

## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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June 28, 2007

Ms. Leslie Hyde, Safety and Environmental Affairs Koppers, Inc. 436 Seventh Avenue Pittsburgh, PA 15219-1800 JUL 0 2 2007

EID# 816009810

HW/CORR

Douglas County

Subject: Review of Partial Closure Report for Koppers, Inc. Wood-Treating Facility in

Superior, WI EPA I.D. # WID006179493

Dear Ms. Hyde:

This letter acknowledges receipt of your Drip Pad Decommissioning Report, dated May 1, 2007, for the creosote wood-treating process, equipment, and buildings at the Koppers, Inc. facility in Superior, WI. We have reviewed your submittal as a "partial closure" report and have determined that Koppers, Inc. has satisfied the majority of the closure performance standards stated in s. NR 665.0445 (1) and (3), Wis. Adm. Code. These standards state that at closure, the owner or operator shall remove decontaminate all waste residues, contaminated containment system components (such as pads and liners), contaminated sub-soils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste. The following chronology provides a background and other important information contained in your partial closure report:

## Background

According to our records, creosote wood-treating at the Superior facility first began at Koppers Inc., in 1928. Wood-treating continued using a creosote preservative until 1955, when the facility (Koppers) began using pentachlorophenol as the primary wood preservative. This type of preservative was used from 1955 to 1982, and then discontinued. Koppers changed its treating solution back to a creosote preservative in 1983 and used this until November 18, 2007. Under s. NR 665.0440 (1), Wis. Adm. Code, Koppers is defined as an existing facility because it was constructed prior to June 1, 1995. As an existing wood-treating facility, Koppers was been exempted from the need to obtain a feasibility and plan of operation approval, and licensing to operate its Superior facility.

On December 29, 1988, through a series of business transactions, Beazer East (Beazer) acquired and sold the facility to Koppers, Inc. Under a contractual agreement with Koppers, Inc., Beazer retained responsibility for environmental contamination and releases occurring prior to the sale. Beazer initiated RCRA corrective action involving the removal and disposal of contaminated soil from two wastewater impoundments to an on-site capped-land disposal facility. Beazer began operating this closed landfill as a 30-year long-term care facility in 1988, and received its long-term care license No. 3157 from the Department of Natural Resources (Department) on December 20, 1990. Beazer and their environmental consultant, Blasland, Bouck & Lee, Inc., have been working closely with Jim Hosch, WDNR Remediation Hydrogeologist of our Superior office, on an on-going facility-wide corrective action investigation study to address other areas of on-site and off-site soil and groundwater contamination.



## Closure Work Completed to Date

On April 19, 2006, Koppers issued a news release announcing the closure of its wood-treating operations in Superior. On this same day, the Department of Natural Resources (Department) received a copy of a work plan from Patrick Stark, Koppers, Inc., which detailed the steps necessary to decommission (partially close) the drip pad, wood-treating process, product storage tanks and buildings. Department staff reviewed this work plan and determined that the initial submittal report was incomplete. The Department requested that Koppers include a sampling plan with its closure work plan to further investigate possible contamination of the underlying soils and groundwater near the drip pad[s. NR 665.0445 (1), Wis. Adm. Code]. Koppers agreed to this request and submitted an acceptable sampling plan to the Department on November 6, 2006. The sampling plan included test methods and QA/QC laboratory procedures to sample the soil and groundwater at several locations and depths adjacent to the drip pad for total metals, polycyclic aromatic hydrocarbons (PAHs), total dioxins, pentachlorophenol, and volatile organic compounds (VOCs). The Department reviewed the proposed sampling plan and found it to be acceptable.

Decommissioning work on the drip pad, all treating equipment and buildings was completed during October 2006 through mid-January 2007. Work included asbestos removal from buildings, power washing and cleaning the drip pad, sumps, treating tank cylinders and product storage tanks. The drip pad and product transfer lines were power washed several times, using a washer rated at 3,500 psi at 200 degrees F. Rinseate water samples were obtained from the drip pad sump collection points after cleaning and then analyzed for metals and PAHs. Sample concentrations for the constituents were found to be less than or just slightly above the laboratory detection limits. The Department informed Koppers that the drip pad surface was determined to be clean for the purpose of partial closure. Koppers next applied an epoxy OverKrete E 100S coating seal with a permeability rating at < 1 x 10<sup>-10</sup> cm/sec to the drip pad surface. Koppers plans to use the drip pad as a permanent cap over underlying soils to address possible direct contact concerns, i.e. ingestion of soils. All drip pad sumps were abandoned and then filled in with concrete. Stained areas located on the brick outside and inside the containment building were sandblasted to a visibly clean level. Sandblast grit material was then properly containerized and disposed of as a K001 hazardous waste. All rinseate water collected during drip pad and tank cleaning was shipped off-site and treated as a F034 type hazardous waste, All decommissioning work was overseen and documented by Brian McVeen, a registered professional engineer with EPC Engineering and Testing. As a follow-up, I completed two site inspections of the on-going closure work on November 30, 2006, and January 3, 2007.

