



August 7, 2008

Chad Stobbe, Environmental Specialist Senior
Iowa Department of Natural Resources
502 East 9th St.
Des Moines, IA 50319

Re: Iowa Utility Association comments on the draft revisions
to Iowa Administrative Code 567—Chapter 108.

Dear Mr. Stobbe:

Chapter 108 “Beneficial Use Determinations: Solid By-Products as Resources and Alternative Cover Material” was last updated in 2003. In 2006, IUA established a task force to consider updates needed to the limited provisions in Chapter 108 that reference coal combustion residues. The IUA Task Force includes representation by two IUA member companies: Interstate Power and Light Company (Alliant Energy) and MidAmerican Energy Company along with representation from Muscatine Power and Water and Headwaters Resources who also have an interest in these changes. I have attached letters of support from each of these organizations. The comments below represent a consensus of the parties participating in the IUA Task Force.

After initial discussions with the Energy and Waste Management Bureau of DNR, the IAU Task Force filed a petition for rulemaking encouraging the department to commence a rulemaking on the limited issues raised by the IUA Task Force. However, when the department decided to undertake a review of the entire Chapter 108, IUA agreed to withdraw its petition but reserved the right to re-file the petition again if the Department’s proposed rulemaking did not move forward as indicated.

This letter is in response to your memo dated July 17, 2008, requesting comments and suggestions on the draft Iowa Department of Natural Resources (Department) amendments to Iowa Administrative Code 567—Chapter 108 “Beneficial Use Determinations: Solid By-Products as Resources and Alternative Cover Material”. The Iowa Utility Association (IUA) supports the Department’s commitment to improving and enhancing Iowa’s successful beneficial use program, and respectfully offers the following comments and suggestions to assist in both the clarification and streamlining of the regulations:

1. IUA recommends that the time line for stakeholder comment prior to proceeding to formal rulemaking be extended. Many industries are involved with portions of this chapter and the Department would benefit by taking the extra time to thoroughly explain the rule change proposals to impacted parties and to gather additional comments. IUA believes that it is unlikely that the current method of information distribution via email, the web and mail will be successful in obtaining informed consent. The stakeholder involvement and rule change explanations needed are likely to require both general informational session meetings, and targeted meetings with stakeholder industries and associations. When these rules were last amended, multiple meetings of a diverse, industry-focused, advisory committee of nearly 20 members were required to obtain informed consent. IUA has filed separately, a letter supporting an expanded time frame for discussion and comments to supplement the IUA Petition Extension letter which you have placed on the website for this rulemaking.

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2. The proposed revisions to 108.2(1), as detailed in the final sentence of this subrule, conflict with the third sentence of this subrule. To clarify the intent of this amendment, IUA suggests revised language similar to what the Iowa Utility Association submitted in their petition for rulemaking on February 4, 2008. IUA suggests replacing the proposed text and the sentence prior to it (the third and final sentences of 108.2(1)) with:

“These rules do not apply to solid by-products that have already been disposed of as solid waste by the generator, except for industrial monofills at which the generator has been granted such authorization pursuant to the industrial monofill permit. All such operations, activities and plans pertaining to the reclamation of solid by-products from an industrial monofill for beneficial use shall be regulated pursuant to the respective industrial monofill regulations (e.g. IAC 567—Chapter 103, IAC 567—Chapter 115); but after reclamation, the beneficial use of those solid by-products shall be in compliance with these rules.”

IUA suggests that this provision be limited to only industrial monofills, rather than all sanitary landfills, to ensure the waste generator has reasonable opportunity to consent to the proposed beneficial use application of the solid by-product being considered. Sometimes private enterprises have legitimate reasons (e.g. off-specification products) for why a solid by-product must be disposed of rather than beneficially reused, and the waste generator does not want to incur legal liabilities associated with the landfill subsequently utilizing those materials without the generator’s consent. In general, generators disposing of materials in sanitary landfills expect the materials will remain in the landfills. Limiting the potential to reclaim solid by-products to industrial monofills will reduce this potential liability because in most cases the generator is also the operator of the disposal facility at which the reclamation would occur and thus has complete knowledge of the properties of the material placed in the monofill. In addition, by the very nature of being a monofill, there is less potential for unknown contaminants from a wide assortment of other types of waste material to be introduced.

