Brown Wood Preserving

Goldkist Boulevard & Sawmill Road
Live Oak, Florida
County: Suwannee
District: Northeast
Site Lead: EPA
Placed on National Priorities List: December 20, 1982
Delisted: September 22, 1995
HWC # 006
ERIC ID # 3779

Site Description and History

The Brown Wood Preserving site is located on Goldkist Boulevard, approximately two miles west of the City of Live Oak in Section 22, Township 02S, Range 13E at 30° 18′ 05.1542″ N, 83° 00′ 34.3932″ W. The 55-acre site contained an inactive creosote pole treatment facility with an adjacent five-acre surface impoundment. During the major period of operation from 1948 to 1978, wastewater containing creosote was discharged into an open ditch where it flowed approximately 100 yards to the impoundment. This impoundment occupies a low-lying area and could be underlain by a sinkhole. Two small sinkholes have developed on the site.

Threat

Creosote concentrations as high as 150,000 mg/kg were originally found in soils in the ditch, and concentrations reached 20,000 mg/kg in soils around the work area. Approximately 3,000 cubic yards of creosote-soaked sediments lined the bottom of the impoundment. Soil remediation by land farming was conducted April 1989 to October 1991. Soil contamination levels appear to have met cleanup goals. Groundwater monitoring results show contaminant levels are within acceptable groundwater guidance concentrations with the exception of one monitoring well where elevated levels of naphthalene have been detected. Contamination has not been detected in nearby private drinking water wells.

Response Strategy and Status

In April 1984, the Florida Department of Environmental Regulation (FDER, now DEP) and the EPA signed parallel Consent Orders for an approved site cleanup action with potentially responsible parties (PRPs), the James Graham Brown Foundation, Inc. and AMAX, Inc. The first phase of the Remedial Investigation Feasibility Study (RI/FS) began in June 1984. Initial reports produced during this preparatory phase were discussed with FDER and EPA, and subsequently used to develop tasks necessary to complete the RI/FS. Tasks established in the RI/FS work plan were completed in September 1985.

The Draft RI report was completed in March 1986, and indicated that additional field work was required to better define the site hydrology. Exploratory bore holes and the installation of two additional monitoring wells were completed in September 1986. Groundwater samples,

collected in October 1986, indicated two on-site monitoring wells were contaminated with polynuclear aromatic hydrocarbons. Samples collected in January 1987 verified the contamination. The Risk Assessment and Feasibility Study were completed in August 1987. The FS recommended disposal of contaminated lagoon sludge in a licensed hazardous waste landfill, and land farming of contaminated soil. In December 1987, a public meeting for discussion of the recommended alternative was held in Live Oak.

As an interim measure conducted from December 1987 to March 1988, the Brown Foundation and AMAX removed 15,000 tons of highly contaminated sludge and soil from the lagoon to a hazardous waste landfill in Emelle, Alabama. Lagoon water was treated and spray-irrigated onsite, and the old plant facilities were dismantled and disposed in an EPA approved manner.

EPA signed the Record of Decision (ROD) in April 1988 which called for the remaining contaminated soil to be treated by onsite biodegradation via land farming. After two years of treatment, the total concentration of carcinogenic creosote substances in the soil was required to be reduced to less than 100 mg/kg. In June 1988, design of the biodegradation system was begun along with negotiations between EPA and the PRP's for the Remedial Design/Remedial Action Consent Decree. The design was completed in August 1988. Construction of the land treatment area was begun in October 1988, and completed in January 1989. In April 1989, the construction was certified, and operation and maintenance of the onsite treatment system was begun.

After treatment was initiated, the first quarterly sampling event indicated that cleanup goals had been met at over 75% of the treatment area. Additional soil was applied to these areas in September 1989, and the remaining 25% area met cleanup goals in March 1990. Soil monitoring data collected in October 1990 indicated that the soils have reached cleanup goals and that remedial action has been completed. The close- out report for the soil remedy was issued in December 1991. Groundwater monitoring was conducted at the site for five years following completion of the soil remedy. The monitoring was completed in June 1994. EPA has determined that “No Further Action” is necessary. The site was deleted from the National Priorities List on September 22, 1995.