



# Explanation of Significant Differences

## Town of Pines Superfund Site

<i>Site Name:</i>	<b>Town of Pines Superfund Site</b>
<i>CERCLA ID #:</i>	<b>INN000508071</b>
<i>Site Location:</i>	<b>Town of Pines, Indiana</b>
<i>Support Agency:</i>	<b>Indiana Department of Environmental Management</b>
<i>Lead Agency:</i>	<b>EPA, Region 5</b>

## I. Introduction

This decision document presents an Explanation of Significant Differences (ESD) for the Town of Pines Superfund Site (Site), also known as the Town of Pines Groundwater Plume Site or Pines Groundwater Contamination Site, located in Town of Pines, Indiana. The Record of Decision (ROD) addressed by this ESD was issued on September 30, 2016.

The ESD is issued in accordance with § 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9617, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), § 300.435(c)(2)(i). The Director of the Superfund & Emergency Management Division has been delegated the authority to sign this ESD.

This ESD will become part of the Administrative Record for the Town of Pines Superfund Site, which has been developed in accordance with § 113(k) of CERCLA, 42 U.S.C. § 9613(k) and NCP § 300.825(a)(2).

The Administrative Record is available for review at the Michigan City Public Library located at 100 East Fourth Street in Michigan City, Indiana, the EPA, Region 5 Superfund Records Center at 77 W.

Jackson Boulevard in Chicago, Illinois, or [www.epa.gov/superfund/town-pines-groundwater](http://www.epa.gov/superfund/town-pines-groundwater).

## II. Statement of Purpose

The purpose of this ESD is to document the addition of potential institutional controls (ICs) to allow for more flexibility as part of the soil remedy for the Site and to provide access to the Site to conduct the soil and groundwater remedies, remove hexavalent chromium as a contaminant of concern (COC) for soil, and clarify the scope of the selected soil remedy in the ROD.

EPA prepares an ESD when it is determined by the Agency that changes to the original selected remedy are significant, but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost.

## III. Site History and Contamination

### *Site History*

The Site is located in and around the Town of Pines, Indiana. Contamination at the Site stems from coal ash that was disposed at a landfill (Yard 520) on Site (now closed) and was used as landscaping fill material at an unknown number of properties in and around the town.

Yard 520 was owned by Ddalt, Corp. and operated by Brown, Inc. Materials accepted by Brown for disposal at Yard 520 were primarily coal ash materials generated from the combustion of coal at Northern Indiana Power Service Company's (NIPSCO's) Michigan City Generating Station. In addition, at least one other company, Bulk Transport Corp., was involved in the transport of the coal ash to Yard 520.

EPA and the Indiana Department of Environmental Management (IDEM) found boron and molybdenum above removal action levels (RALs) in private wells near Yard 520 after property owners complained of a bad taste in their water. In 2003, EPA entered into an Administrative Order on Consent (AOC) with the potentially responsible parties (PRPs) that required the PRPs to extend municipal water service to residents potentially impacted by Yard 520. The AOC was modified in 2004, to extend municipal water service to additional properties and to provide bottled water service to properties in the larger investigation area without municipal water service.

In 2004, EPA and the PRPs entered into a second AOC that required the PRPs to conduct a remedial investigation (RI) and feasibility study (FS) using the Superfund Alternative Approach.

EPA issued the RI report for the Site on March 5, 2010, and human health and ecological risk assessments in July 2012. In 2012, groundwater was the only contaminated media of concern. However, in post-RI sampling, EPA found that the coal ash used as landscaping fill resulted in coal ash-derived contaminants in the soil that exceeded EPA's RALs.

EPA issued an Action Memorandum in October 2015, to initiate a time critical removal. The response actions included: (1) sampling properties, subject to landowner consent, within the Town of Pines or the Area of Investigation as defined in the RI; (2) excavating site-related contaminated soil above site-specific clean-up levels to a depth of three feet; (3) replacing excavated soil with clean fill; and, (4) restoring the property. On March 17, 2016, EPA

entered into an Administrative Settlement Agreement and Order on Consent (ASAOC) with NIPSCO to conduct these soil sampling and excavation activities. To date, NIPSCO continues to conduct the soil excavation and sampling activities.

EPA issued the FS report for the site on May 2, 2016, and the proposed plan on May 16, 2016. EPA issued the ROD on September 30, 2016, in which it selected a remedy for groundwater and soil.

#### *Site Contamination*

The contaminants found at the Site include boron, molybdenum, and arsenic in groundwater, and arsenic, thallium and lead in soil. Some or all of the contaminants identified are hazardous substances as defined in § 101(14) of CERCLA, 42, U.S.C. § 9601(14), and 40 C.F.R. § 302.4.

## **IV. Selected Remedy**

A ROD for the entire Site was signed on September 30, 2016.

This document is available in the Superfund Document Management System (SDMS) under Record Number 508886.

