

Leslie S. Hyde  
Vice President, Safety and Environmental Affairs



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May 21, 2013

Mr. Steven Ashenbrucker  
WI Department of Natural Resources  
2501 Golf Course Road  
Ashland, WI 54806

**Subject: Request for Final Closure Approval of Drip Pad  
Koppers Inc. Superior, WI Facility**

Dear Mr. Ashenbrucker:

As you are aware, Koppers Inc. (Koppers) discontinued and decommissioned its wood treating operations at the Superior, WI facility in 2005 - 2006. Since that time, Koppers has communicated to Wisconsin Department of Natural Resources (WDNR) that it has completed clean closure of the Subpart W drip pad at the site in accordance with the requirements specified at NR665.0445\*. WDNR concurred with this assessment in its letter of June 28, 2007 (see Attachment A).

As agreed with WDNR in prior discussions and correspondence, conditions from historic wood treating operations in the drip pad area are being addressed in the site-wide RCRA corrective action process being conducted by Beazer East, Inc. (Beazer) the former (pre-1989) owner and operator of the facility. Beazer has completed the approved on-property soil remediation and is nearing selection of the final groundwater remedy working with WDNR. As you are also aware, Koppers sold the Superior property in 2012. Beazer and Koppers will provide the new owner with notification of the continuing obligations at the site as a result of the remedial and site closure activities.

WDNR has indicated to both Koppers and Beazer, that final closure approval for the drip pad and the on-property\*\* remediation will not be provided until Beazer completes the yet to be determined off-property remedy. In an email dated August 9, 2012 (see Attachment B), WDNR stated that "Because final closure of the drip track area is apparently tied to the site wide closure, and site wide closure will not happen until after the off-property soil and sediment contamination has been addressed, it is not likely that the WDNR can provide Koppers Inc. with a final closure for the drip track area in the near term." The email also stated that [WDNR] "considers the concrete covering the drip track area as both a barrier cap and a structural impediment" per s. 292.12, Wis. Stats., subject to continuing obligations to maintain and inspect the barrier cap as long as impacted soils may remain beneath.

With the foregoing in mind, Koppers has three items for which it seeks Department concurrence:

1) that final approval of the drip pad closure will be issued to Koppers upon completion of the off-site property remedy by Beazer and that no further action at the drip pad is required at this time, including no

\* In November 2006, Koppers submitted a *Drip Pad Closure Investigation Work Plan* to WDNR to address additional activities to investigate soils and groundwater adjacent to the drip pad. The results of the drip pad investigation were summarized in the *Drip Pad Closure Investigation Report* submitted in January 2007. The *Decommissioning Report for the Treating Process, Equipment, and Buildings at Koppers Inc. Superior, WI Facility* addressing all site closure activities, including cleaning and decontamination of the drip pad, was submitted to WDNR in May 2007.

\*\* The corrective action "Site" includes the Koppers Facility property and affected downgradient areas. The term "on-property" addresses the portion of the Site located within the former Koppers property boundaries.

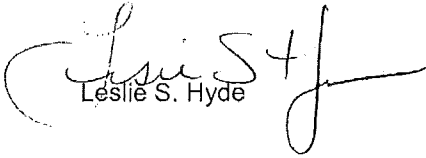
need for further regular inspections and/or re-application of low permeability coating as may be required under Subpart W;

2) that the drip pad concrete can be maintained as a cover material similar to the other cover materials placed by Beazer as part of the on-property remedy. The cover material can consist of concrete, gravel, or soil, as long as a minimum of 12 inches of cover material remains in the drip pad area consistent with the 12 inches of cover in the on-property remedy areas. For example, should significant cracks or deterioration of the concrete occur, these cracks or deterioration could be addressed by placement of alternate materials that would prevent contact with the underlying soils, similar in purpose to the other designated covers; and

3) that the Continuing Obligations letter to be issued to the new property owner and the site survey to be filed with WDNR's online GIS Registry will identify the drip pad as an area to be included within the continuing site obligations for long-term maintenance.

