



# U. S. Environmental Protection Agency

## ESTECH GENERAL CHEMICALS SITE, NAVASSA, BRUNSWICK COUNTY, NORTH CAROLINA

May 2010

If you have questions or comments about the Site, please contact EPA by phone at the numbers listed below:

### Contact Info:

**McKenzie Mallary**  
Remedial Project Manager  
(404) 562-8802  
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**Tonya James**  
Community Involvement  
Coordinator  
(404) 562-8633  
[james.tonya@epa.gov](mailto:james.tonya@epa.gov)

You can also mail your questions or comments to either contact shown above at the following address:

**U.S. EPA**  
61 Forsyth St.  
Atlanta, GA 30303  
Toll Free: 1-877-718-3752

If you would like to be placed on the EPA's mailing list to receive updates about the site, please see the back of this fact sheet. Provide the requested information, fold the form, and return it to EPA at the address provided. Or if you prefer, do not hesitate to call the contacts above.

### *Site Location & History*

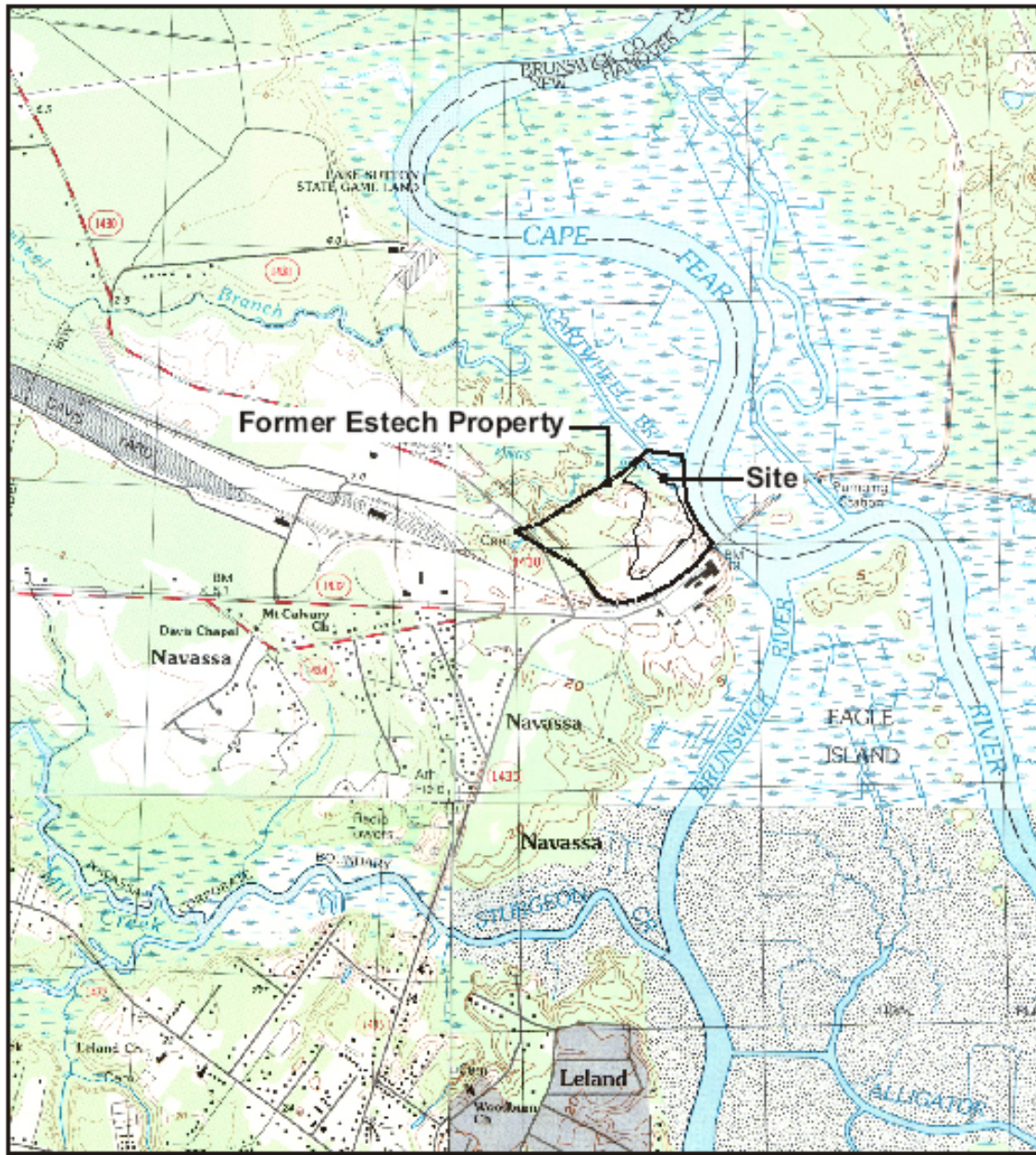
The Estech General Chemicals Site (the "Site") is located on Navassa Road in Navassa, Brunswick County, North Carolina. See Site Location Map on page 2. The Site is bounded by the Cape Fear River to the east, the Seaboard Coastline Railroad and a former yacht manufacturing facility to the southeast, undeveloped property and Old Navassa Road to the southwest, undeveloped property to the northwest, and Cartwheel Branch to the north.

