



Long-Term Stewardship Assessment Report

Hoover Treated Wood Products, Inc.

EPA ID #: VAD988190021

Milford, Virginia 22514

Assessment Date: September 21, 2022

Introduction: Long-term stewardship (LTS) refers to the activities necessary to ensure that engineering controls (ECs) are maintained and that institutional controls (ICs) continue to be enforced. The purpose of the EPA Region 3 LTS program is to periodically assess the efficacy of the implemented remedies (i.e., ECs and ICs) and to update the community on the status of the RCRA Corrective Action facilities. The assessment is conducted in twofold, which consists of a record review and a field inspection, to ensure that the remedies are implemented and maintained in accordance with the final decision.

Facility Background: Hoover Treated Wood Products, Inc. (Hoover) operates a wood preserving facility located at 18315 House Road in Milford, Caroline County, Virginia at approximate latitude 38° 00' 32" North and longitude 77° 21' 59" West. Hoover owns approximately 53.48 acres of land at this site. Approximately 65% of the property is developed. The Hoover site is generally considered the developed portion of the property only. The site is bounded on the south by a swamp with oxbow lake features, on the north by a low lying marshy intermittent drainage way and American Stone Mix Inc., to the northwest by Jones Chemical Inc., to the east by undeveloped woodland, to the south by woodland and swamp followed by farmland and a residence, and to the west by Keller Ladders, Inc.

Wood is preserved at the Hoover facility by pressure treatment with a Chromated Copper Arsenate solution (CCA) and other wood preserving solutions, as well as interior and exterior fire retardants. Alkaline Copper Quat (ACQ) is also used as a wood preserving chemical at the facility. ACQ is a wood preservative that has been developed in recent years as an alternative to CCA. The fungicides and insecticides in ACQ consist of copper oxide (approximately 67%) and a quaternary ammonium compound (approximately 33%). Interior and exterior fire retardants used at the facility include Pyro-Guard® and Exterior Fire-X®. Pyro-Guard is pressure-impregnated, interior fire-retardant treated lumber and plywood for enclosed structural applications that is generally composed of boron, nitrogen, phosphorus, and sodium compounds. Exterior Fire-X is pressure-impregnated fire-retardant lumber and plywood that provides tested fire protection for applications directly exposed to the weather or high humidity, outdoors as well as indoors. Exterior Fire-X is generally composed of polymerized resin of nitrogen-phosphorus complex.

Current Site Status: In July 2016, the facility's Hazardous Waste Management Permit (Permit) was modified to incorporate a final remedy detailed in a Statement of Basis (SB) developed by the Virginia Department of Environmental Quality (DEQ), dated May 13, 2016, which consists of the following components: 1) continue the groundwater monitoring program and operation of existing groundwater extraction system, 2) continue to comply with the Facility's Corrective Measures Implementation Workplan, dated December 8, 2014, and 3) maintain compliance with institutional controls (ICs) in the form of land use restrictions. The modified Permit became effective on July 8, 2016 and represents Remedy Selection and Remedy Construction Complete determinations in accordance with the Corrective Action process.

Long-term Stewardship Site Visit: On September 21, 2022, EPA conducted a long-term stewardship site visit with Hoover Treated Wood Products, Inc. to discuss and assess the status of the implemented remedies at the Facility.

The attendees were:

Name	Organization	Email Address
Christine Kimak	EPA Region 3	kimak.christine@epa.gov
Stephanie Houston	Virginia Department of Environmental Quality	Stephanie.houston@deq.virginia.gov
Mike Rastatter	Hoover Treated Wood Products, Inc.	
Gene Henson	Hoover Treated Wood Products, Inc.	
David Kerschner	KU Resources, Inc.	dkershner@kuresources.com

Institutional Controls (ICs) Status: The Facility must comply with the ICs which will be imposed by the Facility's Hazardous Waste Management Permit for Site Wide Corrective Action. The following ICs apply to the Hoover Facility, shown on Figure 1:

Groundwater Use Restriction: Groundwater beneath the property shall not be used for any purposes except for environmental monitoring and testing, or for non-contact industrial use as may be approved by EPA subject to the considerations in the Corrective Measures Study until cleanup goals for groundwater have been met. Any new groundwater wells installed on the property must be approved by EPA. Groundwater on site is not used for potable purposes.