3. The amendments to 108.2(2) and the Department’s accompanying explanatory memo regarding the land application of solid by-products require clarification. The amendments to 108.2(2) state that the land application of solid waste is considered disposal and is not a beneficial use. Pursuant to Iowa Code, disposal projects must have a sanitary disposal project permit; however, the Department’s memo states that IAC 567—Chapter 121 “Land Application of Wastes” will be rescinded with no mention of a replacement chapter for where such a sanitary disposal projects would fall. Furthermore, the Department’s memo states that all soil amendments and fertilizers, other than manure, will be regulated pursuant to the Iowa Department of Agriculture and Land Stewardship (IDALS). It is important to note that there are many solid by-products that have successfully and safely been utilized as liming agents and soil amendments under IDALS rules for decades, but were also sometimes regulated under department rules. Does this mean that only IDALS regulations will apply to such solid by-products that qualify as liming agents, fertilizers (other than manure), or soil amendments? If so, IUA would support this interpretation for regulatory efficiency; however, a more explicit clarification or cross reference is needed in these beneficial use rules and IDALS must also agree with this regulatory approach.
4. The amendment to the definition of “Beneficial use determination” in 108.3 would have improved clarity by rearranging “rule” and “written formal decision” at the beginning of the sentence as follows:

“Beneficial use determination” means a rule, or written formal decision issued by the department to an applicant after review and approval of an application, to allow the beneficial use of a solid by-product as a resource.”

5. The universally approved list for coal combustion by-products in 108.4(4) should include three additions; (1) "*neutralization of acid mine drainage*", (2) "*construction material for field entrances and driveways*", and (3) "*railroad ballast and subbase*". The Department should include these three additions because coal combustion by-products are equally or better suited for such purposes than ferrous electric arc furnace slag, and the Department has included such universal approvals for ferrous electric arc furnace slag in proposed 108.4(17). First, "*neutralization of acid mine drainage*" should be added under the fly ash type category in 108.4(4)"a" since the basic properties of fly ash have been successfully utilized for numerous acid-mine drainage remediation projects, as evidenced by the Pennsylvania Department of Environmental Quality.¹ Fly ash type products are inherently better suited for neutralization of acid mine drainage than ferrous electric arc slag, and thus deserve such approval. Second, the bottom ash type category in 108.4(4)"b" should include "*construction material for field entrances and driveways*" as this material is sand and gravel captured within the coal seam that is released when the coal is combusted. Furthermore, "*railroad ballast and subbase*" should also be added to 108.4(4)"b" for the same reasons. A similar approval is provided to the aggregate-like slag in 108.4(17). Finally, there is also one correction for 108.4(4)"b"(15) in that "*construction*" should be replaced with "*collection*" as the intended purpose is for leachate collection media, not leachate construction media.
6. The universally approved category for "*Uncontaminated soil*" under 108.4(14) can be deleted given that petroleum contaminated soil has been removed as a universally approved category. The additional text to explain uncontaminated soil instead adds uncertainty as to what qualifies, and clean soil is already captured under the "Rubble" category under 108.4(12). Thus, IUA recommends deleting 108.4(14) in its entirety.
7. It is unclear why the universal approvals for "*Wastewater filter sand*" under the current 108.4(16) is being deleted. IUA requests an explanation on why such material, which is largely sand and aggregate, is not suitable for subbase for hard surface road construction?
8. Proposed 108.4(17) creates a new category for "*Electric arc furnace slag*", but this category only specifies a slag from a specific technology and does not specify the source of the by-product (i.e. iron or steelmaking) unlike all of the other sub-rules under 108.4. To clarify, IUA recommends that "*Steel or ferrous electric arc furnace slag*" be utilized as the title of this new beneficial use category. While electric arc furnace technology is primarily utilized in the iron and steel industry, it is not exclusive to these applications and without clarification other alloys that may utilize high concentrations of heavy metals would fall under this universally approved beneficial use list. Finally, the Department should consider inserting this new sub-rule in alphabetical order, as all other categories are listed in 108.4.
9. A new un-numbered paragraph has been added to the beginning of 108.5. For ease of reference, IUA suggests making this new paragraph 108.5(1), and renumbering the rest of rule 108.5 accordingly. IUA also recommends stating in this new paragraph that only the generator of the solid by-product may apply for a beneficial use determination. The requirement that the generator submit a written application was deleted from proposed 108.5(1) and this requirement is imperative to reduce legal liabilities due to a lack of generator consent.
10. Important language pertaining to incomplete applications was deleted at the end of proposed 108.5(1). Such boilerplate language is consistently utilized throughout waste management regulatory chapters and should be maintained. IUA recommends utilizing the updated language proposed in the IUA rulemaking petition dated February 4, 2008, and not deleting this important language pertaining to the management of incomplete applications.

