



## STATEMENT OF BASIS

REGION III  
ID # PAD  
061105441

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### FORMER EPHRATA MANUFACTURING CO.

Ephrata, Pennsylvania  
August, 2013

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**Facility/Unit Type:**                      **Former Foundry**

**Contaminants of Concern:**            **Heavy Metals**

**Media:**                                        **Soil**

**Proposed Remedy:**                      Maintenance of Asphalt Caps and Compliance with Land  
Use Restrictions

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## I. INTRODUCTION

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the facility formerly owned by Ephrata Manufacturing Company and located at 104 West Pine Street, Ephrata, Pennsylvania 17522 (Facility). The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901 *et seq.* EPA is providing a 30-day public comment period on this SB and may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the comment period has ended.

Information on the Corrective Action program as well as a fact sheet and the Government Performance and Results Act Environmental Indicator Determinations for the Facility can be found by navigating <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

The Administrative Record (AR) for the Facility contains all documents on which EPA's proposed remedy is based. See Section VIII for information on how you may review the AR.

## II. FACILITY BACKGROUND

From sometime in 1922 until July 31, 2006, Ephrata Manufacturing Company manufactured iron castings and similar foundry products at the Facility. Prior to 1922, the ownership of the property is unknown. The Facility occupies 3.71 acres. The surrounding area is comprised of mixed residential, commercial, and agricultural use properties. A site location map is attached as Figure 1.

On November 11, 2004, the Ephrata Manufacturing Company mortgaged the Facility to Ephrata National Bank (ENB). Following the end of operations in July 2006, the Facility was acquired by ENB on December 12, 2006. ENB is the current owner.

### III. SUMMARY OF ENVIRONMENTAL HISTORY

In 1989, a Preliminary Assessment Report was prepared by NUS Corporation for EPA in which the following six Solid Waste Management Units (SWMUs) were identified at the Facility:

SWMU	Description
SWMU 1	<ul style="list-style-type: none"><li>• Sludge Collection Room</li><li>• Operated from 1975 until 2006</li><li>• 600-square foot room where fly ash sludge was removed from wastewater</li></ul>
SWMU 2	<ul style="list-style-type: none"><li>• Empty Sludge Tub Storage Area</li><li>• Operated from 1982 until 2006</li><li>• 100-square foot area located outside on a macadam surface southeast of SWMU 1</li></ul>
SWMU 3	<ul style="list-style-type: none"><li>• Sludge Storage Dumpster</li><li>• Operated from 1982 until 2006</li><li>• 20-cubic yard dumpster located directly in contact with the soil approximately 40 feet north of SWMU 1</li></ul>
SWMU 4	<ul style="list-style-type: none"><li>• Foundry Sand and Slag Storage Dumpster</li><li>• Operated from 1988 until 2006</li><li>• Dumpster located directly in contact with the soil approximately 155 feet southwest of SWMU 3</li></ul>
SWMU 5	<ul style="list-style-type: none"><li>• Foundry Sand and Slag Pile</li><li>• Operated from 1922 until 1989</li><li>• Approximately 32,400-square foot area located in the northeast corner of the Facility</li></ul>
SWMU 6	<ul style="list-style-type: none"><li>• Former Sludge Disposal Pit</li><li>• Operated from 1975 until 1982</li><li>• An approximately 16-foot by 13-foot deep pit used for disposal of wastewater and sludge</li><li>• Located south of SWMU 5</li></ul>

In March 2011, ENB elected to remediate the Facility pursuant to the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) Program and submitted a Notice of Intent to Remediate (NIR). The Facility also enrolled in the One Cleanup Program under which Pennsylvania facilities with RCRA corrective action obligations may complete federal corrective action and, concurrently receive a liability release from Pennsylvania Department of the Environment (PADEP) under Act 2.

ENB, through historical report review, identified 10 Areas of Concern (AOCs) in a Combined Remedial Investigation and Cleanup Plan (Revised) approved by PADEP on September 1, 2011. The six SWMUs identified in the Preliminary Assessment Report were included in the AOCs (sometimes multiple SWMUs were combined into a single AOC) as detailed in the table below. The 10 AOCs and Facility groundwater were investigated and sampling results were compared to Act 2 Statewide Health Standards Medium Specific Concentrations (MSCs) for residential and non-residential uses. Lead (Pb) and Arsenic (As) were identified as the only constituents of concern (COCs) at the Facility. Unless otherwise noted, the Statewide Health Standards are equivalent to EPA standards for the identified COCs. In 2013, ENB submitted an Act 2 Final Report and Final Report Addendum (Final Report) describing the completion of remedial efforts and documenting the identified analytical results of the COCs as detailed in the table below. PADEP approved the Final Report on April 16, 2013.