As part of its closure work, the owner or operator of the drip pad is required to investigate the sub-soils and groundwater in the vicinity of the drip pad for possible contamination. Soil and groundwater samples were obtained from the drip pad area during the week of November 22-28, 2006. Section NR 665.0445 (1), and (3), Wis. Adm. Code, allows the owner or operator the option to close the facility and perform long-term care in accordance with the closure and long-term care requirements that apply to landfills if all the contaminated sub-soils cannot be practically removed or decontaminated. As an alternative to going through long-term care licensing. Koppers has the option of closing its drip pad unit in conformance with the closure performance standards stated in s. NR 665.0111, Wis. Adm. Code. Under this section, Koppers, Inc. may choose to meet, in the case of a landfill or surface impoundment, applicable groundwater protection requirements in ch. NR 140, soil clean-up standards in ch. NR 720, or meet the applicable closure requirements of subsections (2) or (3), whichever is more stringent. In your May 16, 2007, cover letter for a naphthalene groundwater re-sampling report, you indicated that you have been working with Beazer East and WDNR Remediation Hydrogeologist Jim Hosch, on a facility-wide RCRA Corrective Action investigation study to include the drip pad area. You stated in your cover letter that you plan to meet Wisconsin's soil and groundwater clean-up standards to address other areas of contamination, as well as the drip pad area, and plan to implement Natural Attenuation (NA) as the anticipated corrective action. Natural Attenuation is believed to be effective as an on-going process

leading to decreased concentrations of contaminants in groundwater over time. The rationale for selecting this option is based on the fact that closing your drip pad will be addressed as part of your facility-wide corrective action, and not as a separate, stand alone site. Another supporting factor includes historical soil and groundwater sampling data obtained from other areas of contamination at Koppers that is consistent with the concentrations found near the drip pad area. Although the sample concentrations for naphthalene and other PAHs are exceeding ch. NR 140 enforcement standards at several shallow well locations, groundwater flow at the site is low and no evidence of contaminant migration has been found beyond the facility boundary at levels above standards. Previous naphthalene monitoring completed during July 2004 and April 2005, ranged from 4,000 to 7,000 ug/l at well #W-16A. Naphthalene concentrations at well # W-10AR2 were measured at 2,000 ug/l for sampling completed on April 10, 2006. The most recent sampling event completed on April 10, 2007, at monitoring well #TW-2, showed naphthalene concentrations at 1,200 ug/l, which is consistent with earlier sampling results.

## **On-Going Corrective Action Work**

We understand that Beazer is currently completing additional groundwater investigation work to further support its NA corrective action strategy. The anticipated timeframe for completing this study is scheduled for July 2007. As Beaser pursues this NA approach, I will need to work closely you and Jim Hosch to assess the feasibility of applying this treatment technology to meet ch. NR 720 standards. We will also need to establish site operational conditions to periodically inspect and maintain the integrity of the drip pad as a permanent cap for the underlying contaminated soils, agree on an on-going groundwater monitoring strategy, and a tentative schedule to achieve "final closure" of the facility.

Based on the information contained in your May 1, 2007, drip pad decommissioning report, it appears as though Koppers has satisfied many of the performance standards to partially close its wood-treating facility and drip pad in Superior, WI. We look forward to meeting with you and Beazer representatives after July 2007 to discuss the results of the facility-wide corrective action study and actions needed to achieve final closure of your facility. If you have questions on the findings or closure requirements contained in this letter, please feel free to call me at (715) 635-4068.

Sincerely,

James I. Ross

Waste Management Specialist

James Y. Ross

Northern Region

Cc: Ann Coakley – Rhinelander Pete Flaherty – LS/5 Jill Schoen – WCR Steve LaValley – Superior Jim Hosch – Superior Bruce Moore – Ashland

> Jane Patercity – Beazer East, Inc. Steve Willis – Koppers, Inc. (Superior)

John Robinson - Rhinelander Pat Chabot - WA/3 Mark Gordon - RR/3