



Kerr-McGee Chemical Corporation NPL Site Public Health Assessment

September 11, 2012



Background

This site is located on North Navassa Rd. in Navassa, Brunswick County. The site is bordered by Sturgeon Creek to the south, the Brunswick River to the east, and the town of Navassa to the west. The property consists of 300 acres. The site operated as a wood treating facility from 1936 until 1974. The site was dismantled in 1980.

Dried lumber was pressured treated with a creosote solution and stored outside to dry. Wastewater generated during the creosote treatment process was discharged into two on-site un-lined wastewater ponds.

Current Environmental Situation

Polynuclear aromatic hydrocarbons were detected in soil and ground water on the site and in the sediments of the marsh next to the site. No samples were collected on the site until 14 to 30 years after operations ended. The samples evaluated may not represent exposure amounts experienced

by the local community while the facility was in operation.

Purpose of the Public Health Assessment

To evaluate available environmental data to determine if the site presents a health hazard to the community.

How was the Public Health Assessment conducted?

We evaluated data generated by N.C. Department of Environment and Natural Resources, U.S. Environmental Protection Agency, N.C. Department of Transportation and Kerr McGee/Tronox, or their contractors. The data included soil, sediment, groundwater, surface water and private well samples collected from 1988 to 2005.

Conclusions

- We do not expect infrequent unintentional ingestion of soil or sediments on the site to cause harm. Daily unintentional ingestion of soil on the site over many years could harm people's health.
Reason: The concentration of polycyclic aromatic hydrocarbons (PAHs) currently present at the site is too low to cause harm if ingested infrequently but high enough to cause harm if ingested daily for 30 years.

- We do not expect unintentional ingestion of soil in the private residential area in the east-central portion of the site to cause harm.

Reason: The concentration of PAHs currently present in the soil in the residential area is below levels that could harm people even if ingested daily.

- We do not expect drinking water from private wells west of the site to cause harm.

Reason: The residences immediately west of the site are connected to municipal water. Groundwater flows away from the residential area towards Sturgeon Creek and the Brunswick River. No contaminants were detected in well samples collected in 1988 and 1995.

- We do not know if eating fish or shellfish from Sturgeon Creek or Brunswick River adjacent to the site could cause harm.

Reason: Fish samples were recently collected near the site. We will issue a report to inform the community of the results when the evaluation is completed.

- We do not know if people living near the site during the years wood was being treated could have been harmed by contaminants from the site.

Reason: No environmental data was collected when the site was in operation. No data was collected on the site until 1988, well after operations ended.

Recommendations by the N.C. Division of Public Health

- Discourage people from going into the south portion of the site where wood treating operations occurred.
- Discourage people from eating fish caught near the site until the evaluation of the fish is completed.
- Continue to monitor environmental data for potential health effects.
- To protect public health, the levels of PAH in the soil and sediments need to be reduced or contact prevented if the site is re-developed for industrial, residential or recreational use.

Contact:

HACE Program

Telephone: (919) 707-5900

E-mail: nchace@dhhs.nc.gov

Address: N.C. Division of Public Health
OEE/MERA
1912 Mail Service Center
Raleigh, NC 27699-1912

Additional Information

The full report is available under Brunswick County at

www.epi.state.nc.us/epi/oeo/hace/ncmap/CountyInfo.html#Brunswick

