



Hazardous Sites Cleanup Program – Southwest Region
Tub Mill Farms and Clearview Farms
Elk Lick Township, Somerset County
LRP 5-56-916-19954

STATEMENT OF DECISION

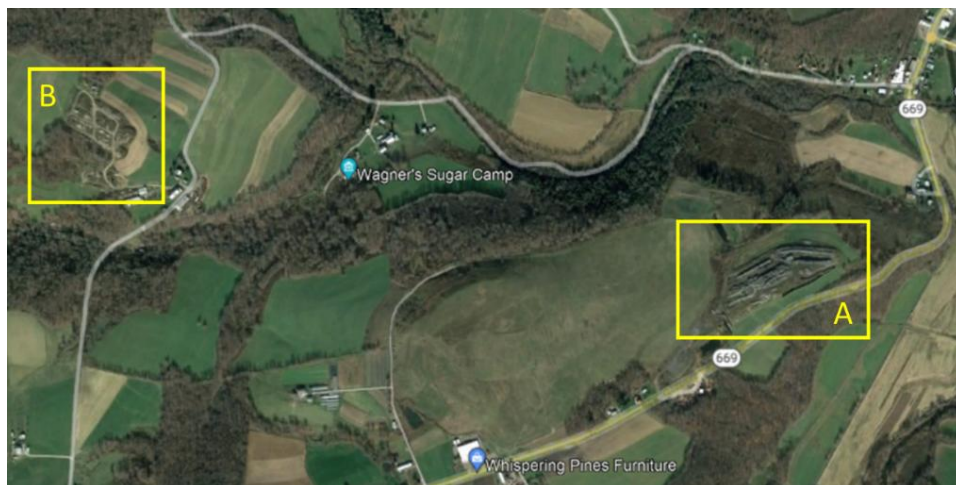
The Commonwealth of Pennsylvania, Department of Environmental Protection (DEP) files this statement of the basis and purpose of its decision in accordance with Section 506(e) of the Pennsylvania Hazardous Sites Cleanup Act (HSCA), Act of October 18, 1988, P.L. 756 No. 108, 35 P.S. Section 6020.506(e).

The DEP will complete an Interim Response at the Tub Mill and Clearview Farms (Site) to remove and properly dispose of potentially hazardous materials comprised of, but not limited to, telephone poles, railroad ties, and soil impacted by hazardous contamination.

I. SITE INFORMATION

A. Site Location and Description

Tub Mill Farms and Clearview Farms, herein identified as the ‘Site,’ is located in Elk Lick Township, Somerset County, Pennsylvania. The Site is split between two tax parcels. The first parcel, Tub Mills Farms, is Tax Parcel ID #S14-012-009-00, herein identified as ‘Parcel A,’ located off of Spring Road (State Route 669), and is 122 acres, with approximately 11 acres containing potentially hazardous material. The second parcel, Clearview Farms, is Tax Parcel ID #S14-007-046-00, herein identified as ‘Parcel B,’ located off of Oak Dale Road and is 390 acres, with approximately 10 acres containing potentially hazardous material.



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The Site is located 1-2 miles west of West Salisbury, Pennsylvania. Parcel A is situated less than 0.5 miles south of the Tub Mill Run and northwest of the Casselman River. Parcel B is situated less than 0.5 miles south of the Tub Mill Run River and north of an unnamed tributary of Tub Mill Run River. Within Parcel A, there are 2 mine drainage basins adjacent to the waste pile. The Old Tub Mill Mine is located on Parcel A. Coal was mined from the Elk Lick, Barton, Harlem, and Lower Bakerstown coal seams. The mine appears to have ceased operations around 2010, based on historical images.

B. Site History

Several investigations have been performed by DEP's Waste Management Program. Inspections conducted between 1995 to 2016 revealed continued violations of Pennsylvania's Solid Waste Management Act and Clean Streams Law. The inspections noted that the Site was processing, transferring, and disposing of materials, primarily utility poles and railroad ties, without a valid permit. The DEP issued an Administrative Order (AO) on August 13, 2002, to address the violations. The AO required Tub Mill Farms to cease waste acceptance and properly manage the waste onsite. Subsequent inspections by the DEP identified that the site was in violation of the AO with the acceptance of new utility poles transported to the Site. A Consent Order and Agreement (CO&A) was signed on October 27, 2014, to address the removal of all utility poles and railroad ties within 6 years. In October 2016, DEP's Bureau of Investigation (BOI) took samples of the utility poles, railroad ties, and soil on the site which identified hazardous chemicals, as specified in 40 CFR, have leached into the soil. Multiple visits to the Site in 2022 confirmed that the utility poles and railroad ties were on site in violation of the CO&A. The terms of the CO&A were not met by the responsible party, and the utility poles and railroad ties remain in place today. It was determined that the responsible party does not have the financial means to conduct the remediation at the Site, and therefore, the case was referred to DEP's HSCA Program to address the waste and potential contamination at the Site. The DEP signed a Response Justification Document (RJD) on May 23, 2023, officially documenting the HSCA response action is appropriate for the Site.

