

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PROPOSED AMENDMENTS TO)	R2012-009
CLEAN CONSTRUCTION OR DEMOLITION)	(Rulemaking – Land)
DEBRIS (CCDD) FILL OPERATIONS;)	
PROPOSED AMENDMENT TO)	
35 ILL. ADM. CODE 1100)	

PUBLIC COMMENT

Vulcan Materials Company (Vulcan) submits the following Public Comment in support of its position that Illinois Environmental Protection Agency (IEPA) should revise the Proposed Amendments to Clean Construction or Demolition Debris Fill Operations (CCDD) or (Rules), specifically in areas related to certification, pH dependent maximum allowable concentrations (MAC) criteria and groundwater monitoring. In addition, Vulcan believes that it is important for the Department of Commerce and Economic Opportunity (DCEO) to conduct an economic impact study related to the Rules as proposed.

BACKGROUND

Vulcan is the nation's largest producer of construction aggregates, a major producer of other construction materials including asphalt and ready-mixed concrete and a leading producer of cement in Florida. Vulcan produces aggregates, primarily crushed stone, sand and gravel, that are used in nearly all forms of construction.

Vulcan's Midwest Division is comprised of approximately 30 facilities located in Illinois and Wisconsin. The largest facility in the division is McCook Quarry, which includes a permitted CCDD fill operation.

Vulcan established an internal fill policy and procedures for the review and acceptance of fill in 1997. These procedures provide assurances that only clean fill is accepted at Vulcan operations. Midwest Division established the McCook clean fill operation in 1998 as a means of providing a service to our customers, and providing Vulcan with a source of clean fill for use in reclaiming the quarry. Since the implementation of Vulcan's program, the company has evaluated over 2,740 separate clean fill projects for CCDD acceptance at our McCook clean fill operation. Of these projects, 32% were rejected due to concerns over possible contamination.

DISCUSSION

Vulcan asks the Illinois Pollution Control Board to remand the Rule to IEPA for revision for the following reasons.

I. IEPA's rule allows uncontaminated soil certification without analytical data to support the soil being defined as "uncontaminated soil".

Section 1100.205 requires CCDD fill operation and uncontaminated soil fill operation owners or operators to obtain for soil either a certification from the source site owner, source site operator or a duly authorized representative that the site is not a potentially impacted property and is presumed to be uncontaminated soil; or a certification from a licensed Professional Engineer or licensed Professional Geologist that the soil is uncontaminated soil. This appears to be a straightforward approach for fill operation owners and operators, but Vulcan has experienced issues with this process.

Vulcan has received certification forms that are: 1) incorrectly completed; 2) signed by parties who are not the site owners / operators or authorized representatives nor licensed professional engineers or licensed professional geologists; 3) lacking supporting evidence for the certification basis; or 4) of questionable validity based on Vulcan's review of the project. Vulcan understands that we are not obligated to accept the certification or material, but the common belief in the marketplace is that once a certification form is provided, the material can be accepted.

Vulcan supports the use of certification, but believes the process does not provide adequate assurance that material received from commercial or industrial use sites is uncontaminated. Vulcan believes IEPA should require analytical testing of material from all sites other than residential as a prerequisite to certification. The reasons for this are as follows:

- a. Vulcan believes some sites currently being certified have potential contamination, based on our due diligence process. Vulcan has rejected these sites.
- b. IEPA has proposed defining uncontaminated soil as "soil generated during construction, remodeling, repair or demolition of utilities, structures and roads that do not contain contaminants in concentrations that pose a threat to human health and safety and the environment." Contaminants in soil cannot be confirmed without analysis and proper comparison with MAC cannot be completed without analytical data.
- c. During the October 26, 2011 hearing, Mr. Hornshaw stated: "For purposes of soil used as fill material at regulated fill operations, it is our intent that soil below the MAC criteria is uncontaminated and

that soil over the criteria is contaminated.” Fill operation owners and operators cannot meet the intent of the rule without a certification that includes analytical data and a comparison against MAC criteria.

- d. A certification based on analytical data and a comparison against MAC criteria is a valuable control for fill operation owners and operators and the only realistic control to demonstrate compliance. As part of these Rules, IEPA requires operational controls on the part of fill operation owners and operators but does not require the control, which would be of most value to protecting human health and safety and the environment. This control would reduce the occurrences of contaminated soil being improperly accepted.

Recommendation: IEPA should require analytical testing to verify that soil at sites used for commercial or industrial purposes is uncontaminated soil. A comparison of analytical results against the MAC criteria as part of the certification process provides an approach that is consistent and much more efficient for fill operations to manage.

II. The use of the lowest available pH dependent concentrations in Part 742, Appendix B, Table C as MAC criteria is not appropriate.

Section 1100.605 requires that for both ionizing organic and inorganic constituents, the lowest pH-dependent values for the soil component of the Class I groundwater ingestion exposure route in 35 IAC742 Appendix B, Table C must be substituted for the pH-neutral value provided for the soil component of the Class I groundwater ingestion exposure route in Appendix B, Table A.

