

Bert Morsch Lumber
2331 Edison Avenue, corner of Woodlawn Avenue and Lewis Street
Jacksonville, Florida
County: Duval
District: Northeast
Site Lead: Waste Cleanup Program
Approved for Cleanup: November 2, 1998
ERIC ID # 3889

Site Description and History

The Bert Morsch Lumber Company (BMLC) site began as a wholesale lumberyard in 1960, and is located at the corner of Woodlawn Avenue and Lewis Street in Jacksonville, Duval County in Township 02S, Range 26E, Section 15 at 30° 19' 25.4450" N, 81° 41' 22.0727" W. In 1976, pressure treating operations were begun at the site using the OSMOSE K33 treatment method. This treatment utilized a combination of copper, chromium, and arsenic (CCA) as a wood preservative. The facility manufactured and distributed pressure treated lumber, timber, marine pilings, and wood fencing. The facility also distributed marine construction materials, dock accessories, and boat accessories. During the period that BMLC was actively pressure-treating wood, four above-ground storage tanks ranging from 3,000 to 6,000 gallons in capacity were used to store CCA chemical solution. Lumber was treated in a 42-foot long, 4-foot diameter, retort treatment cylinder, underlain by a 1-foot thick concrete base and surrounded by a concrete block wall. Wood was treated in the cylinder and then allowed to drip dry. A manually operated gate valve located at the easternmost apex of the containment wall was used to drain the treatment/containment area. Pressure treating operations were discontinued in 1986, and the pressure treating cylinder and aboveground treatment solution storage tanks were removed from the site during a soil removal conducted in 1993.

The facility is currently occupied by a car & truck service and dealership business.

Threat

The treatment and drip-drying process resulted in CCA solution contacting the soil and paved areas in the lumber yard and treatment area. Both CCA contaminated storm water and used CCA chemical solution were disposed of and stored onsite. Copper, chromium, and arsenic contamination of both soil and groundwater at the site and in the nearby vicinity is of concern to the Department.

Response Strategy and Status (December 2020)

In August 1999, Ecology & Environment, Inc. (E&E) was contracted by the DEP to conduct contamination assessment activities at the BMLC site to delineate the horizontal and vertical extent of soil and groundwater contamination. The assessment activities were completed in December 2000, and E&E submitted a Site Assessment Report (SAR) to the DEP. The extent of contamination appeared limited to the western and southern portions of the site. However, elevated concentrations of contaminants in the northern and eastern portions of the site remained

undefined. Further delineation of soil contamination in the northern and eastern portions of the site was completed in November and December 2001.

A Feasibility Study/Remedial Alternative Evaluation (FS/RAE) was submitted by E&E in 2003. In 2004, to further delineate the extent of offsite arsenic-contaminated soil and ascertain background arsenic soil concentrations, E&E collected samples from locations surrounding previous offsite sample locations exhibiting elevated arsenic concentrations. Arsenic was found at concentrations exceeding the residential arsenic soil cleanup target level (SCTL). During this time, the residential exposure SCTL for arsenic was under revision by the Department and further delineation of offsite arsenic surface soil contamination was placed on hold until the arsenic SCTL was revised. In 2005, 2.1 mg/kg was adopted as the residential arsenic SCTL, and, in March 2006, the FS/RAE was approved.

A Remedial Action Plan (RAP) was submitted in late 2006, and approved by DEP in February 2007, for excavation of contaminated onsite soils and ex-situ treatment of contaminated groundwater. A Decision Memo identifying the selected remedial alternatives for onsite contaminated soils and groundwater was signed in August 2007. The selected remedial alternative for contaminated groundwater was resin ion exchange filtration. The selected remedial alternative for onsite-contaminated soils was excavation and offsite disposal. Further delineation and identification of onsite and offsite contaminated soils was conducted in late 2007, and early 2008. Based upon arsenic concentrations in the soil, there were approximately 30,000 cubic yards of onsite, arsenic-contaminated soil to depths of 8 feet BGS that were addressed during site cleanup activities. The highest contaminant concentrations were located along a 500-foot portion of the eastern site boundary adjacent to the CSX Railroad right-of-way. There were also approximately 180 cubic yards of offsite arsenic-contaminated soil downgradient to the northeast of the site that exceed the residential arsenic SCTL and would require excavation. This latter area was incorporated into the Jacksonville Incinerator ash remediation and handled as part of that project. In May 2010, E&E was tasked with collecting groundwater samples from fourteen onsite monitoring wells and collecting soil samples to develop an arsenic leaching number for onsite soils. Based upon the data collected, E&E and DEP developed a site-specific arsenic leaching number. E&E performed additional soil sampling to fully delineate the extent of the excavation area based upon the site-specific arsenic leaching number, and submitted a Source Removal and Construction Management Plan (SR-CMP) in May 2011 for the excavation of onsite-contaminated soils. The SR-CMP was approved by DEP in August 2011. Due to funding limitations, the SR-CMP was not implemented until March 2013. Excavation activities began in late November 2013. The SR-CMP was completed in March 2014. A total of 6,087.60 tons of contaminated soil and debris was excavated and disposed offsite. The excavation was backfilled and capped with approximately 1,139 tons of asphalt at a thickness of 3 inches. The first round of post excavation groundwater monitoring indicated only one monitor well with an arsenic concentration in excess of the primary drinking water standard (PDWS). However, this concentration did not exceed the arsenic Natural Attenuation Default Concentration (NADC).

