



# Kerr-McGee Chemical Corporation NPL Site

## Health Consultation

July 25, 2017



### Background

The Kerr-McGee NPL site is located on North Navassa Road in Navassa, Brunswick County. The site is bordered by Sturgeon Creek to the south, the Brunswick River to the east, and North Navassa Road to the north and west. The property consists of 251 acres. The site operated as a wood treating facility from 1936 until 1974. The site was dismantled in 1980.

Dried lumber was pressure treated with a creosote solution and stored outside to dry. Wastewater generated during the creosote treatment process was discharged into two on-site unlined 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 Health Consultation

To determine if the statewide fish advisory for mercury is health protective for people eating fish from areas near the Kerr-McGee NPL site.

### How was the Health Consultation conducted?

The N.C. Division of Public Health (DPH) evaluated fish tissue data collected by U.S. Environmental Protection Agency in 2011 from Sturgeon Creek and N.C. Department of Environmental Quality in 2013 from Sturgeon Creek, Brunswick River, and Cape Fear River. The data included 10 different fish species and blue crabs.

### Conclusions

- Eating fish and shellfish daily from Sturgeon Creek, Brunswick River, and Cape Fear River near the site could harm people's health. DPH has determined that the statewide mercury fish advisory is protective of fishers eating fish and shellfish from these waterbodies, except for striped bass, striped mullet, and blue crab that require additional waterbody-specific consumption advisories. Risk of cancer and non-cancer health effects is lower for recreational fishers than subsistence fishers.

Reason: People who regularly eat fish and shellfish caught in this area may be exposed to levels of contaminants that

increase their risk for non-cancer and cancer health effects. These contaminants are not known to be associated with the Kerr-McGee site.

### The N.C. Division of Public Health recommends that:

- people follow the existing statewide fish consumption advisory for mercury (see “What fish are safe to eat?” fact sheet at <http://epi.publichealth.nc.gov/oe/mercury/safefish.pdf>).
- people follow these additional meal consumption limits for fish and shellfish from Sturgeon Creek, Brunswick River, and Cape Fear River near Navassa, NC:
  - Eat up to **2 meals per week** of striped bass due to high levels of mercury.
  - Eat up to **3 meals per week** of striped mullet due to high levels of hexavalent chromium.
  - Eat up to **3 meals per week** of blue crab due to high levels of arsenic, hexavalent chromium, and mercury.

- the local health departments post advisory signs at areas where people may fish along these waterbodies.
- N.C. DEQ sample fish and shellfish from these waterbodies at least every 5 years to monitor changes in contaminant levels.

#### Contact:

#### N.C. HACE Program

Telephone: (919) 707-5900

E-mail: [nchace@dhhs.nc.gov](mailto: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 will be available soon at:

[http://epi.publichealth.nc.gov/oe/hace/by\\_site.html#K](http://epi.publichealth.nc.gov/oe/hace/by_site.html#K)

Map of fish sampling area. Upstream and downstream limits designated by red marks.

