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August 7, 2008

Chad A. Stobbe
Land Quality Bureau
Iowa Department of Natural Resources
502 East 9th Street
Wallace State Office Building
Des Moines, IA 50319-0034

Subject: Stakeholder Input on Proposed Amendments Regarding Beneficial Use of Foundry Sand
Iowa Administrative Code (IAC) 567 Chapter 108
Beneficial Use Determinations: Solid By-Products as Resources and Alternative Cover Material

Dear Mr. Stobbe,

We appreciate this opportunity to provide stakeholder input prior to your initiating the formal rulemaking process on the proposed amendments to Chapter 108 regarding beneficial use determinations. Wellman Dynamics Corporation ("Wellman") welcomes the Department's encouragement to increase waste diversion, while adequately protecting human health and the environment. Wellman already continuously reuses nearly 80 percent of its foundry sands in ongoing operations. However, Wellman's long-term goal is for zero disposal of this valuable resource and we are actively pursuing off-site beneficial uses (i.e., instead of landfill approximately 3,500 tons of used sand per year). However, used foundry sand has very fine-sized grains which limit its beneficial uses compared to sands with larger and mixed grain sizes. The Department's intention to modify the Beneficial Use requirements is seen as an excellent opportunity by Wellman to enhance their efforts to achieve beneficial use of its foundry sands.

As part of this stakeholder input and to assist our goals to increase waste diversion while being protective of human health and the environment, Wellman Dynamics Corporation is submitting the following written comments to expand the universally approved beneficial use determinations for foundry sand at 108.4(6). Most of these recommended additional approved beneficial uses are also being proposed for coal combustion by-products, electric arc furnace slag, and other solid wastes. Foundry sands are especially suited for these additional uses considering the benign nature of foundry sands.

We understand that the IDNR plans to evaluate and incorporate this stakeholder feedback and resubmit the proposed rule for secondary review by August 22, 2008 (with any further stakeholder comments due by September 12, 2008). We look forward to continued stakeholder involvement and reaching our goal of beneficial use of all of the used foundry sand generated at Wellman.

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WELLMAN MAILING ADDRESS AND CONTACT INFORMATION.

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COMMENTS ARE BEING ARE SUBMITTED ON BEHALF OF A BUSINESS.

As background, Wellman is one of the largest employers in the City of Creston/Union County and currently employs over 425 people at our 285,000 square foot facility in Creston. Wellman specializes in manufacturing premium quality aluminum and magnesium sand castings. We are best known for producing large, complex castings with high strength, close tolerances, and near perfect integrity primarily for aerospace applications. What we bring our customers is 90 years of experience in using advanced casting technology to solve their most difficult problems.

Throughout our long history, Wellman has been recognized for delivering the highest quality castings and pushing the envelope of sand casting technology. We are best known as a primary supplier of complex components for helicopters, missiles, rocket engines, jet engines, and structural parts for both military and commercial aircraft. Such applications include the unique Bell/Boeing V-22 Tilt Rotor, the Rolls Royce/BMW BR710 jet engine, and the Pratt and Whitney alternate turbo pump for the Space Shuttle main engines. Non-aerospace applications include 1600 pound magnesium transfer pumps for the oilfield industry and porosity-free castings for computer chip manufacturing.

Wellman is proud that our skilled workforce is able to produce a wide range of products including the largest and most complex sand castings in the aerospace industry. We are committed to extending this capability to the demanding requirements of tomorrow's aerospace designs as well as those of new markets requiring similar cast components. Satisfying our customers' needs, while continuing to improve quality and production efficiencies in increasingly competitive markets, is our primary goal. Wellman's technical expertise, reduced development time, and delivery performance is demonstrated by the number of awards and contracts won by the company.

As further background, Wellman owns and operates an on-site industrial monofill sanitary landfill (Permit Number: 88-SDP-04-86P) for used sand in accordance with 567 IAC 115. Wellman reclaims sand for reuse on-site and is actively pursuing off-site beneficial use of the sand to avoid the direct disposal of this valuable resource (currently Wellman reclaims about 80 percent of the sand used in production and disposes of approximately 3,500 tons per year). Wellman's goal is to achieve beneficial use of all of our used foundry sands.