Area of Concern	Description
<p style="text-align: center;">AOC 1 Former Sludge Disposal Pit and Foundry Sand/Slag Pile (SWMUs 5&amp;6)</p>	<ul style="list-style-type: none"> <li>• Seeps sampled during a 1989 Preliminary Assessment Report showed elevated levels of Pb and As in this AOC</li> <li>• Disposal ceased and AOC was closed and capped with two feet of clay under PADEP's oversight between 1989 and 1991</li> <li>• Soil samples collected as part of the Act 2 closure showed levels of Pb (5,250 mg/kg) above the applicable non-residential MSC (450 mg/kg) and As (17.4 mg/kg) above the applicable residential MSC (12 mg/kg).</li> <li>• In 2012, AOC was capped with asphalt as an <b>engineering control</b> to prevent exposure.</li> <li>• On July 10, 2013, an Environmental Covenant was recorded on the deed to the Facility property pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa.C.S. §§ 6501-6517 (UECA) requiring maintenance of the asphalt cap. A copy of the Environmental Covenant is attached as Attachment 1.</li> </ul>
<p style="text-align: center;">AOC 2 Arsenic-Impacted Surface Soils</p>	<ul style="list-style-type: none"> <li>• Soil samples collected as part of the Act 2 closure showed levels of As (22.2 and 24.2 mg/kg) above the residential MSC and levels of As (56.9 mg/kg) above the non-residential MSC.</li> <li>• In 2012, the one small area exceeding the non-residential MSC was capped with asphalt as an <b>engineering control</b> to prevent exposure.</li> <li>• On July 10, 2013, an Environmental Covenant was recorded on the deed to the Facility property pursuant to UECA requiring maintenance of the asphalt cap.</li> </ul>

<p style="text-align: center;">AOC 3 Sludge Collection Room (SWMU 1)</p>	<ul style="list-style-type: none"> <li>• Soil samples collected as part of the Act 2 closure showed levels of As (12.4, 13.7, and 19.3 mg/kg) above the applicable residential MSC above the applicable residential MSC.</li> </ul>
<p style="text-align: center;">AOCs 5&amp;8 Interior Features and Foundry Pits</p>	<ul style="list-style-type: none"> <li>• One soil sample collected as part of the Act 2 closure showed levels of As (25 mg/kg) above the applicable residential MSC.</li> </ul>
<p style="text-align: center;">AOC 7 Sludge and Foundry Sand/Slag Storage Areas (SWMUs 2, 3, &amp; 4)</p>	<ul style="list-style-type: none"> <li>• Soil samples collected as part of the Act 2 closure showed levels of As (12.6 and 19.7 mg/kg) above the applicable residential MSC.</li> </ul>
<p style="text-align: center;">Facility Groundwater</p>	<ul style="list-style-type: none"> <li>• Four Groundwater (GW) monitoring wells were installed in 2010. Details are presented in the Combined Remedial Investigation and Cleanup Plan. Results indicate GW has not been impacted.</li> <li>• EPA is proposing no further action for the Facility GW.</li> </ul>

**IV. CORRECTIVE ACTION OBJECTIVES**

EPA’s Corrective Action Objective for Facility is to contain hazardous constituents that remain in Facility soils and control human and environmental exposure to those hazardous constituents in a non-residential land use scenario.

**V. PROPOSED REMEDY**

EPA’s proposed remedy is to require the maintenance of the asphalt caps over AOCs 1 and 2 and compliance with land use restrictions to minimize the potential for human exposure to hazardous constituents that remain in Facility soils.

EPA has determined that the Environmental Covenant recorded on the title to the Facility property requires the maintenance of the asphalt caps over AOCs 1 and 2 and includes land use restrictions sufficient to minimize the potential for human exposure to

contamination and protect the integrity of the Facility’s caps.

**VI. EVALUATION OF PROPOSED REMEDY**

This section provides a discussion of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance.

