule revisions could take approximately 1900 hours/year over two and one half years. We anticipate reconstituting a Beneficial Use Technical Advisory Committee (TAC) composed of both external and internal partners who could be affected by changes in the rule and scheduling several meetings. The purpose of the TAC meetings will be to discuss potential changes to the rules and solicit input into ways such changes may affect the various parties. It is likely we will also need access to the resources of staff in other agencies, especially the Wisconsin Department of Transportation and the Department of Health & Family Services.

6. List with description of all entities that may be affected by the proposed rule :

Potential affected industrial byproduct generators include:

- Iron Foundries
- Electric Utilities
- Paper Mills
- Lime Kilns

Potential affected industrial byproduct users include:

- Road Builders
- Cement Manufacturers
- Aggregate Producers
- Drywall Manufacturers
- Asphalt Producers
- Concrete Manufacturers
- Farmers/CAFOs
- WisDOT
- Construction Firms
- Industrial Byproduct Brokers

7. Summary and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the proposed rule :

The U.S. EPA currently does not have any regulations relating to the beneficial use of most industrial waste byproducts under either RCRA Subtitle D for landfills and nonhazardous solid waste, or Subtitle C for hazardous waste. The U.S. EPA published a new rule on December 19, 2014 (Docket No. EPA-HQ-RCRA-2009-0640) regulating one specific type of industrial byproduct, coal combustion residuals (coal fly ash, bottom ash and flue gas desulfurization condensate). The US EPA set some minimum standards for beneficial use and disposal of CCRs and set up a self-implementing process for the respective CCR generators to be enforced by civil lawsuits. The States are not required to adopt the new EPA standards, but the EPA strongly encourages all States to revise their rules so that the Federal and State rules are consistent.

8. Anticipated economic impact of implementing the rule (note if the rule is likely to have a significant economic impact on small businesses):

The Department believes the beneficial use of these industrial byproducts (e.g., coal ash residuals, foundry sand, paper mill sludges, etc.) results in a positive economic savings for the generators and users of these materials. Savings result from the materials being used in lieu of virgin materials as well as the reduction or elimination of these materials being landfilled. The generators of these waste are utilities, paper mills and foundries, most of which are large businesses. These rules will have little or no effect on small businesses.

9. Anticipated number, month and locations of public hearings :

The Department anticipates holding one public hearings in the month of December, 2016. The hearing city will be in Madison.

Contact Person:

Edward Lynch, Hazardous Waste & Mining Section Chief
(608) 267-0545

Philip Fauble, Beneficial use Coordinator
(608) 267-3538

Ruth O'Donnell, Waste Management Specialist
(262) 574-2157