COMMENTS

1. **Paragraph 108.2(2) (Applicability and compliance)** – This paragraph proposes to unilaterally identify land application of solid waste as being disposal and not a beneficial use. Wellman agrees that this exclusion for most solid waste makes sense. However, given that sand is also a soil, certain land applications for foundry sand that may involve direct land application are reasonable and should be allowed. Uses such as grass sod farm topsoil replacement, components in “specialty soils,” and as components of compost mixtures are examples of land applications.

In addition, the largest volumes of foundry sands are used in geotechnical applications which can be considered land applications. These applications are concerned with the engineering properties of earth materials and construction, and include embankments and structural fills as well as road bases, alternative daily cover for landfills, highway construction, and barriers. Studies and research have led several states to issue general exemptions or blanket policies for the beneficial reuse of many types of foundry sand for geotechnical applications. This provision should be modified accordingly to provide the flexibility for the land application of sands under beneficial use applications [Foundry Industry Recycling Starts Today-FIRST, www.foundryrecycling.org].

2. **Paragraph 108.4(6) (Foundry Sand)** – The proposed list of approved-beneficial uses of foundry sands actually provides fewer options than are currently allowed. However, many new approved beneficial uses of coal combustion by-products, electric arc furnace slag, and other solid wastes are being proposed. Since foundry sands are especially suited for many of these newly added beneficial uses, Wellman requests that these (and certain other beneficial uses ideally suited for sandy materials) be similarly added to Paragraph 108.4(6) as approved beneficial uses of foundry sand. The following is the proposed list for universally approved beneficial use determinations for foundry sand:

- Road surfacing granular material
- Raw material in the manufacture of asphalt products
- Raw material in the manufacture of cement or concrete products
- Raw material in the manufacture of aggregate
- Raw material for the manufacture of glass
- Subbase for coal stockpile and storage areas
- Subbase material for livestock feedlots and confinement areas
- Subbase for hard surface road construction
- Aggregate or mineral filler for road seal-coats
- A compost amendment pursuant to 567-Chapter 105
- Traction agent for surfaces used by vehicles, if the use is consistent with department of transportation specifications or other applicable specifications
- Sandblasting or a raw material in the manufacture of abrasive products
- Emergency flood control use
- Leachate drainage and construction media pursuant to 567-Chapter 103
- Backfill for concrete foundations
- Filter media
- Use in making glass
- Landscaping, excavation or grading, or other suitable purposes

- Trench aggregate/drain fields
- Granular structural material engineered to provide strength, stability, and improved drainage characteristics (e.g., for unpaved parking and storage areas, pipe and tank backfill, berm construction and other industrial construction activity)
- For use as a component of “specialty soils” (e.g., turf mix, bedding mix, etc.)
- For use in grass sod farms including as a soil layer or for incorporation into surface soils
- Leachate control drainage material at a sanitary landfill
- Alternative cover material at a sanitary landfill
- Proppant material (frac sand) for hydraulic fracturing in oil and gas fields

3. **Paragraph 108.7 (Beneficial use determination application requirements for alternative cover material)** – This paragraph proposes the addition of a burdensome application process to verify and approve each beneficial use of alternative cover material other than uncontaminated soil. Wellman feels the addition of this paragraph is counter to promotion of beneficial reuse of foundry sand as alternative cover. Wellman’s spent foundry sand has been used as alternative cover material and demonstrates suitable characteristics for this application. In addition, Wellman’s sand is currently disposed in a permitted landfill, so use of this material for alternate cover in other landfills is a logical extension. Analytical testing of the Wellman used foundry sand [i.e., toxicity characteristics leaching procedure (TCLP, EPA Method 1311) and total metals] also demonstrates its safe use for alternative cover application. To enhance the beneficial use of foundry sand as alternative cover material, Wellman requests that the Department modify Chapter 108 to allow the beneficial use of used foundry sand which has already been proven suitable as alternative cover (or specifically grant an exemption for Wellman’s used foundry to be used as alternative cover material) without requiring this further redundant and burdensome verification process.

I appreciate your consideration of these stakeholder comments to enhance the beneficial use of foundry sands and to assist Wellman in achieving its goal of zero disposal. Please keep me informed on the progress of this proposed rulemaking and further opportunities for stakeholder involvement. In addition, please do not hesitate to call me if you have any questions or if you would like to discuss these comments further.

Sincerely,



Dave Leitten
President