

Site Review And Update

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**TOXICOLOGY &
HAZARD ASSESSMENT**

BROWN WOOD PRESERVING

LIVE OAK, SUWANNEE COUNTY, FLORIDA

CERCLIS NO. FLD980728935

SEPTEMBER 30, 1993

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Agency for Toxic Substances and Disease Registry

Division of Health Assessment and Consultation

Atlanta, Georgia 30333

Site Review and Update: A Note of Explanation

The purpose of the Site Review and Update is to discuss the current status of a hazardous waste site and to identify future ATSDR activities planned for the site. The SRU is generally reserved to update activities for those sites for which public health assessments have been previously prepared (it is not intended to be an addendum to a public health assessment). The SRU, in conjunction with the ATSDR Site Ranking Scheme, will be used to determine relative priorities for future ATSDR public health actions.

SITE REVIEW AND UPDATE
BROWN WOOD PRESERVING
LIVE OAK, SUWANNEE COUNTY, FLORIDA
CERCLIS NO. FLD980728935

Prepared by:

The Florida Department of Health and Rehabilitative Services
Under a Cooperative Agreement With the
Agency for Toxic Substances and Disease Registry

SUMMARY OF BACKGROUND AND HISTORY

The Brown Wood Preserving National Priorities List (NPL) site is at the intersection of Sawmill Road and Gold Kist Road, about 2 miles west of the city of Live Oak, Suwannee County, Florida (Figs 1 and 2). The plant operating on this 55-acre site treated lumber products with creosote and some pentachlorophenol (PCP) for thirty years between 1948 and 1978. The wood preserving plant consisted of two horizontal retorts (cylinders), a series of storage tanks, a boiler, associated storage yards, and a wastewater lagoon (Fig. 3). Untreated timbers were received by rail and truck, treated, and then stored on the site until they were shipped to buyers by truck or rail. Plant wastewater was discharged to an oil/water separator and from there to the lagoon. Creosote recovered from the separator was returned to the storage tanks, or if unusable, pumped to an off-specification storage tank.

Contractors for the U.S. Environmental Protection Agency (EPA) and the potentially responsible parties (PRPs) at the site have analyzed soil, surface water and groundwater samples from the site, and soil and groundwater samples from off of the site. Contaminants of concern included pentachlorophenol (PCP) (not detected [ND]-20,000 milligrams per kilogram [mg/kg]), phenol (ND-2,300 mg/kg), and carcinogenic (e.g., chrysene, ND-3,900 mg/kg) and non-carcinogenic (e.g., fluoranthene, ND-26,000 mg/kg) polycyclic aromatic hydrocarbons (PAHs) in on-site surface soil. PCP (10-94 micrograms per liter [$\mu\text{g/L}$]) and benzo(a)pyrene (ND-10 $\mu\text{g/L}$) were detected in on-site surface water and naphthalene (ND-65 $\mu\text{g/L}$) in on-site groundwater. No contaminants were detected at a level of concern in off-site soil or groundwater.

The Health Assessment (HA), prepared by the Florida Department of Health and Rehabilitative Services (Florida HRS) in 1989, concluded that the site was of public health concern because of exposure to hazardous substances. Workers on the site and children or other individuals trespassing on the site may have been exposed through direct dermal contact and ingestion of contaminated soil, or by inhalation of dust. Nearby residents and employees at businesses across Gold Kist Road from the site may have been exposed to contaminated dust blowing from the site. Exposure may also have occurred by contact with water in the on-site lagoon. Exposure to contaminants bioaccumulated in fish in the lagoon was not considered likely since no fish were present.

The Brown Wood Preserving site was placed on the NPL September 1, 1983. A remedial investigation and feasibility study were completed for this site in 1987. A Record of Decision (ROD) relating to cleanup of the site was signed on April 8, 1988. Consent Orders were signed between the Florida Department of Environmental Regulation (FDER) (now the Florida Department of Environmental Protection (FDEP)) and the James Graham Brown Foundation on April 19, 1984, and between EPA and the James Graham

Brown Foundation on January 22, 1988. The ROD stipulated the following remedial activities: 1) pump and treat liquids in the wastewater lagoon, 2) excavate and stabilize lagoon sediments, 3) transport the wastes to a RCRA-licensed secure landfill, 4) dismantle, decontaminate, and dispose of the plant facility (buildings, machinery, etc), 5) bioremediate contaminated soils on-site, and 6) monitor groundwater semiannually for five years after completion of remedial activity.