Residential Land Use Restriction: The Facility property shall not be used for residential purposes or for children's (under the age of 16) daycare facilities, schools, or playground purposes. The site is currently being used as a wood preserving facility.

Engineering Controls (ECs) Status:

Groundwater Treatment System: The groundwater extraction system consists of nine recovery wells (RW-1 through RW-9), nine electric submersible pumps, a vertical storage tank, and cycle and overflow controls. Extracted groundwater from each well is routed via buried piping to a 15,840-

gallon vertical water storage tank located within the bermed area east of the wood treatment plant. The water held in the storage tank is introduced into the facility process stream. Along with development water and purge water generated from site assessment and monitoring activities, the water is used to mix wood treating solutions for generation of product at the Facility. Approximately 1,400 gallons of this water are used at the Facility each day. The latest data suggest that there was hydraulic control of the groundwater, and it appears that the system is effectively removing arsenic from groundwater at the Facility via the recovery wells.

Per the Permit and SB, remedial efforts utilizing groundwater extraction to reduce concentrations of arsenic in groundwater and to provide containment of the dissolved arsenic groundwater plume will continue. Active remediation will continue until the remedial cleanup goals for arsenic have been met or until it has been demonstrated that the remedy is no longer effective.

Monitored Natural Attenuation Groundwater Monitoring: The groundwater monitoring program outlined in the Facility's approved CMI Plan will continue to provide adequate hydraulic control of arsenic in groundwater and ongoing reductions in arsenic concentrations within the plume, and to monitor attenuation and/or dissipation of arsenic.

Financial Assurance: The Facility is providing financial assurance for continued groundwater monitoring and investigation activities required by the Facility's Permit. Updated cost estimates for DEQ's final decision were required by the Permit and were the basis for financial responsibility for the implementation and operation and maintenance of the final remedy.

Reporting Requirements/Compliance: Hoover submits annual groundwater monitoring reports, which includes the Operation and Maintenance requirements associated with the groundwater extraction system. The latest Annual Groundwater Monitoring Report was submitted on April 27, 2022. The Facility is in compliance with activity and use limitations set forth in the Permit. No transfer of Facility property, change in use of the property, or work that will affect contamination at the property has been reported.

Mapping: The EPA website map displays the approximate 64-acre Facility boundary. A downloadable geospatial PDF map is available on EPA's corrective action facility webpage under the "Reports, Documents and Photographs" section, found [here](#).

Follow-Up Activities: No follow-up activities required.

Conclusions and Recommendations: No institutional or engineering control deficiencies were identified. EPA has determined that the remedy institutional and engineering controls have been fully implemented. The remedy remains effective in being protective of human health and the environment.

Attachments:

Figure 1: Aerial Map of Hoover Treated Wood Products Facility

Picture 1: Area A

Picture 2: MW-3

Picture 3: Storage Tank Control Panel

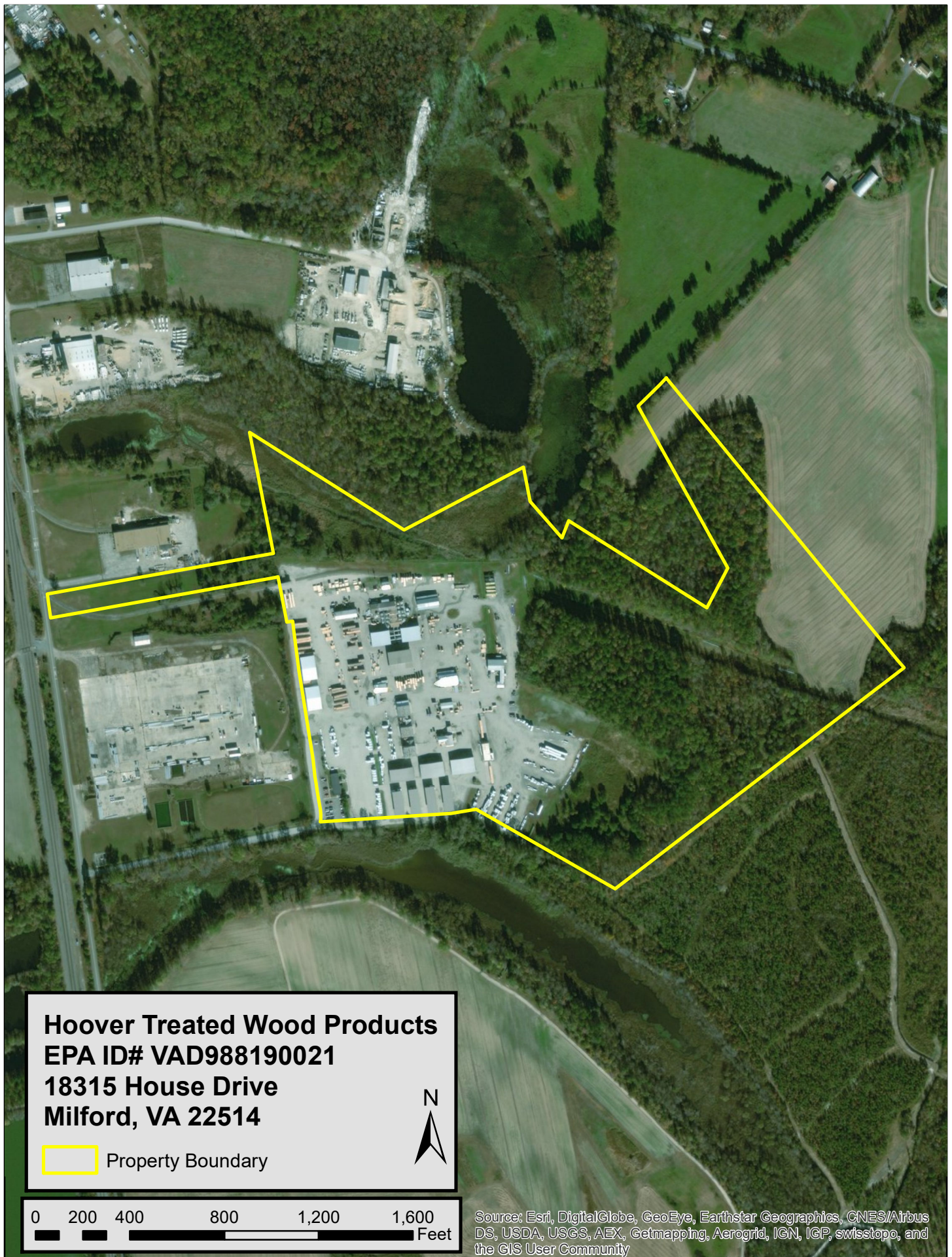
Picture 4: Storage Tank

Picture 5: RW-7

Picture 6: RW-2

Attachment 1: Remedy Review and Assessment Questionnaire

Figure 1: Aerial Map of Hoover Treated Wood Products Facility



Picture 1: Area A



Picture 2: MW-3



Picture 3: Storage Tank Control Panel



Picture 4: Storage Tank



Picture 5: RW-7



Picture 6: RW-2



Attachment 1

<u>Remedy Review and Assessment Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Have the ICs specified in the remedy been fully implemented? Implementation mechanism in place?	X		
• Are there plans to develop or sell the property?		X	
• Have all reporting requirements been met?	X		
• Is groundwater onsite used for potable purposes?		X	
• Is the Facility connected to a public water supply?		X	
• Have any new wells been installed at the facility?		X	
• Has (active remediation system) been maintained as necessary?	X		
• Have there been recent construction or earth-moving activities or plans for such?		X	
• Is the security fence intact?	X		There is a fence that surrounds the property, but as per the Plant Manager it cannot be considered a security fence.