C. Threat of Release of Hazardous Substances

Utility poles and railroad ties are not considered hazardous waste, but wood preservatives used for manufacturing them contain hazardous materials that have the potential to leach from the poles and ties over time. There are three main types of heavy-duty wood preservatives used for treating wood of utility poles and railroad ties: chromated arsenicals, creosote, and pentachlorophenol.

Chromated arsenicals (CCA) are a pesticide which includes preservatives containing chromium, copper, and arsenic. CCAs pose cancer and non-cancer health risks of concern to workers in wood treatment facilities. CCAs pose risks to aquatic invertebrates and plants. The U.S. EPA warns against reusing CCA treated wood and does not recommend burning any CCA treated wood to avoid inhalation of toxic chemicals. Arsenic has high acute toxicity via oral, dermal, and inhalation pathways. Inorganic arsenic is known to be carcinogenic in humans by the oral and inhalation routes of exposure. Chromium VI has high acute toxicity via the oral, dermal, and inhalation route. Significant acute toxicity from chromium VI can cause death after ingestion. Chromium VI is a significant eye and skin irritant and can be a

carcinogenic when inhaled. Under certain circumstances, copper, arsenic, and/or chromium can leach from treated wood into the surrounding soil or water.

Creosote is used as a wood preservative made from the distillation of coal tar. Creosote poses cancer and non-cancer health risks of concern to workers in wood treatment facilities who apply the pesticide, but not for those who handle the wood after treatment. Creosote may pose risks to fish and invertebrates when creosote-treated wood is used in aquatic and railroad structures. The U.S. EPA warns against burning creosote treated wood to avoid inhalation of toxic chemicals. Creosote has a moderate acute toxicity and moderate eye irritant. Creosote has been shown to exert positive mutagenic effects in vitro and is a B1 carcinogen. Creosote has a variable chemical composition, with over 100 different chemicals, and is applied with different viscosity levels, depending on use for railroad ties or utility poles. Creosote contains Polycyclic Aromatic Hydrocarbon (PAHs), most of which are non-soluble in water. Two PHAs, Benzo(a)pyrene and benzo(k)fluoranthene, show resistance to biodegradation. One study showed that due to the rapid depletion of oxygen under aerobic conditions, anaerobic biodegradation of PAHs can take place due to denitrifying, sulfate-reducing, and methanogenic bacteria.

Pentachlorophenol (PCP) is used as a wood preservative and pesticide. PCP poses cancer and non-cancer health risks of concern to workers in wood treatment facilities. Exposure (and therefore risk) to individuals living near PCP-treated utility poles is expected to be minimal. PCP is highly toxic to aquatic, non-target organisms and honeybees, and slightly toxic to avian species, but has expected limited exposure. The U.S. EPA warns against burning PCP and creosote treated wood to avoid inhalation of toxic chemicals. The Risk Assessment & Science Support Branch/Antimicrobials Division Science Chapter for the Reregistration Eligibility Decision Document (RED) for Pentachlorophenol (1999) stated that the average leach rate varies between $1.76\text{E-}4$ and $6.33\text{E-}3$ mg pentachlorophenol/kg leachate/in² surface area/day. PCP tends to attach to organic sediment, binding more strongly in acidic soils while more mobile in neutral to basic soils. PCP can be transported to surface water and become a drinking water hazard. PCP is acutely toxic to moderately toxic to birds, moderately toxic to small mammals, and highly toxic to aquatic life with known bioaccumulation.

In 2008, the U.S. EPA risk assessment for registered pesticides of chromated arsenicals, creosote, and pentachlorophenol had human health risks associated with their use, but it was determined by EPA that these pesticides could remain in use provided certain mitigation efforts were taken. In 2019, a draft risk assessment identified chromated arsenicals and creosote pose an environmental risk. In 2022, the U.S. EPA issued a final registration review decision requiring the elimination of pentachlorophenol's use, due to the risks outweighing its benefits and proposed additional mitigation measures for chromated arsenicals and creosote.

Hazardous substances, such as naphthalene, have been identified within the soil, utility poles, and railroad ties posing potential contamination. Medium-Specific Concentrations (MSC) for arsenic have been identified above DEP's Statewide Health Standards. The current/or potential threats to human health or welfare is the direct contact of the contamination to persons entering the area where the material is being stored or from the inhalation of hazardous chemicals if the piles are burned. The current/or potential threat that could adversely affect the environment is contamination of the soil,

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groundwater, and surface water from the material leachate. The Site had a fire in November 2010, during which 4-acres of land, railroad ties, junk, and debris burned, releasing hazardous chemicals into the air.

II. RESPONSE CATEGORY

DEP proposes an interim response at the Site to protect public health and the environment. DEP's response action is based upon the release of hazardous substances found at the Site. DEP has the authority to conduct an interim response action as defined in Section 103 of HSCA, 35 P.S. § 6020.103, to alleviate the threat to public health and safety, caused by the leaching of and direct contact of hazardous material from the railroad ties and utility poles. The proposed response is anticipated to cost less than 2 million dollars and take less than one year to implement.