The 1989 HA identified air-borne contaminated dust from the site as a concern of residents and business owners near the site. Dust suppression measures during remediation and the completion of remedial activities have addressed these concerns. We were unable to identify any current community concerns about the site. The HA recommended additional monitoring of private wells, access restrictions, and posting of warning signs.

CURRENT CONDITIONS OF SITE

On September 8, 1993, Bruce Tuovila of the Florida Department of Health and Rehabilitative Services (HRS) and Charles Bradley of the Suwannee County Public Health Unit (CPHU) toured the site. The site is in a rural/agricultural area about two miles west of the city of Live Oak. Fewer than 750 people live within one mile of the site. There are wooded areas and agricultural fields on the north, west, and south sides of the site. Across Gold Kist Road to the east are several businesses. The site is secured by a chainlink fence topped with barbed wire and is posted with signs identifying it as a waste treatment area. The site is overgrown with weeds and small bushes and contains no buildings or other structures, except for a small office building near the road. Remediation of the site has been completed and the property has been conveyed to the city of Live Oak. Mr. Bradley indicated that the city uses a portion of the site fronting on Gold Kist Road as a sewage spray field. We did not observe any spraying activity at the time of the site visit.

CURRENT ISSUES

Completion of remediation activities at this site has reduced or eliminated the risk of exposure to site-related contaminants both on-site and through off-site migration in groundwater. A contractor for the PRP has tested private wells in the area and has not found any site-related contaminants in private drinking water (10).

Local residents have not expressed any concerns about the site.

CONCLUSIONS

The conclusions of the 1989 HA were valid at the time it was written. However, remediation of the site has reduced or eliminated the potential risk to human health from exposure to contaminants. The following recommendations of the HA have also been addressed by the remediation activity: warning signs have been posted around the site and a more sensitive test for carcinogenic PAHs was used to determine their concentrations in drinking water wells. The recommendation to fence the wastewater lagoon was not considered necessary since subsequent testing of the lagoon water has shown it to be free of contamination. The recommendation to test for additional creosote-related compounds such as dioxins and furans has not been addressed. Since remediation of the site has been completed, these additional tests these tests are unnecessary.

The potential for future exposure to contaminants from this site is negligible. Should the use of this site change in the future, a reevaluation may be necessary.

RECOMMENDATIONS

Because it appears this site is no longer a public health hazard, we do not recommend a full public health assessment. Since the site is occasionally used as a sewage spray field, we recommend that security of the site be maintained. We also recommend that private wells within one-half mile of the site be periodically monitored to ensure the timely discovery of any contaminants.

Health Activities Recommendation Panel Recommendations:

The data and information developed in this Site Review and Update have been evaluated to determine if follow-up actions may be indicated. No further public health actions are indicated at this time.

DOCUMENTS REVIEWED

Documents reviewed by Florida HRS for this summary are as follows:

1. NUS Corporation. Investigation Report, Brown Wood Preserving, Live Oak, Florida, March 5, 1984.
2. Consent Order. State of Florida v. James Graham Brown Foundation, Inc., April 19, 1984.
3. Fishbeck, Thompson, Carr & Huber, Inc. Report on the Remedial Investigation, Brown Wood Preserving Site, March 1987.
4. Remediation Technologies, Inc. Feasibility Study for the Live Oak Wood Preserving Site, July 1987.
5. Consent Order. U.S. Environmental Protection Agency re: Brown Wood Preserving Site, January 22, 1988.
6. Record of Decision. Brown Wood Preserving Site, Live Oak, Florida, April 8, 1988.
7. Memorandum. Live Oak Status Report, April 18, 1988.
8. EPA. Certification of Remedial Action Construction Completion at the Brown Wood Preserving Site, Live Oak, Suwannee County, Florida, April 7, 1989.
9. ATSDR. Health Assessment for Brown Wood Preserving Site, Suwannee County, Live Oak, Florida, April 24, 1989.
10. Remediation Technologies. Groundwater and Water Well Survey Report, Live Oak Wood Preserving Superfund Site, April 1, 1991.
11. Remediation Technologies, Inc. Supplemental Risk Assessment, Live Oak Superfund Site, Live Oak, Florida, May 1992.

