Background

The Horton Iron & Metal NPL site is located at 2216 U.S. Highway 421 North, Wilmington, New Hanover County. The site was added to the U.S. Environmental Protection Agency's (U.S. EPA) Superfund National Priorities List program in September 2011 – a program to clean-up abandoned hazardous waste sites that threaten to harm the environment or people.

The property is approximately 37 acres. The eastern-most 7.4 acres that are adjacent to the North East Cape Fear River have been investigated as part of the NPL listing. The contamination resulted from former fertilizer manufacturing that took place approximately from 1911-1959, and ship breaking salvage operations that occurred in two boat slips in the 1960s and 1970s.

Currently, Horton Iron & Metal Co., Inc. is a scrap iron and metal recycler that operates to the west of the contaminated area.

Current Environmental Situation

The soil, groundwater and boat slip sediment in the 7.4-acre area is contaminated with polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), pesticides, metals and asbestos.

Purpose of the Public Health Assessment

The assessment evaluated available environmental data from the 7.4-acre area to determine if the site presents a health hazard to the nearby community.

How was the Public Health Assessment conducted?

The data evaluated came from the N.C. Department of Environment and Natural Resources, and the U.S. Environmental Protection Agency and their contractors from 1990 to 2009. The data included soil, groundwater and sediments in the 7.4-acre area.

Conclusions

- We cannot conclude if asbestos in the soil can harm the health of people in the immediate area. No air monitoring has been done to see if asbestos fibers in
the soil could be released into the air where people can breathe them.

- The other contaminants present at the site are not expected to cause harm.

- We do not know if former workers of the fertilizer manufacturing or ship breaking salvage operations may have been harmed by substances they were exposed to during their employment. Data was not available to determine workers' exposure levels while they were working at the site.

- We do not know if fin fish or shellfish caught downstream from the site could be harmful to people’s health. We were not able to find data on fish tissue for the area.

**Recommendations**

- Women that are pregnant or may become pregnant should avoid repeated exposure to the soils to prevent harm to unborn children.

- Groundwater wells on the property should not be used as a drinking water source.

- Place signs and fencing around the perimeter of the contaminated area to discourage access.

- Determine if an asbestos hazard exists and eliminate the hazard if it exists.

- Multiple past industrial activities on the northeast Cape Fear River could have contaminated fin fish and shellfish. We recommend testing fin fish and shellfish downstream of these areas to see if the fish could be contaminated at levels that could be harmful to people who eat them.

- Continue to monitor the data generated for this site.

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**Additional Information**

The full report is available under New Hanover County at  
http://epi.publichealth.nc.gov/oee/hace/ncmap/CountyInfo.html#NewHanover