¹ Pennsylvania Department of Environmental Protection Response to Clean Air Task Force Report: "*Impacts On Water Quality From Placement Of Coal Combustion Waste In Pennsylvania Coal Mines*", DEP Bureau of Mining and Reclamation, DEP Bureau of District Mining Operations, November 9, 2007.

11. Proposed 108.5(2) should more accurately be titled "*Chemical characterization of solid by-products*" to clearly convey the intent of the following paragraphs.
12. In 108.5(2), IUA recommends that a clarification be added which states that Chapter 108 only applies to materials suitable for disposal as solid waste in a sanitary landfill. The beginning of proposed 108.5(2) is likely a good place to reiterate this point so that an applicant does not waste the Department's time and resources reviewing tests for a solid by-product that does not meet the definition of "*suitable for disposal as solid waste in a sanitary landfill*". IUA is concerned that this regulatory fact has not been understood given that the details in the paragraphs that follow proposed 108.5(1) imply a much greater sense of risk than should ever be experienced by a solid by-product that is suitable for disposal as solid waste in a sanitary landfill.
13. Proposed sub-paragraphs 108.5(2) "a" (1) and (2) ask for demonstrations that the chemical constituents are not "*biologically available*", yet offer no definition of this term thereby potentially creating an impossible standard due to subjectivity. Again, it is important to remember that to even qualify for a beneficial use determination a solid by-product must meet the definition of "*suitable for disposal as solid waste in a sanitary landfill*". This means that the material is non-hazardous, non-radioactive, and does not contain free liquids. This definition is more restrictive than the current universe of consumer products. Thus, IUA recommends that these demonstrations that the chemical constituents are not "*biologically available*" be removed. Instead, it is recommended that the Department reiterate the regulatory requirements for a Toxicity Characteristics Leaching Procedure, radioactivity, and Paint Filter Liquids Test to ensure that the solid by-product is suitable for disposal as solid waste in a sanitary landfill.
14. IUA recommends replacing proposed 108.5(2)"b" with a more suitable test requirement. Proposed 108.5(2)"b" is an overly conservative evaluation of solid by-products that are suitable for disposal as solid waste in a sanitary landfill given that the solid by-product will not be authorized as "*fill material*". If fill material no longer qualifies as a beneficial use then the Department should focus on more applicable tests.

For example, the TCLP test (which should have already been performed to qualify for a beneficial use determination) models leaching in a municipal solid waste type environment, an unlikely scenario given that beneficial use determinations are intended to keep resources out of a landfill. Thus, other than to qualify as suitable for disposal as solid waste in a sanitary landfill (as previously suggested for revisions to proposed 108.5(2) "a"), a TCLP test is unwarranted. By contrast, the SPLP test is designed to measure leaching of a material exposed to the aqueous pH expected from precipitation. Thus, the SPLP may still have value as an additional test.

Nonetheless, the regulatory requirement should not be to compare SPLP leaching from the raw solid by-product to the manufactured product it is replacing. The SPLP tests should compare the two end products, one with and one without the solid by-product. This would be a true apples-to-apples test of the risks presented by incorporating the solid by-product into the final product. For example, under current standards, an industry with a solid by-product consisting of carbon and chromium might fail the Department proposed SPLP test compared to the leaching of the stainless steel product it was being incorporated into, even though stainless steel is created with chromium and carbon inputs. Thus, the proposed tests, as currently worded, would never allow some common consumer products to reach market.

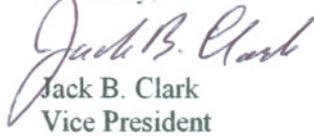
In summary, IUA recommends replacing 108.5(2)"b" with a requirement for a side-by-side SPLP test of the two end products; one SPLP with and one SPLP without the solid by-product incorporated to provide a true apples-to-apples test of the risks, if any, presented by incorporating the solid by-product into the final product.