The selected groundwater remedy in the ROD included:

- phytoremediation in one area of groundwater contamination;
- long-term groundwater monitoring; and,
- institutional controls prohibiting the use or installation of private drinking water wells on specific properties or within a designated groundwater management area using a restrictive ordinance or environmental covenants or both.

The selected soil remedy in the ROD included:

- access to and soil sampling on individual properties;
- excavation of three feet of coal ash derived contaminated soil;
- installation of a visual barrier as an indicator of contaminated soil left in place below three feet;
- restoration of properties by replacing excavated soil with clean backfill; and
- restrictive covenants to restrict digging or other disturbance of any contaminated soil left in place.

The soil cleanup levels established in the ROD are summarized in Table 1 below:

COC	Clean-up Level
Arsenic	30.1 parts per million (ppm)
Thallium	1.9 ppm
Lead	400 ppm
Hexavalent Chromium	4.3 ppm

The groundwater cleanup levels established in the ROD are summarized in Table 2 below:

COC	Clean-up Level
Boron	4.0 milligrams/liter (mg/l)
Molybdenum	0.10 mg/l
Arsenic	0.010 mg/l

## V. Description of Significant Differences and Basis for the ESD

The remedial action provided in the ROD calls for ICs in the form of restrictive covenants to address contaminated soil post cleanup. A landowner may be unwilling to enter into a restrictive covenant, e.g. if the owner refuses to allow EPA to proceed with its remedy. Accordingly, an explanation of significant differences is needed that involves additional

institutional controls, to the extent permissible under local law, as part of the soil remedy for the Site. Such institutional controls may include deed notices or an ordinance to ensure the remedy is protective.

The remedial action provided in the ROD calls for a restrictive ordinance or environmental covenants or both for the groundwater remedy. To carry out this remedy, as well as the soil remedy, easements are needed to gain access to each property within the Site boundaries to sample, inspect, monitor, carry out the remedial actions, and ensure the short and long-term effectiveness of the remedy.

Before the ROD was issued, EPA found total chromium concentrations in soil samples above the hexavalent chromium risk-based screening levels. However, these samples were not analyzed specifically for hexavalent chromium (a subset of total chromium). EPA included hexavalent chromium as a COC for soil in the ROD with the intention of additional analyses would be conducted to determine if hexavalent chromium should remain a COC for soil. After reviewing the results of hundreds of samples, including soil with and without coal ash contamination and direct samples of coal ash materials, EPA has not identified a single sample with hexavalent chromium above the clean-up level of 4.3 ppm. As a result, EPA is removing hexavalent chromium as a COC for soil for the Site.

As part of this ESD, EPA is clarifying that the selected soil remedy is to be conducted consistent with the technical approach taken for previous and ongoing removals under the March 17, 2016 ASAOC, including, but not limited to, the following:

- Each property shall be restored to pre-remedial conditions to the extent practicable. Such restoration shall include, but not be limited to, repairing damage to structures from excavating the soil.
- Property specific design details, such as the location of a septic system or presence of groundwater less than 3 feet from the surface, may result in contaminated soils with COCs

above cleanup levels left at a depth of less than 3 feet as long as the contamination does not present a risk to human health or the environment. The landowner will be notified of the contamination's location through the installation of a physical barrier, institutional control, and letter. In situations where installation of a barrier is not feasible, the landowner will receive notification of the contamination's location by other means. Such other means may include, but not be limited to, an institutional control and/or letter.

- Removal, excavation, or disturbance of contaminated soils left in place will be managed in accordance with a property specific plan. The landowner will receive information regarding such plan in an institutional control.

## VI. Support Agency Comments

EPA consulted with IDEM and provided it the opportunity to comment on this ESD in accordance with NCP § 300.435(c)(2) and § 300.435(c)(2)(i) and CERCLA § 121(f). IDEM concurred with this ESD in a letter dated January 15, 2020, and email dated February 7, 2020.

## VII. Statutory Determinations

EPA determined that these significant changes comply with the statutory requirements of CERCLA § 121, 42 U.S.C. § 9621, are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, are cost-effective, and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

Since this remedy will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be

conducted no less often than every five years after the initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

## VIII. Public Participation

The public participation requirements set out in the NCP § 300.435(c)(2) have been met by publishing this ESD, making it available to the public on EPA's website at [www.epa.gov/superfund/town-pines-groundwater](http://www.epa.gov/superfund/town-pines-groundwater) and in the Administrative Record, publishing a notice summarizing the ESD in a major local newspaper, and emailing the ESD to a group of citizens and stakeholders whom have informed EPA they are interested in obtaining more information about the Site.

## IX. Authorizing Signature

I have determined the remedy for the Site, as modified by this ESD, is protective of human health and the environment, and will remain so provided the actions presented in this report are implemented as described above.

This ESD documents the significant changes related to the remedy at the Site. U.S. EPA selected these changes with the concurrence of IDEM. I therefore approve this ESD for the Town of Pines Superfund Site.

U.S. Environmental Protection Agency

By:

2/13/2020

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Douglas Ballotti, Director  
Superfund & Emergency Management Division  
Signed by: DOUGLAS BALLOTTI