

Hudson Refinery Site (Payne County) Oklahoma

EPA REGION 6
CONGRESSIONAL DISTRICT 03

Contacts:
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EPA ID# OKD082471988
Site ID: 0601160



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Current Status

- The next steps for site activity include the design of the remedy outlined in the Record of Decision, implementation of that design and the clean up of the site. This is called Remedial Design (RD) and Remedial Action (RA). The potentially responsible party, Land O'Lakes, has submitted the RD work plan and other associated documents for EPA review and comment.
- A Unilateral Administrative Order, signed January 6, 2009, was sent to the company, Land O'Lakes, requiring it to implement the Site remedy outlined in the Record of Decision (ROD). It is EPA policy for parties that were responsible for site contamination to conduct and pay for the clean up of Site contamination.
- The Agency for Toxic Substances and Disease Registry (ATSDR) released the Public Health Assessment on June 22, 2006. While the ATSDR found no exposure risk to individuals in the City of Cushing or living adjacent to the Site, contamination at the Site remains at levels above human health risk levels. The City of Cushing has enacted an ordinance prohibiting Site access; activity at the Site should be prohibited until after clean up to protect human health.

Benefits

The cleanup of the contaminated media at the Hudson Oil Refinery Superfund site will reduce the health and ecological risks associated with the remaining contamination.

National Priorities Listing (NPL) History

NPL Inclusion Proposal Date: April 23, 1999
NPL Inclusion Final Date: July 22, 1999
NPL Deletion Proposal Date: n/a
NPL Final Deletion Date: n/a

Location: The Hudson Refinery site is located in Cushing, Payne County, Oklahoma. Surrounding the site are residential and agricultural lands to the north and commercial properties to the south. Highway 33 (Main Street) separates the site into a "north" and "south" refinery. The "North Refinery" consists of approximately 165 acres, and the "South Refinery" is approximately 35 acres.

Setting: Historical aerial photographs indicate the site operated as a refinery beginning as early as the mid-1920s. Refining operations ended in 1982, and the site was abandoned. The site historically included aboveground storage tanks, wastewater treatment impoundments, separators, stained soils, a land treatment unit, and loose and friable asbestos containing material. Runoff from the site enters on-site wetlands and storm water collection ponds. The tanks, piping and most of the refinery superstructure were removed from the site during the EPA removal actions.

Population: There are approximately 8,371 residents in the City of Cushing.

Site Map



Health Considerations

There is a potential exposure threat to human health through ingestion, dermal contact, or inhalation of soil or surface water from the site due to hazardous chemicals that may still be present at the site. These materials may present both a cancer and non-cancer risk to human health. Some of the more toxic chemicals residuals that may still be present are TEL, hydrogen sulfide (H₂S), benzene, hydrochloric acid (HCL), hydrosulfuric acid, HF, mercury, arsenic, chromium, ammonia, and calcium hypochlorite. Asbestos containing material associated with the piping and vessels at the facility were friable, had weathered and deteriorated over time posing an increasing risk of release to the air. All aboveground tanks on the site containing some of the more toxic chemicals and the asbestos piping were removed during the 1998 and 2002 removals.

Record of Decision (ROD)

**Soil, waste pond sediment, waste pond surface water, ground water, and other media
ROD signed November 23, 2007**

The ROD was signed on November 23, 2007. The cleanup decision includes:

- Institutional Controls – The process and tanks areas of the Site will be available for a reasonably anticipated reuse of commercial/industrial; therefore, Institutional Controls (ICs) will be required to aid in the management of waste left on-site for each of media listed below. ICs will include deed notices placed on land parcels that are contained in the Site. The deed notices will identify the reason for the notice, the affected property, the remedy, engineering controls, land use restrictions, and ground water use restrictions prohibiting use of the shallow ground water. An easement may also be granted by the landowners for continued remedial response. The deed notices will be filed by the ODEQ should the property owner decline. The city currently has an

ordinance in place that prohibits Site access with the exception of EPA, ODEQ, and federal/state remediation contractors until completion of Site cleanup. Current Site zoning is for industrial use.

- Other Media – Removal of Asbestos-Containing Material (ACM), Coke Tar, and Scrap Metal – ACM will be excavated, containerized, and transported to a regulated off-site disposal facility. Coke tar will be excavated, stabilized, and transported to a regulated off-site disposal facility. Material, including tanks and metal debris, that remains at the Site will be removed and salvaged. If any of the material is not salvageable, it will be disposed of at an authorized off-site disposal facility.
- Soil – Excavation and Off-site Disposal at Permitted Facility – Soil and waste will be excavated and transported to an off-site disposal facility. These areas include the North Refinery (North Tank Farm Area) and South Refinery (South-South Tank Farm Area, South Process Area, Northeast-South Tank Farm Area, North-South Tank Farm Area, and South Refinery Other Areas).
- Waste Pond Sediment – Excavation, Stabilization and Off-site Disposal at Permitted Facility – Contaminated sediment from waste ponds and sumps will be excavated, stabilized, and transported to an off-site disposal facility. These sediments will be excavated from the Aeration Pond 7 and Sumps, Wastewater Ponds 1 and 2, and the Coke Pond. The ponds will be backfilled, revegetated, and closed.
- Waste Pond Surface Water – On-site Treatment – Surface water from the ponds with contaminated sediment and water from ponds that are leveled to ensure proper site drainage will be treated on-site and discharged or transported off-site for disposal.
- Light Non-Aqueous Phase Liquid – Hydrocarbon Belt Skimmers – Light non-aqueous phase liquid (LNAPL) recovery skimmers and monitoring will be implemented where LNAPL has been observed. Recovered LNAPL will be contained in drums for off-site disposal or recycling.
- Ground Water – Ground Water Monitoring – A ground water monitoring plan will be developed during the remedial design and implemented to further delineate ground water contamination. The ground water analytical data collected will be evaluated to identify the potential for off-site migration to occur and to ensure that the areas with contamination are stable and/or decreasing.

Site Contacts

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