

# NPL Partial Site Deletion Narrative

## Tar Lake Mancelona Township, Michigan

On November 21, 2005, EPA deleted a portion of the Tar Lake Superfund site from the National Priorities List (NPL). The site is located in Mancelona Township, Antrim County, Michigan. This partial deletion pertains only to the East Tailing Area of Operable Unit 2 (OU2) and does not include the other portions of the site. The East Tailing Area consists of approximately 40 acres of land east of Peckham Lake.

From 1882 through 1945, the Tar Lake site was the location of an iron production facility. The Antrim Iron Works Company produced iron using the charcoal method. From 1910 to 1944, the Antrim Iron Works Company produced charcoal in sealed retorts from which pyroligneous (made by destructive distillation of wood) liquor was recovered. A secondary chemical manufacturing process was applied to the recovered pyroligneous liquor at the iron works. The pyroligneous liquor was further processed into calcium acetate, methanol, acetone, creosote oil, and a tarry-like waste residue—referred to throughout this document as tar. The tar was discharged into a 4-acre depression located on site. Tar and water that remained in this depression are referred to as Tar Lake. Groundwater coming from the Tar Lake was determined to be contaminated with phenolic compounds as early as 1949. Tar Lake caught fire in 1969 and burned for several months before being extinguished by natural action.

It was determined that benzene and 2,4-dimethylphenol in onsite groundwater and tar/creosote waste presented an unacceptable risk. The Record of Decision (ROD) for OU2 was signed in February 2002 to address these unacceptable risks. Components of the selected remedy were: removal of on-site foundations and miscellaneous debris; removal of the poly-liner to enhance infiltration of precipitation to flush contaminants to groundwater; bioventing of approximately 45,000 tons of rind material; installation of a groundwater circulation system for approximately 45,000 tons of rind material; continued operation of the on-site groundwater biosparge system; institutional controls to restrict on-site groundwater use; long-term monitoring; and excavation of approximately 15,000 tons of tar/creosote waste and transportation to an energy recovery facility.

On June 14, 2004, EPA began remedial construction activities. Approximately 4,000 cubic yards of top soil and 8,000 cubic yards of overburden (non-impacted soil and slag) were excavated from the 4-acre depression above the rind. On July 7, 2004 and continuing through August 28, 2004, 21,482 tons of rind and 225 tons of tar/creosote waste from the Creosote Area were excavated and disposed of locally at an approved RCRA Subtitle D landfill in Federick, Michigan. Removal of on-site foundations and miscellaneous debris impeding remediation and removal of the poly-liner to enhance infiltration were also completed.

An Explanation of Significant Differences (ESD for OU2) was issued in September 2004, to document a change of two remedial action components from bioventing and groundwater circulation of the rind to excavation and off-site disposal. The remedial action component to address tar/creosote waste found in the Creosote Area was changed from excavation and transportation to a recovery facility to excavation and off-site disposal.

The Remedial Investigation (RI) for OU2 demonstrated that there is no contamination present in the East Tailing Area which is located upgradient of the contaminated rind. EPA has no further concern with groundwater beneath the East Tailing Area.

A pre-final inspection conducted on September 20, 2004 demonstrated that site restoration activities such as backfilling, regrading and seeding the 4-acre depression had been properly conducted. It was determined that remedial action construction activities had been performed according to specifications. The first five-year review for the Tar Lake site is scheduled to be conducted before June 2009.

EPA, with concurrence of the State of Michigan, has determined that all appropriate responses under CERCLA have been completed and that no further response actions are necessary at the East Tailing Area. Therefore, EPA is deleting the East Tailing Area of the Tar Lake site from the NPL.