III. CLEANUP STANDARDS

This response is not a final remedial response pursuant to Section 504 of HSCA, and therefore, is not required to meet the cleanup standards which apply to final remedial responses. Additional response action may be required to achieve a complete and final cleanup for the site.

IV. APPLICABLE, OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs)

The following standards, requirements, criteria, or limitations are legally applicable, or relevant and appropriate under the circumstances presented by the site.

Applicable requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law, that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a Commonwealth Site. The "applicability" determination is a legal one and implies that the remedial action or the circumstances at the site satisfy all the jurisdictional prerequisites of a requirement.

Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a state site, address problems or situations sufficiently similar to those encountered and that their use is well suited to the particular site.

The determination of relevant and appropriate relies on professional judgment. A requirement can be judged by comparing several factors, including the characteristics of the remedial action, the hazardous substances in question, or the physical circumstances of the site, with those addressed in the requirement. It is also helpful to look at the objective and origin of the requirement.

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A requirement that is determined to be relevant and appropriate must be complied with to the same degree as if it were applicable. However, there is more discretion by DEP in this determination. It is possible for only part of a requirement to be considered relevant and appropriate, the rest being dismissed, if judged not to be relevant and appropriate in a given case.

Non-promulgated or non-regulatory documents (health advisories, guidance, proposed regulations), issued by the state or federal government, are not considered ARARs and are referred to as “to be considered” requirements or TBCs. TBCs are evaluated along with ARARs and are considered appropriate in the absence of a specific ARAR or where ARARs are not sufficiently protective in developing cleanup goals. A TBC identified for the action must be complied with to the same degree as if it were applicable.

The following standards, requirements, criteria, or limitations are legally applicable, or relevant and appropriate under the circumstances presented by the site.

- The Hazardous Sites Cleanup Act, Act of October 18, 1988, P.L. 756, No. 108, as amended, 35 P.S. §6020.101, *et seq.*
- The Solid Waste Management Act, Act of July 7, 1980, P.L. 380, No. 97, as amended, 35 P.S. § 6018.101 *et seq.*
 - Hazardous Waste Management Regulations, Article VII, Chapters 260a-270a, including incorporated parts of 40 CFR 260-270.
- The Land Recycling and Environmental Remediation Standards Act, Act of May 19, 1995, P.L. 4, No. 1995-2, 35 P.S. § 6026.101, *et seq.* ("Act 2")
 - Section 303 of Act 2, 35 P.S. § 6026.303 outlines the establishment of Statewide health standards and medium specific concentrations (MSCs) for all mediums, including soil.
 - Regulations promulgated under Act 2, 25 Pa. Code Chapter 250 - Administration of Land Recycling Program.
 - Subchapter C. Statewide Health Standards - Title 25 Chapter 250.301.
 - Subchapter G. Demonstration of Attainment - Title 25 Chapter 250.701 and Post remediation Care Attainment 25 Pa. Code § 250.708.
 - Appendix A - Provides Medium Specific Concentrations of various contaminants.
- The Clean Streams Law, Act of June 22, 1937, P.L. 1987, No. 394, as amended, 35 P.S. §§691.1-691.1001.

V. ANALYSIS OF ALTERNATIVES

Alternative 1. No Action

This alternative consists of taking no action to remove the potentially hazardous material from the Site.

Compliance with ARARs:

This Alternative does not comply with Section 501(a) of HSCA because the potentially hazardous material would remain on the site and the release of hazardous substances would continue to be a threat to human health and the environment.

Cost Effectiveness:

There is no cost associated with this Alternative.

Alternative 2. Removal and Proper Disposal

This alternative consists of removing the potentially hazardous material consisting of, but not limited to, utility poles and railroad ties, and contaminated soils from the Site. After removal of utility poles and railroad ties, underlying impacted soil will be sampled to identify the level and extent of soil contamination. Removal of contaminated soil will be assessed based on MSC values of hazardous material and feasibility of removal.

Compliance with ARARs:

This alternative will comply with the listed ARARs above, addressing the threat of release of hazardous substances and the proper handling and disposal of waste.

Cost Effectiveness:

The estimated cost for this alternative is less than two million dollars.

VI. SELECTED RESPONSE

The proposed selected alternative is Alternative 2: Removal and Proper Disposal because it is the most cost-effective alternative that complies with the ARARs. The telephone poles and railroad ties and associated materials will be removed from the Site and properly disposed. Visibly impacted soils will be assessed for removal and proper disposal. This action will remove the source for potential contamination.

VII. MAJOR CHANGES FROM PROPOSED RESPONSE

There were no major changes to the selected response from the proposed response.

VIII. RESPONSE TO PUBLIC COMMENTS

DEP's response to public comments concerning the selection of this response action is filed in the Administrative Record.

FOR THE COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Diane D. McDaniel
Program Manager
Environmental Cleanup and Brownfields

Date