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Figure 1. Map Showing Location of Suwannee County

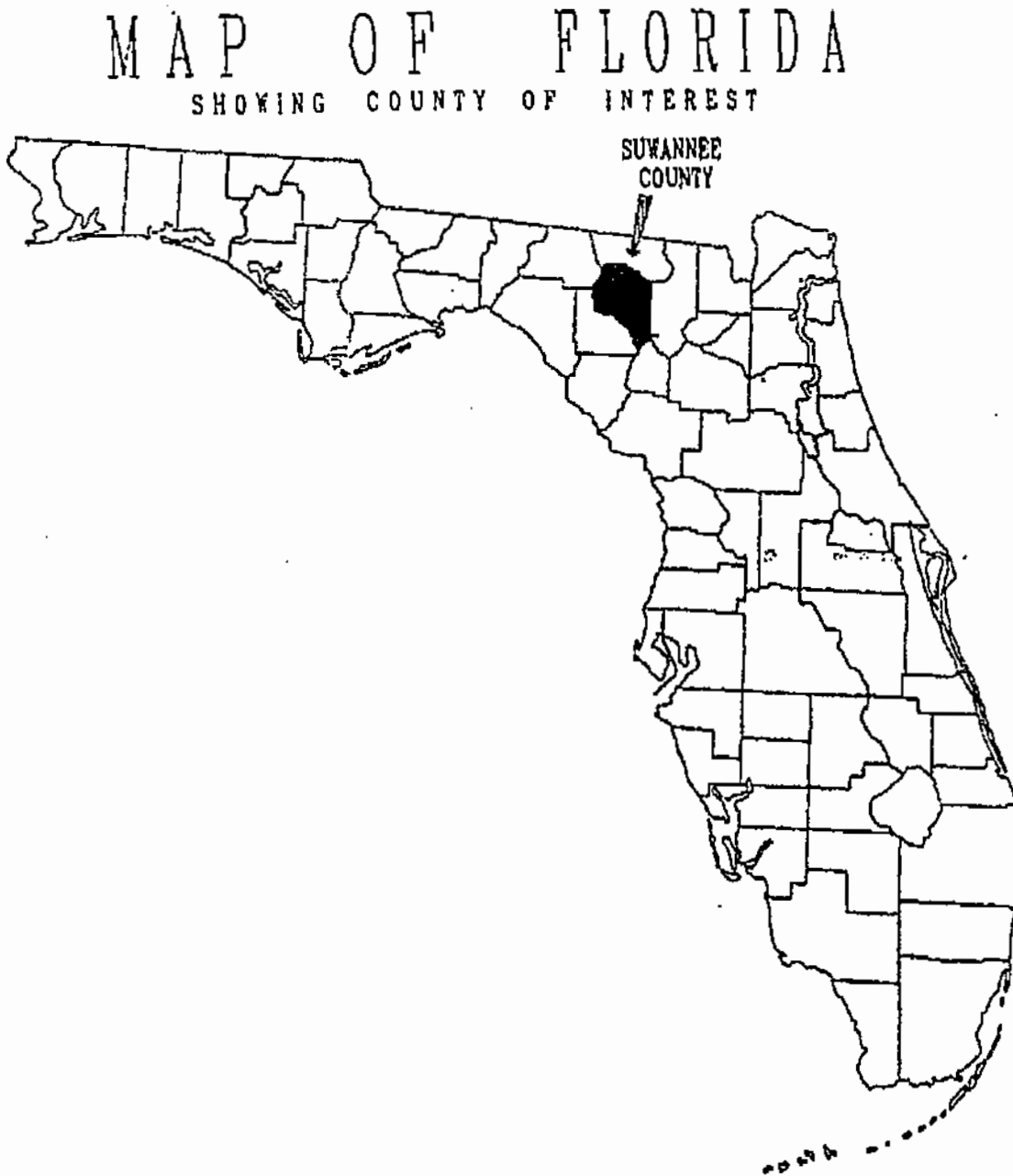


