

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor Darrell Bazzell, Secretary William H. Smith, Regional Director 1401 Tower Avenue Superior, Wisconsin 54880 Telephone 715-392-0802 FAX 715-392-7993

January 23, 2002

Ms. Jane Patarcity Beazer East, Inc. One Oxford Centre, Suite 3000 Pittsburgh, PA 15219-6401

Subject: Notice of Incompleteness "Request for Modification of the Closure and Long Term Care Plan Approval and Corrective Action Management Unit (CAMU) Demonstration", Koppers Industries Inc. Site, Superior, WI WDNR BRRTS # 02-16-000484, WID 006 179 493.

Dear Ms. Patarcity,

A number of issues related to the above document and the Koppers-Superior facility have been under discussion for over a year. In a November 1, 2000 letter, the Department indicated that: "although a determination of completeness has not been made by the Department, it appears that enough substantive information has been provided to confirm that this application is substantially in the approval process. Since that time, it is my understanding that the scope of the above *CAMU Demonstration* document has changed.

The Department has now completed it's review of the *CAMU Demonstration* document and has determined that the application is incomplete for the reasons listed below. We are also taking this opportunity to identify several specific issues that will need to be addressed before proceeding to revise the application as well as detailed comments that need to be considered as part of the actual site design.

Incompleteness Items

- 1. Approval of a CAMU is a Class 2 modification as listed in Appendix I section L 1 in ch. NR 680, Wis. Adm. Code. The required plan review fee for Class 2 Modifications at a non-Commercial Hazardous Waste Facility is found in Table III of NR 680.45, Wis. Adm. Code. Therefore, the appropriate fee of \$1,800.00 must be submitted with the revised document. Since our meeting of January 9, 2002, we have looked into this matter further. A review of our records does not indicate a payment for this plan review fee to the Department.
- 2. Based on previous discussions with representatives of Beazer East and Koppers, Inc., the Department is of the understanding that an alternative location has been chosen for the proposed CAMU. The new location is apparently along the western property boundary of the site north of the Lead Track Landfill. Since a new location is now being pursued, the proposal needs to be revised to identify the boundary of the Corrective Action Management Unit.

Major Issues Requiring Resolution

Based on our knowledge of existing site conditions we feel that there are several items which require resolution prior to re-submitting a revised CAMU application since these issues will have a direct affect on the design of the unit.



- 1. The new location of the proposed CAMU is along the Western property boundary of the facility. A preliminary analysis of this portion of the site raised concerns that wetlands may be present. Further work to determine whether wetlands are present and, if so, what alternatives may be available need to be performed in accordance with the requirements in ch. NR 103, Wis. Adm. Code.
- 2. Defining the degree and extent of contamination in the unnamed ditch and Crawford Creek is not yet complete, and a final decision on an appropriate remedy for addressing the contaminated sediments is critical to the overall cleanup of the facility. Since the contaminated sediments are contiguous with the Koppers facility, the February 16, 1993 CAMU rule would allow the material to be managed within the CAMU since the contamination was associated with a release from the facility. While some preliminary discussion has taken place on whether the final remedy for contaminated sediments will include using the CAMU, the Corrective Measures Study must be completed for the facility so the footprint and design volume of the CAMU can be specified in a revised submittal.
- 3. We are requesting that an evaluation of corrective actions alternatives be submitted prior to submitting the final report. Options considered should be evaluated for the following:
 - a. technical feasibility;
 - b. long and short-term effectiveness;
 - c. implementability;
 - d. restoration timeframe; and
 - e. economic feasibility.

This document should be submitted following the completion of the investigation, since waste locations, waste volumes, and clean-up goals directly impact remedy selection. After the corrective action alternatives are reviewed for comment by the Department, a final CAMU design report should be submitted.

CAMU Design Considerations

Ch. NR 636 requires that when wastes will remain in-place following closure, the CAMU shall be managed and contained so as to minimize future releases, to the extent practicable. In order to ensure compliance with this requirement, the Department is requesting the following issues be addressed as part of the revised CAMU application.

- 1. Detailed justification on how the proposed engineering design will meet the performance criteria and other requirements set forth in ch. NR 636. The applicable sections of NR 700 may be used to evaluate performance with the terms stated in ch. NR 636.
- 2. Engineering properties and chemical characteristics of the expected wastes to be managed in the CAMU should be evaluated and presented.
- 3. The Department's experience with the geology in the Superior area is that secondary fractures and sand seams exist within the clay and can allow for migration of contamination. Migration through the on-site clay soils by the contaminants of concern has already been documented by the existing monitoring program. The on-site wells also show groundwater gradients to be strongly downward beneath the clay. Geologic materials on site increase in coarseness with depth, so the effective protection of the clay would be diminished at the base of any excavation.

- 4. Based on the previous discussion, the Department anticipates that the use of an engineered liner and cap system will be necessary to demonstrate the CAMU will meet the requirements in chs. NR 636 and NR 140 Wis. Adm. Code. An option for addressing the concerns raised in item 3 above, may be a re-compacted clay liner. Any proposed liner and cap design must be adequately justified.
- 5. The design of a leachate collection system, or justification for exclusion of leachate management should be presented.
- 6. The need for gas venting and any air discharge monitoring should be discussed. Design for the control of air emissions should be included if necessary.
- 7. A proposed monitoring plan should be included to monitor performance of the CAMU and assure that the performance objectives are met. Monitoring must be sufficient to document compliance with chs. NR 140 and NR 635 as appropriate. Lysimeters may be necessary to evaluate performance.
- 8. Any proposed changes to the existing monitoring plan for the closed impoundments should be considered a separate Plan Modification until such time as the monitoring requirements for the CAMU are known. However, monitoring may eventually be combined and minimized where appropriate.

If you have further questions or need further assistance regarding this determination, please contact me in our Superior Office at 715/392-0802.

Sincerely,

James A. Hosch

Hydrogeologist

Cc: Jeff Holden - BBL

Brian Magee - AMEC

Linda Paul – KII Pittsburgh

Tim Ries – KII Superior

Steve Willis - KII Superior

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