

US EPA ARCHIVE DOCUMENT

Visit the Koppers Site
July 16, 2013

Open House and Guided Tours
4:00 - 8:00 p.m.

Hosted by Beazer East, Inc.
1555 N. Marion Street
Carbondale, IL

For additional information

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**Information repository and
website:**

A file containing official documents
about the Koppers site is available
for your review at the Carbondale
Public Library, 405 W. Main Street,
Carbondale or at
[www.epa.gov/region5/cleanup/rcra/
koppers/](http://www.epa.gov/region5/cleanup/rcra/koppers/).

Koppers Open House - July 16, 2013 and Protective Clean-up Overview

Former Koppers Wood Treating Site

Carbondale, Illinois

July 2013

During the EPA public meeting held in Carbondale on May 22, 2013, some neighboring residents voiced concern over the approach used at the former Koppers Wood Treating Plant to clean up contamination at the demolished site. Some residents believe that there is still a risk of exposure to contamination because all materials were not removed to an off-site landfill, but are being contained and managed in-place. This newsletter explains the clean-up strategy used at the site, which includes remedial design elements for eliminating exposure to contamination now and into the future. Furthermore, the site owner, Beazer East, Inc. (Beazer), wants to show people the actual remedies and what the site looks like today at an Open House on July 16, 2013.

History: In 2004, EPA selected a remedial strategy of on-site management of clean-up wastes including soil, sediment and debris at the Koppers site. This strategy is used at sites across the country. Additionally, liquid wastes are being extracted from the ground and taken off-site for disposal or recycling.

Future Protection: When contamination is left in place using a containment method, one of the trade-offs for the site owner is that the containment systems must be maintained and monitored forever and the responsibility for doing so stays with the site owner and any future owner (via the property title). Containment measures are maintained for as long as the contaminated materials remain in place.



The three-acre CAMU in the background, looking north from the western soil cover. The CAMU contains contaminated materials dug up at the site and has a leak monitoring and collection system.

Pre-Remedial Conditions: On-site, large volumes of soil and sediment were contaminated with creosote, heavy metals and dioxin/furans. Below ground, an unknown and presumed large volume of creosote resided in cracks in the clay. Several piles of contaminated debris were also present. On the eastern side of the site, Glade Creek was laden with creosote along the creek bottom for nearly one mile, as far as Piles Fork Creek.

Off-site sampling in the adjacent neighborhood in 2005, 2006, and 2012 by EPA, Beazer, and the City of Carbondale showed that the neighborhood was not contaminated.

Remedies: The overall clean-up approach was to isolate contamination that was identified as being above clean-up standards and to restrict the future use of the site to non-residential uses. A caretaker works at the site to monitor its condition.

Treatment of the large volume of contaminated soil was considered in 2002. However, the process would have required at least a decade of moving materials in and out of the treatment unit which had considerable risk of creating fugitive emissions and an uncertain outcome.

CAMU: An engineered containment unit called a Corrective Action Management Unit ("CAMU") was constructed on top of an area of already contaminated soil. The CAMU holds 30,000 cubic yards of materials from around the site. The CAMU design includes a double liner and liquid collection system that is routinely monitored and maintained to prevent buildup of liquids. It also includes a soil cover system to reduce rainwater infiltration and to prevent people and wildlife from coming into contact with materials in the CAMU. Regular inspections ensure that the cover system remains in place.

Soils: Soils stained with creosote were removed and placed in the CAMU. Also, about 37 acres of contaminated soils are contained beneath a low-permeability cover. Some of the cover areas include a high-density polyethylene liner for additional isolation. All of the covers have one foot of soil, and grass or roadway surfaces. Covers do not destroy or remove contaminants. Instead, they isolate them, keep the soil in place, and prevent people and wildlife from coming into contact with contaminants.



Western soil cover, looking southwest from the CAMU. The adjacent neighborhood is on the other side of the tree-line.

A cover is effective as long as it does not erode, develop holes or cracks, and stays in place. Regular inspections will continue to be required at Koppers to make sure that weather, plant roots, wildlife or humans have not damaged the soil cover. Also, groundwater monitoring wells are placed around the cover areas and the site itself. The wells are sampled to ensure that contamination does not spread beyond the site boundaries.

Glade Creek: The section of the creek at the east end of the property was laden with creosote before the remedies were completed. Part of the creek channel was moved outside the zone where the creosote was entering. An underground trench was installed near the old channel location to collect creosote. Collected creosote is sent off-site for re-use or disposal. About 9,000 cubic yards of the downstream end of the creek were excavated, mixed with stabilizing materials, and placed in the CAMU.

When the remedies were being constructed at Koppers, dust was controlled by trucks that sprayed water and air quality was monitored to ensure the protection of site workers and neighboring properties.

New Health Risk Assessment: Over the next year, Beazer and EPA will complete additional risk assessments using the latest data to guide decisions about whether more clean-up may be needed. A risk assessment estimates the chances for negative health effects occurring from exposure to chemical contamination.