The real property owner (RPO) has agreed that conditional closure would be acceptable. However, since it appears that the groundwater plume also affects City and CSX Railroad rights-of-way, a risk management option level III (RMO-III) closure would be required, with RCs for the RPO and

both the City of Jacksonville and the CSX Railroad. DEP has contacted both the city and the railroad to discuss this option and negotiations are ongoing.

On February 21 and 22, 2017, E & E performed a relative top of casing elevation survey, multiple rounds of depth-to-water measurements, and a groundwater sampling event at the site. During the February 2017 sampling event, groundwater samples were collected from select monitoring wells as specified in the “Cost Estimate for Groundwater Sampling at the Bert Morsch Lumber Company, Jacksonville, Duval County, Florida” dated February 10, 2017. Based upon this data, DEP is exploring the feasibility of conditional closure for this site.

On February 13th, 2018, the City of Jacksonville, gave permission to the State of Florida, Department of Environmental Protection and its Contractor, subcontractors, and vendors, to enter the contaminated site with the Permission to Enter Property – Non-Source document.

During the February 2018 sampling event, E & E collected three groundwater samples from three monitoring wells; which were subjected for laboratory analysis. Soil Sampling and Groundwater Monitoring Report for Bert Morsch was submitted on March 9, 2018.

FDEP reviewed the Soil Sampling and Groundwater Monitoring Report and sent a “Request for Change Order for Additional Soil Samplings” on April 11, 2018.

On February 23 and April 18, 2018, Ecology & Environment (E&E) collected soil samples adjacent to the Bert Morsch Lumber Company property to assess arsenic contamination. A total of forty-two (42) soil samples were collected from seven soil borings located on the Bert Morsch Lumber company property. The soil samples were analyzed for arsenic via Method SW-846 6010 in a fixed laboratory. Arsenic was detected in thirty-one (31) samples. Twenty-one (21) samples had arsenic concentrations exceeding the Commercial/Industrial Soil Cleanup Target Level. Six of the seven boreholes produced soil samples with arsenic concentrations exceeding the Commercial/Industrial Soil Cleanup Target Level in the interval surface – 2 feet BLS.

On September 13, 2018, FDEP and E&E had a teleconference meeting to discuss preparations for the pre-source removal plan. The soil borings completed in March and May of 2018 detected Soil Cleanup Target Level (SCTL) exceedances for Arsenic, which facilitated the removal action.

During the November 2018 sampling event, E & E completed eight additional soil borings (SB09 through SB16) and resampled SB06 at the 8-10’ interval as well as SB08 at the 2-4’ interval along Lewis Street. The borings were completed in between previous borings for the purpose of Arsenic delineation. Soil sampling analytical results are shown on Figures 2 and 3. Soil samples were collected from six depth intervals (0 – 6 inches, 6 inches – 2 feet, 2 – 4 feet, 4 – 6 feet, 6 – 8 feet, and 8 – 10 feet) in each of the four soil borings. Soil samples were collected using 10-foot hand augers. The 46 soil samples, plus one sampling equipment rinsate blanks, were submitted to Advanced Environmental Laboratories (AEL) Jacksonville, Florida, for laboratory analysis. The soil samples were analyzed for total arsenic using United States Environmental Protection Agency (USEPA) Method 6010. Three soil samples [SB09(4-6), SB09(8-10), and SB-12(4-6)] were also run for SPLP analysis.

On March 20, 2019, E&E submitted an Interim Source Removal Plan. The total areal extent of the arsenic soil contamination is approximately 2,675 square feet (ft²). The depth of the proposed excavation ranges from 1.5 to 2.0 feet BLS. It should be noted that the depth of the excavation is likely to vary considering the need to avoid the FO line. Currently, the design is based upon a FO line being installed to a depth of 2.5 feet BLS. The estimated volume of impacted soil to be removed is approximately 6,600 cubic feet (ft³) or 250 cubic yards (yds³). The Source Removal includes a chain-linked security fence which runs along most of the excavation area, and tree removals located within the excavation areas.

On September 23, 2019, Golder Associates submitted a Proposed Path Forward Report. Golder recommended that they develop an Interim Source Removal (ISR) Work Plan. The ISR Work Plan would outline how Golder would excavate and replace with clean backfill the top two feet of soil that had been affected by arsenic. The ISR Work Plan would also include Golder's plan to conduct groundwater sampling to ascertain whether arsenic contamination is still on site. FDEP approved the Proposed Path Forward Report on December 6, 2019.

On March 12, 2020, Golder Associates submitted an ISR Work Plan. The ISR Work Plan detailed how Golder planned to excavate the top two feet of arsenic-impacted soil in the City of Jacksonville right of way along Lewis Street and replace that soil with clean backfill. FDEP approved the ISR Work Plan on April 28, 2020.

On March 16, 2020, Golder collected five groundwater samples to be analyzed for arsenic. On April 28, 2020, Golder submitted an Annual Groundwater Monitoring Report. Arsenic was found to be above the NADC of 100 µg/L at monitoring well WQ-1R. Golder recommended continuing annual groundwater monitoring for arsenic. FDEP approved the Annual Groundwater Monitoring Report on May 11, 2020.

From May 29, 2020, to June 17, 2020, Golder excavated the top two feet of arsenic-impacted soil in the City of Jacksonville right of way along Lewis Street and replaced that soil with clean backfill. On July 24, 2020, Golder submitted the ISR Report. Golder recommended continuing annual groundwater monitoring for arsenic. FDEP approved the ISR Report on September 23, 2020.

Schedule

Currently, Golder is scheduled to conduct annual groundwater monitoring in March 2021.