15. Proposed subparagraph 108.5(2)“b”(4) contains a reference to a 95% upper confidence interval in EPA SW-846 test methods. IUA could not locate such a test; however, a 95% confidence interval in comparing test results is usually a mark of high statistical significance. Such statistical significance is usually achieved by running numerous tests and mathematically comparing the results, but this would be an expensive process utilizing multiple TCLP, SPLP, total metals, or all three tests. Instead, the objective of the Department to ensure statistically significant test comparisons can be more efficiently obtained by requiring that a representative sample is analyzed by a laboratory certified by the Iowa Hygienic Laboratory. A representative sample can preclude the need for multiple separate tests, and a certified laboratory will have quantification limits and procedures that ensure an accurate analysis.
16. IUA recommends that the total metals test in proposed 108.5(2)“b”(4) be replaced with the SPLP testing suggested in comment 14 above. However, if kept, the total metals test should be separated into a new sub-rule 108.5(2)“b”(5) as it is a separate requirement from the requirement for statistical significance in the beginning of that subparagraph.
17. IUA believes that proposed sub-paragraph 108.5(2)“b”(5) is redundant with worker safety standards already required by other state and federal agencies and therefore should be deleted.
18. Proposed paragraph 108.5(2)“c” is out of place, as this paragraph does not involve chemical characterization and analysis. Thus, IUA recommends moving this requirement toward the end of the paragraphs under proposed 108.5(1).
19. The purpose of proposed sub-rule 108.5(3) could be more clearly conveyed by replacing “assessment” with “re-assessment”, and by specifically noting that the sub-rule only applies to solid by-products that have received a written beneficial use determination from the Department pursuant to 108.5.
20. The new language in 108.6 pertaining to reclamation activities is redundant and inconsistent with the requirements by IDALS for quarry reclamation. The IDALS Bureau of Mines and Minerals is responsible for quarry reclamation standards, while the Department regulates the materials suitable for quarry reclamation pursuant to current Chapter 108. Thus, a cross reference to IDALS regulations is a better solution for quarry reclamation projects than repeating or creating new reclamation standards in Department rules.
21. IUA questions why rules 108.8 and 108.9 are deleted in their entirety. The universally approved alternative cover list was created in 2003 after a review of common Department-approved alternative covers. New information has emerged since 2003 regarding potential odor problems involving sulfur compounds from gypsum and drywall at municipal solid waste landfills, but IUA is not aware of why a 50/50 coal combustion residue and soil mixture, or the other solid by-product mixtures, are now removed from a universally approved list. Moreover, the proposed amendments are a decrease in regulatory efficiency and add additional workload to the department. The new language in proposed 108.7 largely reiterates what is in current 108.9, with the exception of details regarding trial permits. Thus, IUA requests a justification for the proposed deletion of 108.8 and 108.9. IUA recommends that the Department amend the details of a trial alternative cover material approval into the language that presently exists in 108.9, instead of deleting and replacing 108.8 and 108.9.
22. The blanket exemption to state tonnage fees in proposed 108.8 is likely illegal given that this subject matter is explicitly addressed in Iowa Code 455B.310. For example, Iowa Code 455B.310(5) only exempts monofills from the tonnage fee. Furthermore, Iowa Code 455B.310(9) specifically exempts foundry sand used for daily cover from the imposition of the tonnage fee, thereby implying that the tonnage fee should be applied to all other forms of cover material at landfills that are not monofills. The language currently in rule 108.10 is likely a more accurate statement of what incentives are allowed under Iowa Code for alternative cover materials (i.e. goal progress exemptions); however

IUA recognizes that the Department may need to more clearly delineate the requirements for goal progress exemptions due to previous misinterpretations.

Thank you for the opportunity to comment on the draft beneficial use regulatory amendments. Members of the IUA Task Force would be pleased to meet with you to discuss these comments in more detail. Please contact me at 515-282-2115 if you have any further questions. Your consideration is greatly appreciated.

Sincerely,


Jack B. Clark
Vice President

Attachments:

Muscatine Power and Water Letter dated August 7, 2008 signed by Donald G. Pauken
Headwater Resources Letter dated August 7, 2008 signed by Keith Bargaheiser

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