We will follow-up with you to answer any questions and to get your feedback on the three items above. Thank you for your review and consideration in this matter.

Sincerely,

  
Leslie S. Hyde

cc: Christopher Saari, WDNR, by email  
Ed Lynch, WDNR, by email  
Jane Patarcity, Beazer East, Inc., by email  
Linda Paul, Koppers Inc., by email

**ATTACHMENT A**  
**WDNR JUNE 28, 2007 LETTER**



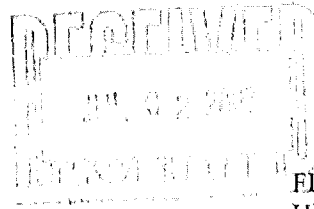
State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
John Gozdzialski, Regional Director

Northern Region Headquarters  
810 W. Maple Street  
Spooner, Wisconsin 54801  
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June 28, 2007

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



FID# 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  $< 1 \times 10^{-10}$  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

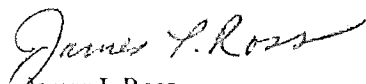
leading to decreased concentrations of contaminants in groundwater over time. The rationale for selecting this option is based on the fact that closing your drip pad will be addressed as part of your facility-wide corrective action, and not as a separate, stand alone site. Another supporting factor includes 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 Beazer 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  
Northern Region

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

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

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

**ATTACHMENT B**

**WDNR AUGUST 9, 2012 EMAIL**

## Paul, Linda S

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**From:** Saari, Christopher A - DNR [Christopher.Saari@Wisconsin.gov]  
**Sent:** Thursday, August 09, 2012 3:03 PM  
**To:** Paul Linda S; Ashenbrucker, Steven J - DNR; Lynch, Edward K - DNR  
**Cc:** Robinson, John H - DNR; Gordon, Mark E - DNR; Patarcity, Jane (Pittsburgh) NA (Jane.Patarcity@hanson.biz)  
**Subject:** RE: Koppers Inc., Superior, WI Facility, Drip Pad Closure

Hello Linda:

Following internal discussions between Wisconsin DNR's Waste and Materials Management (WMM) and Remediation and Redevelopment (RR) programs, it was determined that the RR program will have the lead on responding to your request below. Based on this message and previous discussions with you, it appears that Koppers Inc. is trying to achieve final closure for the former drip track area at the facility Superior. It also appears that a joint decision was made between Koppers Inc. and the WDNR prior to 2007 to close the drip track area as part of the site wide RCRA closure, rather than as a separate site under the drip track regulations (p. 2 of the May 2007 Decommissioning Report). Because final closure of the drip track area is apparently tied to the site wide closure, and site wide closure will not happen until after the off-property soil and sediment contamination has been addressed, it is not likely that the WDNR can provide Koppers Inc. with a final closure for the drip track area in the near term.

However, we can offer an alternative that might help explain the regulatory status of the drip track area and clarify any liability questions associated with that area. The WDNR's RR program can write General Liability Clarification Letters (GLCLs) that answer site-specific questions about status and liability issues. For more information, please refer to the GLCL Fact Sheet found at this link: <http://dnr.wi.gov/files/PDF/pubs/rr/RR619.pdf>. Requests for GLCLs are fee-based and should be accompanied by an application detailing the specific questions and/or issues for which the requestor is seeking clarification. The application can be found at this link: <http://dnr.wi.gov/files/PDF/forms/4400/4400-237.pdf>.

One issue that likely would require clarification would be the responsibility for ongoing inspection and maintenance of the concrete drip track. The WDNR considers the concrete covering the drip track area as both a barrier cap and a structural impediment. Under s. 292.12, Wis. Stats., barrier caps and structural impediments require continuing obligations at the time of case closure, in order to ensure that such things as inspection and maintenance activities are performed for as long as the contamination beneath the cap or structural impediment remains in place. These continuing obligations are conveyed with the property, meaning that the current property owner is responsible to make sure that the obligations are met. This does not preclude responsible parties and property owners from reaching separate agreements over which party or parties will take on those responsibilities, but I raise this as an issue now because of similarities between the continuing obligations for the drip track area and the direct contact soil barrier caps that Beazer installed in 2010 as part of the on-property cleanup work. This issue is also pertinent considering the potential sale of the property to the tie-grinding company (Omaha Track Materials?).