Figure 2. Map Showing Approximate Location of Brown Wood Preserving

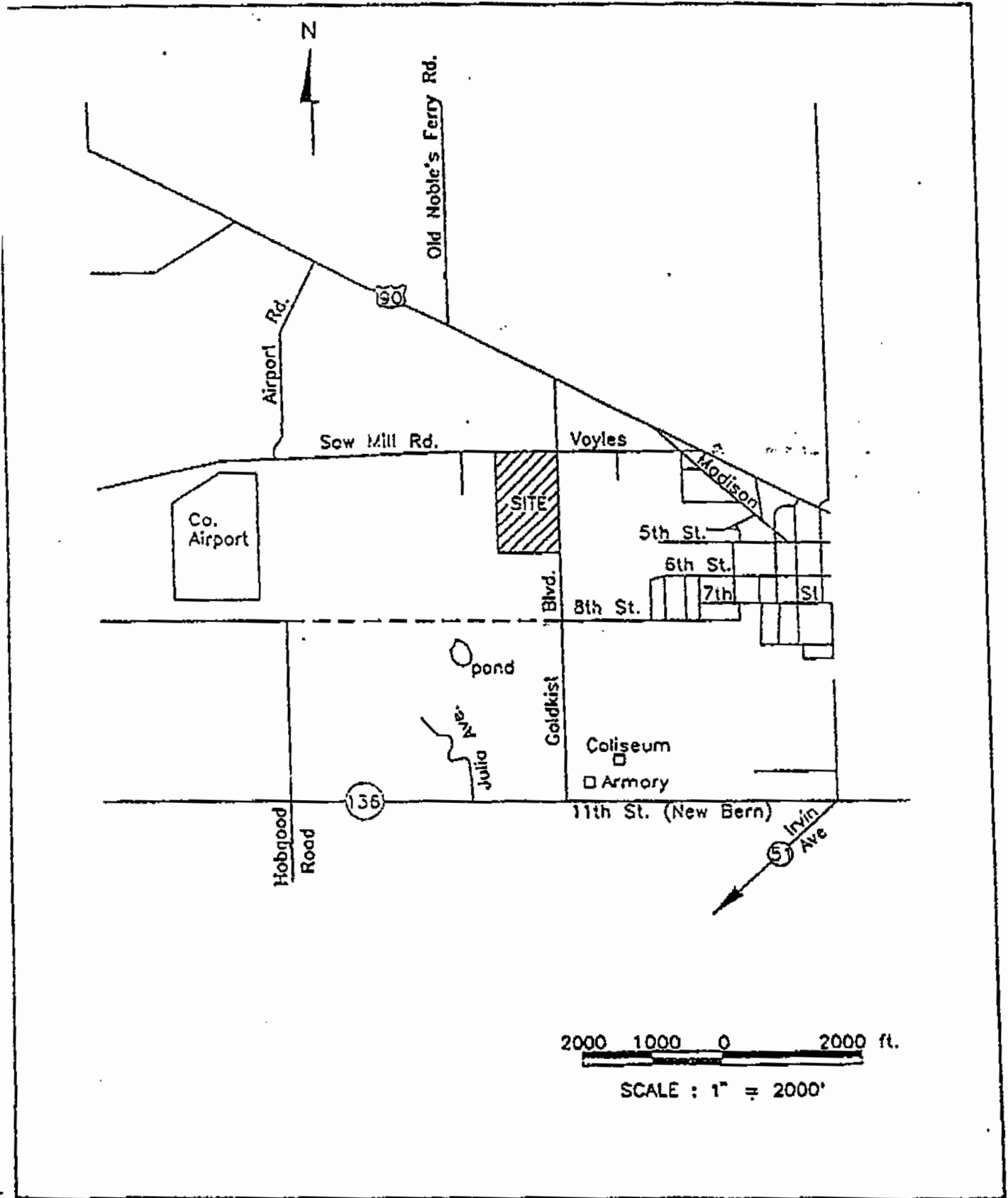


Figure 3. Brown Wood Preserving Site