IEPA has proposed this conservative approach believing that in the fill operation scenario, the relevant pH affecting constituent leachability is not the pH at the site where the soil was generated or the pH of the native soil near the fill operation. Rather it is the pH of the soil being placed inside the fill area, which the Agency believes will be variable and unpredictable.¹

Vulcan periodically tests accepted and placed soil for internal control purposes. During 2011 to date, the pH range of soil placed inside the fill area has been 7.48 – 8.20, with an average of 7.94. During his testimony before the Illinois Pollution Control Board on October 25, 2011, Mr. John Hock, P.E. of Civil and Environmental Consultants, Inc. presented pH data from an investigation showing that the pH of soil collected at four (4) CCDD facilities typically ranged above 7.3. Given that representative pH data can be obtained as part of the certification process or determined from sampling soil placed in the fill area, Vulcan believes IEPA's broad-brush approach of utilizing a statewide program

¹ Illinois EPA Statement of Reasons submitted to the Illinois Pollution Control Board, July 27, 2011, Page 26.

that can be applied uniformly is unacceptable. The use of the lowest pH-dependent concentration is unnecessary, overly restrictive and results in more soil having to go to landfills.

Recommendation: IEPA should establish MAC criteria that are based on pH neutral values. If the Agency believes this is not a viable option, a MAC based on fill owner / operator determination of the pH of the soil placed inside the fill area should be used rather than the most conservative value.

III. IEPA's requirement for groundwater monitoring is unnecessary.

Subpart G of the rule requires owners and operators of CCDD fill operations and uncontaminated soil fill operations to monitor groundwater. As documented in the transcripts from each of the hearings, several points made by IEPA related to the need for groundwater monitoring:

- a. Groundwater monitoring is needed because there is a lack of data regarding contamination at fill operations
- b. Groundwater monitoring is intended as a final check to verify that there is not a problem at the fill operation.
- c. Since no system (*i.e.*, certification and load screening procedures) is fail proof, groundwater monitoring should be required to verify that groundwater is not adversely impacted.
- d. Groundwater monitoring provides an opportunity to evaluate the receiving site in its entirety.
- e. Groundwater monitoring is required because PA 96-1416 modified the Act in 2010 by adding Section 22.51(f)(1). The section states in part: "The rules must include standards and procedures necessary to protect groundwater, which may include, but shall not be limited to, the following: requirements regarding testing and certification of soil used as fill material, surface water runoff, liners or other protective barriers, monitoring (including, but not limited to, groundwater monitoring) . . ."

Vulcan believes that ground water monitoring is unnecessary for the following reasons.

First, the proposed monitoring does not adequately address groundwater conditions with respect to surrounding properties. The requirements do not factor in the multitude of potential changes within the operations at these surrounding properties that would directly influence groundwater monitoring results at a fill operation. If monitoring within a fill operation indicates an exceedance of groundwater standards, the change in groundwater quality from background cannot be attributed directly to the receiving of fill.

Secondly, if groundwater monitoring is required for a fill operation, the certification process would have to change. To fully demonstrate compliance and appropriately manage the risk of accepting the material, the fill operation would ultimately have to require a full panel analysis of the entire groundwater standard list. The risk for accepting the material would have to be evaluated against the groundwater standards. The cost per sample for this type of analysis is extremely expensive and burdensome.

The controls used by Vulcan prior to the acceptance of material identify possible contamination issues. These controls include:

- a. Due diligence conducted by Vulcan and consisting of an environmental database search and site visit,
- b. Certification provided by source site owner or operator or signed by a licensed professional engineering / licensed professional geologist,
- c. Requesting analytical data when not provided by the customer and evaluating the results against appropriate TACO values,
- d. Excluding fill soil within standard distances from recognized environmental conditions such as, but not limited to, aboveground and underground storage tanks, hazardous waste generators and railroads,
- e. Visual inspection of the material upon arrival and a photoionization detector (PID) screen when dumped,
- f. Project specific inbound tickets used to verify material is from an "approved" project, and
- g. Routine project audits to ensure fill soil is taken from approved project areas of a site and that material is consistent with what is being delivered to the fill operation.

As a final control, Vulcan uses post placement sampling of fill soil to identify any possible contamination issues. Using a pre-determined interval, a section of the fill area is segregated and soil samples of placed material are collected and analyzed using appropriate methodology. Benefits of this proactive approach include providing data (including pH) on what is being accepted at the fill operation and protecting groundwater.

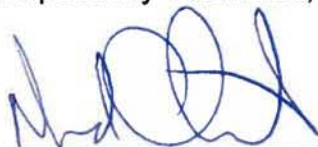
Recommendation: Groundwater monitoring should be removed from the proposed rules and as a compromise to requiring groundwater monitoring, IEPA should require fill operation owners and operators to periodically sample placed fill material and report results to the Agency annually. In addition, if contaminated soil is identified, owners and operators must take the necessary actions to properly manage and dispose of the waste.

ECONOMIC IMPACT STUDY

During the hearing on October 26, 2011, Mr. Wilt, representing Waste Management, made a comment that an economic impact study would not be needed since there is nothing to study.² Vulcan disagrees with this comment, and believes that it is important for the Department of Commerce and Economic Opportunity (DCEO) to conduct an economic impact study related to the Rules as proposed.

Quarries are financial assets and without reclamation the value of the asset is diminished. The fill material received at our operation is needed to reclaim the quarry as mining activity is completed and the property is prepared for post-mining land use that will continue to add value and economic benefit to the community. In many cases, especially in densely populated and fully developed urban areas, conversion of a quarry site to land that can be used for commercial or industrial purposes, turns what would be a liability into an asset of substantial value. These Rules negatively impact our ability to reclaim the quarry. Both our customers and Vulcan are impacted by these Rules and it is disappointing that DCEO is not willing to study that impact. Vulcan requests that DCEO reconsider the Board's request for an economical impact study.

Respectfully submitted,



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² Illinois Pollution Control Board Hearing Transcript, October 26, 2011, Pages 87-88.