Once you have had a chance to look this material over, please contact me to let me know how you would like to proceed. Feel free to call me (715-685-2920) if you have any questions.

**From:** Paul Linda S [mailto:PaulLS@koppers.com]  
**Sent:** Tuesday, July 17, 2012 3:27 PM  
**To:** Ashenbrucker, Steven J - DNR; Saari, Christopher A - DNR; Lynch, Edward K - DNR  
**Subject:** Koppers Inc., Superior, WI Facility, Drip Pad Closure

Gentleman,



In recent discussions with Steve Ashenbrucker about a final drip pad closure at the Koppers Inc., Superior, WI facility, the question arose about the soil removal activities that had occurred in the drip track area. After review, the following summarizes information that was located on this subject.

- From 1928 until either 1981 or 1982, the drip track adjacent to the treating building at Superior was unlined (*Phase II RFI, June 1991, page 1-5*).
- In 1981 or 1982, the concrete-lined drip track was constructed, after removal of underlying soils (*Phase II RFI, June 1991, page 1-5; and Drip Track Extension Soil Sampling & Analysis Plan, Sept. 1991, page 2-2*). No specific data on the depth or volume of soil removal has been located for this project. Based on the dates, the removal and concrete drip track construction would have been completed by Koppers Company, Inc. (Beazer East, Inc.).
- In late 1991, to comply with new RCRA regulations, Koppers Inc. extended the Superior drip track. A 125 foot extension was installed to the existing concrete drip track - extending the length by about 20% and an additional 25 ft. x 75 ft. drip pad was installed adjacent to the existing 9.5 ft x approx. 600 ft. concrete drip track (see Figure 1 of the attached *Draft Sampling and Analysis Report, May 1992*).
- Soils in each of the two drip track expansion construction areas were to "be excavated . . . to remove all soils showing visible evidence of site-related constituents" and it was "anticipated that 2 to 3 feet of soil" was to be excavated from each area prior to installation of the drip track extension/expansion. (*Drip Track Extension Soil Sampling & Analysis Plan, Sept. 1991, pages 2-1 and 3-1*). Beazer collected soil samples in the two excavation areas to provide data on the soils remaining beneath the two newly constructed drip track extension areas.
- The Drip Track Extension and Expansion Project was completed in the fall of 1991. There is reference to memos that indicate approximately 700 cubic yards of soil were removed but I have been unable to locate those memos at this time. After the visibly impacted surficial soils were excavated, soil samples were collected from 0.0 to 1.0 foot depth from ten locations in the two expansion areas as shown on Figure 1 of the *Draft Sampling and Analysis Report* for the drip track extension. The sampling results for TPH, total PAHs, total phenolics, and pentachlorophenol are included on page 1b of the *Draft Sampling and Analysis Report*.

The information provided previously by Koppers at the time of facility decommissioning demonstrated that the drip track concrete had been sufficiently cleaned (rinseate sampling) and soil samples and groundwater samples were collected from adjacent to the drip track as reported in the *January 2007 Drip Pad Closure Investigation Report* and May 2007 follow-up letter. Per the above, soils beneath at least portions the concrete drip track were removed (likely to the 2 to 3 foot depth) in two different projects coinciding with the original concrete pad construction and the extension in 1991.

I will contact you shortly to review the information contained herein and to determine any remaining steps to obtain final closure of the drip pad at the Superior facility. Thank you for your timely review of this information.

Linda S. Paul, P.E.  
Koppers Inc.  
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Pittsburgh, PA 15219  
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[pauls@koppers.com](mailto:pauls@koppers.com)