



Koppers Co., Inc. Superfund Site

U.S. Environmental Protection Agency \$ Region 9 \$ San Francisco, CA \$ March 2009

Koppers Co., Inc. Superfund Site Third Five-year Review Fact Sheet

This fact sheet provides a summary of the recent Five-Year Review at the Koppers Company, Inc. Superfund Site in Oroville, CA. It is being distributed to EPA's mailing list for the Koppers Site and other interested parties. If you are not on the mailing list and would like to be added, please see the EPA contact information at the end of this fact sheet.

About Five-Year Reviews

A five-year review is required by the Superfund law whenever the remedy for a site either leaves waste on site above levels that are safe for unrestricted use or will take longer than five years to reach cleanup goals. The purpose of the five-year review is to determine if the remedy is protective of human health and the environment.

Koppers Five-Year Review

The United State Environmental Protection Agency (EPA) has completed the third Five-Year Review for the Koppers Superfund Site in Oroville, CA. The final document is available for review both online and at the information repository (see page 2 of this document).

For the Koppers site, the review is required for two reasons 1) the soil cleanup goals were set at levels that allow for only commercial/industrial use (not residential use) and 2) the groundwater remedy includes an area on the former Koppers property where EPA determined that it would be technically impracticable to achieve cleanup levels that allow for unrestricted use of the water. A copy of the Five-Year Review Report is made available for the public both online and at the information repositories listed on page 2.

Findings – Protectiveness Statement

The remedy at the Koppers Superfund Site is protective of human health and the environment because all exposure pathways that could result in unacceptable risk are being controlled. Residents whose wells are located within the former plume have been supplied with an alternate source of drinking water. A deed restriction on the former Koppers property prevents unacceptable exposure to onsite soil contamination and restricts the property for industrial use only. Current data indicate that the groundwater remediation is progressing and that the remedy is functioning as required to achieve groundwater remediation standards.

Past Five-Year Reviews

Two five-year reviews were previously completed for the Koppers site. The first review was completed in December 1997. The review evaluated contamination levels and actions taken on the site up to that point in time. At that time, the groundwater treatment and soil consolidation remedies were found to be protective of human health and the environment. The second five-year review was completed in 2003 and evaluated changes in contaminant levels at the site that had taken place between December 1997 and February 2003. Cleanup measures that were conducted to treat the site during that time period were found to also be protective of human health and the environment.

Remedy Selection for Koppers

A Record of Decision (ROD) for Koppers was signed in 1989 and has been amended twice, first in 1996 and again in 1999. The Koppers site is currently in the Operation and Maintenance (O&M) phase of the Remedial Action as described in the ROD and ROD amendments. Once the groundwater cleanup goals are met, the site will be removed from EPA's National Priorities List.

Site History

From 1948 until March 2001, the 205-acre Koppers Co., Inc. (Oroville Plant) site was used to conduct wood-treating operations to prevent wood deterioration by insects or fungi. Chemical and waste-water handling procedures, wood treatment and storage operations contaminated the soil and groundwater on and off site. In 1973, pentachlorophenol (PCP) was discovered in nearby residential wells that were used as a source of drinking water. Fires at the Koppers facility occurred in 1963 and 1987 causing increased contamination at the site. Groundwater, surface water and soils on and off site were contaminated with PCP and other hazardous substances used in Koppers' wood-treating activities. The contaminated groundwater is located

beneath this site and off-property south of the Koppers site. In November 2006, the former Koppers plant site (approx 205-acres - exclusive of those parcels that contained the site's contaminated soils consolidated into two Resource Conservation and Recovery Act (RCRA) landfill cells, the groundwater treatment operation and the pond areas) was sold to a land developer for development as an industrial park.

Chemicals of Concern

Site Soils

- Dioxins
- Pentachlorophenol (PCP)
- Polycyclic aromatic hydrocarbons (PAHs)
- Heavy metals including copper, chromium and arsenic

Groundwater

- Pentachlorophenol (PCP)
- Dioxins
- Furans
- Polycyclic aromatic hydrocarbons (PAHs)
- Heavy metals including copper, chromium and arsenic

For More Information

Please visit the web page for the Koppers site: www.epa.gov/region09/Koppers



Information Repositories

Butte County Public Library
1820 Mitchell Ave.
Oroville, CA 95965
(530) 538-7642

Meriam Library
California State University at Chico
Chico, CA 95929-0295
(530) 898-5862

EPA Superfund Records Center
95 Hawthorne St.
San Francisco, CA 94105
(415) 536-200



Remedial Actions

Soil

Surface soils cleanup was completed in 2002 by placing contaminated soils in the two RCRA cells and putting in place a land-use-covenant that restricts the site to industrial use. The two landfill cells are lined and capped such that contaminated soils held within do not intermingle with non-contaminated soils and water cannot influence the contaminants that are bound to the soils within.

Groundwater

- Groundwater cleanup is underway using pump and treat technology augmented by nutrient addition to enhance natural biological degradation for on-property and off-property contaminated groundwater plumes. The off-property pump and treat system was decommissioned after the off-property plume receded to the point where the extraction wells were no longer serving a useful purpose.
- A Technical Impracticability waiver was granted for a 4-acre area on the property with sub-surface soil and groundwater contaminated with PAHs and thin layers of creosote trapped in the deep soil strata. This waiver was granted because the contaminants are not in a mobile phase, remediation is impracticable, and existing institutional controls prevent exposure from these chemicals thus protecting human health.

Long-term Remedial Actions

Soil

- Monitor the settlement of the RCRA cells and groundwater around the cells (on-going)
- Monitor Deed Restriction to limit the use of the property.

Groundwater

- Operate and monitor the effectiveness of the pump and treat remedy on-property and the nutrient addition to enhance natural biological degradation of the groundwater contamination both on and off property.
- Monitor the Technical Impracticability waiver zone.

EPA Contacts

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