Phosphate-based fertilizer manufacturing took place at the Site from 1884 until the early 1980's. Phosphate-based fertilizer manufacturing involved reacting phosphate ore with sulfuric acid to produce phosphoric acid, the building block of Nitrogen-Phosphorus-Potassium (N-P-K) agricultural fertilizers. Sulfuric acid was made at the Site, and stored in lead-lined chambers.

A number of different companies manufactured fertilizer at the Site, including Virginia Carolina Chemical Company (VCC) and Estech, Inc. (Estech). The Navassa Guano Company constructed the original facility in 1884. In 1927, the property was sold to VCC. In 1963, VCC merged with the Socony Mobil Oil Company, which changed its name in 1968 to Mobil Oil Corporation. By way of a corporate merger in 1999, the Exxon Mobil Oil Corporation, a subsidiary of the Exxon Mobil Corporation (ExxonMobil), is successor in interest to former VCC phosphate-based fertilizer manufacturing activities conducted at the Site.

### *Removal Site Evaluation*

A number of sampling investigations have been conducted at the Site since 2003 to evaluate the nature and extent of contamination, and determine the potential risks to public health and the environment caused by the release or threatened release of contamination from the Site. The analytical results from these investigations indicate elevated levels of arsenic and lead in soil, groundwater, and sediment at the Site.



REFERENCE: BASE MAP USGS 7.5 MIN. QUADS., WINNABOW, NC, 1990, LELAND, NC, 1997, CASTLE HAYNE, NC, 1997, AND WILMINGTON, NC, 1993.



EXXONMOBIL ENVIRONMENTAL SERVICES AND ESTECH, INC.  
 FORMER ESTECH GENERAL CHEMICALS SITE  
 NAVASSA, NORTH CAROLINA

**SITE LOCATION MAP**



FIGURE

0817.000 STRACUSE, N. HENRY/COAD-JOHNSON  
 500.857.5810/0310/07.12.DWG/25.7591.MKT.CDR

### *Planned Activities*

In 2005, EPA signed an Administrative Order on Consent (AOC) with ExxonMobil, Estech, and the current property owners (collectively referred to as the “respondents”) to conduct a Removal Action to address the contamination at the Site.

Beginning in summer 2010, the respondents will perform a Removal Action to address the lead and arsenic in soil, groundwater, and sediment at the Site. The Removal Action will involve excavating an estimated 46,260 cubic yards of magenta-stained soil and slag. The soil removal will take place over an area of approximately 7.4 acres. A portion of the soil will be stabilized with a combination of ingredients to reduce the leachability prior to backfilling on-site. The remainder of the excavated soil will be transported off-site for disposal at the Sampson County Landfill. The trucks carrying the treated soil off-site will be routed from the Site along Old Mill Road to US 74/US 76, from US 74/US 76 to US 17, from US 17 east to US 421 North, and US 421 North to the Sampson County Landfill.

An exposure barrier will be installed on-site over the stabilized backfilled soil (7.4 acres) and additional surface soil containing residual arsenic and lead above the EPA and North Carolina Department of Environment and Natural Resources (NCDENR)-approved action levels of 27 milligrams/kilogram (mg/kg) and 895 mg/kg, respectively (2.2 acres). The purpose of the exposure barrier is to address direct-contact exposure to soil containing elevated residual arsenic and lead concentrations. In addition, the surface of the exposure barrier will be graded to promote surface water runoff and infiltration to groundwater.

The groundwater that has been impacted by the former fertilizer manufacturing will be addressed by adding a chemical additive to the backfill used in the excavated areas below the water table. In addition, Institutional Controls will be placed on the property deed to prohibit the future use of groundwater for human consumption, and prohibit future use of the property for residential or similar purposes. Following the completion of the Removal Action, groundwater will be monitored in order to determine the effectiveness of the Removal Action in reducing levels of arsenic and lead.

The removal will also involve excavating and solidifying an estimated 2.9 acres of marsh sediment and 0.31 acres of river sediment. The solidified sediment will be transported to the Sampson County Landfill for disposal. The wetland areas disturbed by the Removal Action will be restored to their pre-removal state to the maximum extent practicable. EPA and the NCDENR will provide oversight during the Removal Action. The Removal Action is expected to be completed in late 2010 or early 2011.

**Mailing List Additions/Corrections**

If you would like your name and address added to the mailing list for the Estech General Chemicals Site in Navassa, NC, please complete this form and return it to:

Tonya James  
U.S. EPA - Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

**NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, S.W.  
ATLANTA, GA 30303-8960  
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