Threshold Criteria	Evaluation
<p><b>1) Protect human health and the environment</b></p>	<p>The primary risks posed to human health and the environment at the Facility are related to direct contact with the soil contaminants. The proposed remedy of containment will maintain protection of human health and the environment over time by controlling exposure to the hazardous constituents remaining in soils. AOCs 1 and 2, where As and Pb exceed non-residential standards, have asphalt caps to prevent exposure to those contaminants. Additionally, the other AOCs, where As levels in soils are below non-residential standards but above residential use standards, are restricted to non-residential use under the existing Environmental Covenant. Therefore, EPA has determined that human health and the environment will remain protected in the long term.</p>
<p><b>2) Achieve media cleanup objectives</b></p>	<p>Soils meet Statewide Health Standards except in two areas, AOCs 1 and 2. Remedial efforts include placing an asphalt cap over those two AOCs. EPA's proposed remedy requires the compliance with land use restrictions and the maintenance of the asphalt caps to minimize the potential for exposure. Therefore, EPA's proposed decision meets the media cleanup objectives based on current and reasonably anticipated land use.</p>
<p><b>3) Remediating the Source of Releases</b></p>	<p>At RCRA Corrective Action facilities, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. As described in the Summary of Environmental History section above, the Facility has investigated the areas of potential releases and EPA has determined there are no ongoing releases from sources at the Facility.</p>
Balancing Criteria	Evaluation
<p><b>1) Long-Term Effectiveness</b></p>	<p>EPA's proposed remedy will maintain protection of human health and the environment over time by controlling exposure to any hazardous constituents that remain in the soil. EPA's proposed remedy requires the compliance with and maintenance of a land use restrictions. These restrictions have already been</p>

	implemented through an Environmental Covenant recorded with the deed for Facility property. The Environmental Covenant runs with the land and as such, will be enforceable by EPA and PADEP against future land owners.
<b>2) Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents</b>	Reduction of the mobility of the hazardous constituents that remain in the soil has been achieved through the installation of asphalt caps.
<b>3) Short-Term Effectiveness</b>	EPA's proposed remedy does not involve any activities, such as construction or excavation, that would pose short-term risks to workers, residents, or the environment. In addition, land use restrictions have already been implemented through an Environmental Covenant recorded with the deed.
<b>4) Implementability</b>	EPA's proposed remedy is readily implementable. EPA's proposed remedy incorporates work already completed and the land use restrictions are in place. Therefore, EPA does not anticipate any regulatory constraints in the implementation of its proposed remedy.
<b>5) Cost</b>	Active remediation is complete and the costs to implement the land use restrictions and maintain the existing asphalt caps are minimal.
<b>6) Community Acceptance</b>	EPA will evaluate community acceptance of the proposed remedy during the public comment period, EPA's evaluation will be described in the Final Decision and Response to Comments (FDRTC).
<b>7) State/Support Agency Acceptance</b>	PADEP concurs with EPA's proposed remedy. PADEP will also have the opportunity to comment on this SB during the public comment period. EPA will respond to any comments received in the FDRTC.

## VII. FINANCIAL ASSURANCE

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. Given that EPA's proposed remedy only requires the maintenance of two asphalt caps and the compliance with land use restrictions which are already in place, the cost of this proposed remedy is minimal. Therefore, EPA is proposing that no financial assurance be required.

## VIII. PUBLIC PARTICIPATION

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last 30 calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. Kevin Bilash at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Kevin Bilash at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location[s]:

U.S. EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103

Contact: Mr. Kevin Bilash (3LC30)  
Phone: (215) 814-2796  
Fax: (215) 814 - 3113  
Email: [bilash.kevin@epa.gov](mailto:bilash.kevin@epa.gov)

## IX. INDEX TO ADMINISTRATIVE RECORD

- Preliminary Assessment, NUS, 1989
- Final Environmental Indicator Inspection Report, Michael J. Baker Inc., April 2009
- Phase I Environmental Site Assessment, ePhase Inc., December 8, 2009
- One Cleanup Program Memorandum of Agreement, EPA/PADEP, April 26, 2011
- Combined Remedial Investigation and Cleanup Plan (Revised), Environmental Standards, August 24, 2011
- Final Report, Environmental Standards, January 16, 2013
- Final Report Addendum, Environmental Standards, April 16, 2013

Date: \_\_\_\_\_

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John A. Armstead, Director  
Land and Chemicals Division  
US EPA, Region III

Figure 1 – Facility Location Map  
Attachment – Environmental Covenant