



NR 538 Technical Advisory Committee: Going Forward

First TAC Meeting
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1995 Wisconsin Act 27

- **s. 289.05, Stats. Solid waste management standards.**
- **(4)** The department shall promulgate, by rule, standards for the reuse of foundry sand and other high-volume industrial waste, including high-volume industrial waste that qualifies for an exemption from regulation under s. 289.43(8). **The department shall design the rules under this subsection to allow and encourage, to the maximum extent possible consistent with the protection of public health and the environment, the beneficial reuse of high-volume industrial waste, in order to preserve resources, conserve energy and reduce or eliminate the need to dispose of high-volume industrial waste in landfills.** In developing rules under this subsection, the department shall review methods of reusing high-volume industrial waste that are approved by other states and incorporate those methods to the extent that the department determines is advisable. In developing rules under this subsection, the department shall also consider the analysis and methodology used under 40 CFR 503.13 (*sewage sludge pollutant limits*) in determining the impacts on groundwater from various methods of reusing high-volume industrial wastes.





1995 Wisconsin Act 27

- **Section 9142(6t)(a) [non-statutory provisions]**
- The department of natural resources shall create a committee under section 227.13 of the statutes to advise the department with respect to the promulgation of rules under section 289.05(4) of the statutes. The advisory committee shall consist of the following members:
 - Wisconsin Cast Metals Association (2)
 - Wisconsin Paper Council
 - Wisconsin Utilities Association
 - WisDOT, Development, DOA
 - Private Environmental Protection Group
 - Construction Industry
 - DNR Members





What Works

- Is successfully diverting byproducts from landfills into beneficial uses; geotechnical fill, DOT projects, cement, wallboard, agricultural uses
- Being used as a model for other states:
 - Michigan
 - Minnesota
 - EPA citations





What Works

- Basic Framework:
 - Initial Certification
 - Assign categories based on analytical data
 - List acceptable uses for each category
 - Mostly self-implementing (concurrency for certain applications)
 - Annual reporting
 - Periodic re-characterization
 - Case-specific for certain projects





Potential Changes?

- Standards in Appendix I tables
 - Environmental protection standards (gw and clean-up) have changed since 1995
 - Experience with byproducts (EPA studies of both coal ash and foundry sand – DNR data)
 - Addition of new byproduct columns





Current NR 538 Standards

Category	Water Leach mg/l	Total Elemental mg/kg
1	<PAL NR 140 GW PALs	NR 720 Residential RCL
2	10 X Cat 1 (NR 140 ES)	Various Multipliers
3	10 X Cat 1 (50 X Welfare)	No Table
4	5 X Cat 2 (100 X Welfare)	No Table
5	No Table	No Table

Note: Standards were adjusted in some cases to allow for an accepted beneficial use or to reflect other standards such as NR 105 (aluminum) or background soil concentrations (arsenic).





Potential Changes?

- New Byproducts
- New or Revised Beneficial Uses under NR 538.10
- Incorporate Interpretations from the Guidance Document
 - Excavations of Fill Material
 - Storage Sites (impervious surface)
 - Mixture Rule





Potential Changes?

- New Standards (ASTM, DOT, NRCS) to Incorporate
- New Analytical Methods (totals, water leach)
- New DNR Regulations (storage sites and stormwater management)
- Reporting Requirements (better locational information)





Potential Changes?

- Add a Section for Beneficial Use Through Land Application?
 - Currently NR 518 or Case-Specific Approval
 - Requires different criteria (application rates)
 - Gypsoil (FGD Gypsum)
 - Soil Amendments (lime, soil substitutes)
 - Michigan Example





Potential Changes?

- Avenues for Funding BU Program
 - BU Program currently has no dedicated funding mechanism
 - Review and inspection costs (NHI, wetlands)
 - Cost savings vs. disposal
 - Some authority per s. NR 520 (\$550.00); currently only used in case-specific approvals





Federal CCR Rules

- Dec. 19, 2014, EPA promulgates new CCR disposal rules (40 CFR Part 257, RCRA Subtitle D); EPA-HQ-RCRA-2009-0640
 - New federal definition of “beneficial use” for CCRs
 - Defines “encapsulated” uses
 - Defines placement of CCRs in any quarry setting as “disposal”
 - Four “legitimacy” criteria must be met





Federal Legitimacy Criteria

1. Must provide a functional benefit
2. Must substitute for a virgin material (extraction)
3. Must meet relevant product specifications, regulatory standards and design standards
4. Unencapsulated non-roadway uses in excess of 12,400 tons must demonstrate releases below regulatory standards



Questions?

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