

## NOAA Hazardous Waste Site Report

Wam Chem, Inc. (IV-40)  
Beaufort, South Carolina  
April 13, 1984

### Location and Nature of Site:

Wam Chem, Inc. was operated as a chemical manufacturing facility from 1972 to 1982. From the early 1960's to 1972, the facility was owned and operated by Beaufort Chemical Research. The Wam Chem facility ceased operations in late 1981. Since that time, the company has been developing a closure plan for the facility. This facility is located on U.S. Highway 21 in Beaufort, South Carolina (Figure 1).

Wam Chem, Inc. used and manufactured organic and inorganic compounds in producing intermediate dyes and chemicals for the textile industry. Until the late 1970's, the company disposed of its waste (including phenols, lead, cadmium, and solvents) in an evaporation lagoon. It then switched to spraying its chromium, toluene, dichloronitroethane, and benzene waste materials on the ground. Reported disposal areas on this site included trash disposal trenches, two spray disposal fields, a one-acre waste lagoon, two 100,000-gallon holding ponds, and a small area of waste sludges (which have since been removed).

### Proximity of Chemical Hazard to Marine Resources:

The site is situated on the west bank of McCalleys Creek which is a tidal estuary of the Coosaw River. The site has little topographic relief and is surrounded on three sides by tidal marsh. The distance from the site via McCalleys Creek to the Coosaw River is approximately 4.5 miles.

In 1975, the facility was observed by the South Carolina Department of Health and Environmental Control to periodically discharge untreated process wastes to McCalleys Creek. In addition, the waste-handling system allowed the leaching of toxic chemicals from the lagoon into the groundwater.

In 1979, seepage was reported to be observed entering the creek. However, during recent sampling conducted in October 1983, observations were made around the site perimeter in an attempt to determine if areas of seepage from the site still existed. No seepage from the site was observed.

Forty-two groundwater monitoring and/or production wells are located at the Wam Chem site. Concentrations of lead and chromium were

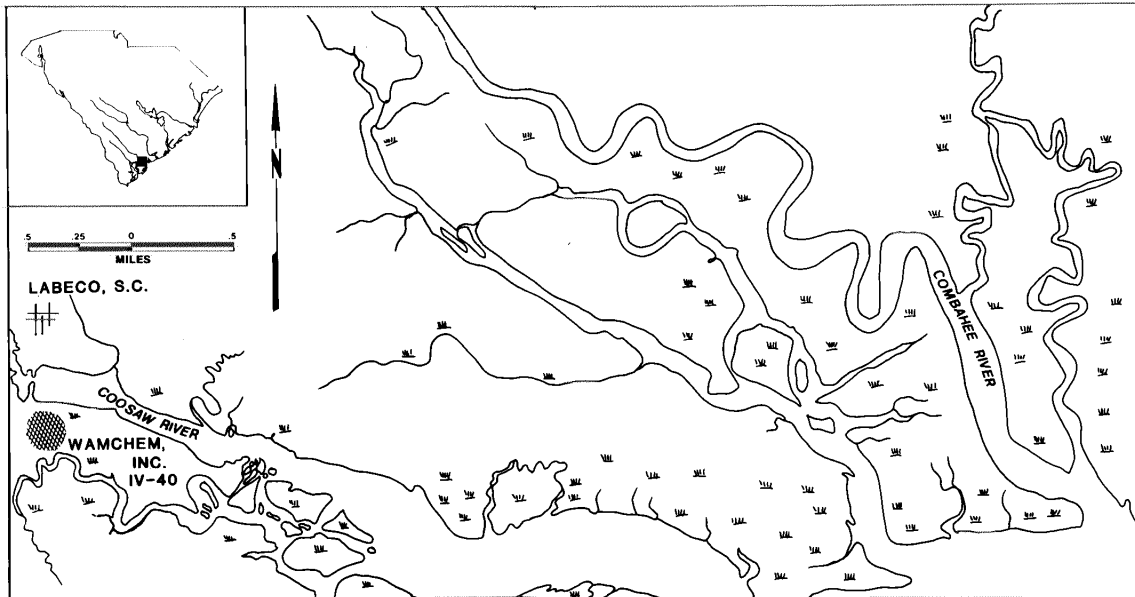


FIGURE 1. Site location.

present in all soil samples analyzed, including a sample taken as background. The background sample had higher concentrations than those detected in samples collected in the former sprayfield areas. Trace concentrations of toluene were detected in soil in the marsh area. These sample results indicate that through the years natural flushing action may have diluted any problems of past years. No concentrated releases of contaminants are anticipated from this site during heavy rains or flooding.

Marine Resources at Risk:

The Coosaw and Beaufort Rivers system is an important commercial and recreational fishery area, and supports a nursery for many marine organisms (see Table 1).

Table 1. Fishery Resources of the Coosaw and Beaufort Rivers Near Beaufort, South Carolina (1-4)

| Finfish Species       | Adult Habitat | Spawning Area | Nursery Area | Comm. Fish. | Rec. Fish. | Migr. Route |
|-----------------------|---------------|---------------|--------------|-------------|------------|-------------|
| <u>Anadromous</u>     |               |               |              |             |            |             |
| Atlantic sturgeon     |               |               |              |             |            | x           |
| American eel          |               |               |              |             |            | x           |
| Blueback herring      |               |               |              |             | x          | x           |
| Hickory shad          |               |               |              |             | x          | x           |
| American shad         |               |               |              |             | x          | x           |
| Striped bass          |               |               |              |             | x          | x           |
| <u>Non-anadromous</u> |               |               |              |             |            |             |
| Seatrout              | x             | x             | x            |             | x          |             |
| Spot                  | x             |               | x            |             | x          |             |
| Croaker               | x             |               | x            |             | x          |             |
| Whiting               | x             |               | x            |             | x          |             |
| Flounder              | x             |               | x            |             | x          |             |
| Silver perch          | x             | x             | x            |             | x          |             |
| Bluefish              | x             |               | x            |             | x          | x           |
| Mullet                | x             |               | x            |             | x          | x           |
| <u>Shellfish</u>      |               |               |              |             |            |             |
| Eastern oyster        | x             | x             | x            | x           | x          |             |
| Hard clam             | x             | x             | x            | x           | x          |             |
| Blue crab             | x             | x             | x            | x           | x          |             |
| White shrimp          |               |               | x            | x           | x          |             |
| Brown shrimp          |               |               | x            | x           | x          |             |

This area is a light- to moderately-developed estuarine system with extensive salt marshes and tidal flats. It is an important spawning and nursery area for fish and shellfish. There is an active recreational fishery for fish and shellfish in this area, and a very important commercial shrimp fishery in the adjacent coastal waters. There are

some anadromous fish runs up the Beaufort and Coosaw Rivers, but they are not primary spawning or nursery areas for these species (5). Many wading birds, shorebirds, and seabirds can be found here all year, as can bottlenose dolphin.

No documentation of resource damage resulting from this facility were identified during discussions with the South Carolina Department of Wildlife and Marine Resources, and with U.S. Fish and Wildlife Service officials. Fish kills had been reported in this vicinity in 1979, but no attributable source could be identified.

Site-Related Actions:

The Wam Chem facility is presently in the site investigation stage by the U.S. Environmental Protection Agency. The company continues in the process of developing a closure plan for the facility for state and EPA approval. Groundwater monitoring around the site continues. All chemical products used and manufactured have been removed from the facility.

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References:

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