



STATEMENT OF BASIS

REGION III
EPA ID #
PAD
070283023

Imperial Metal and Chemical Company (former) Philadelphia, Pennsylvania August, 2013

Facility/Unit Type:	Hazardous Waste Treatment, Storage, Disposal Facility
Contaminants:	Petroleum in liquid phase (LNAPL – light non-aqueous phase liquid) in sump located in basement of building in east corner of property
Media:	Groundwater
Proposed Remedy:	The implementation of institutional controls (ICs), the Environmental Covenant detailing the activity and use limitations has been prepared and approved pursuant to the Pennsylvania Uniform Environmental Covenants Act

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 Imperial Metal and Chemical Company, which 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

The facility is located at 3400 Aramingo Avenue, Philadelphia, Pennsylvania. The facility was situated on approximately 3.5 acres of land.

Imperial operated as a large quantity generator of hazardous waste under USEPA ID number PAD070283023. The facility manufactured type metal, and zinc and magnesium plates for the graphic arts industry. It later began manufacturing lithographic plates (flat, thin-gauge aluminum sheets with specially prepared surfaces and photosensitive coatings) when the use of type metal was phased out. The facility also reclaimed quantities of tin from type metal dross accepted from its customers.

The Aramingo Avenue facility was operational from at least 1930 until 1986. In 1986, the facility phased out its type metal manufacturing operation and moved its lithographic plates manufacturing operation to 2050 Byberry Road, Philadelphia, Pennsylvania. The Aramingo Avenue facility was closed in 1986. The Byberry Road facility was operated under a separate USEPA ID number. Imperial no longer operates at either location. The former Aramingo Avenue facility was demolished in 1987, and Imperial Plaza Shopping Center (Plaza) now operates at this address.

Areas of Investigation

<p>Soil</p>	<p>A Phase 1 Environmental Site Assessment (ESA) was conducted by contractor GZA Environmental Inc. in 2005 at the property. During the site reconnaissance, petroleum staining was observed on the basement floor of the IHOP, and LNAPL was observed in the basement sumps. GZA initiated Phase 2 intrusive investigation activities in 2005/2006 during which six soil samples (including a duplicate sample collected at SB-2) were collected from the boreholes of the monitoring wells installed onsite. The soil samples were collected from intervals exhibiting elevated photo ionization detector (PID) readings, and/or visible/olfactory evidence of fuel oil impact and were analyzed for Semi volatile Organic Compounds (SVOCs) and diesel range organic (DRO). GZA initially compared the results to the Pennsylvania Department of Environmental Protection (PADEP) non-residential used aquifer soil MSCs, and then later compared them to the residential used aquifer soil MSCs. None of the detected SVOCs were above either the residential or non-residential MSCs. GZA had demonstrated attainment of the residential statewide health standard for soils containing SVOCs, and PADEP granted liability relief to Imperial/Aramingo for SVOCs in soils in January 2011.</p>
<p>Groundwater</p>	<p>Groundwater investigations were completed by facility/owners between 2006 and 2010. Phase 2 subsurface investigation activities at the facility property included:</p> <ul style="list-style-type: none"> *Sampling of apparent petroleum product contained in two sumps in the IHOP basement *Installation of nine well points (corings through the basement floor) to evaluate assess the possible occurrence of free product beneath the IHOP basement floor (Note: the well points were used to measure the thickness of any free product floating on the groundwater beneath the floor – no soil, groundwater, or product samples were collected from the well points) *Collection of soil samples from the boreholes of four groundwater monitoring wells installed along the East Tioga Street portion of the property *Collection of groundwater samples from the monitoring wells and beneath the petroleum product in one of the basement sumps *Groundwater samples collected from the four groundwater monitoring wells and the from beneath the petroleum product in the front sump were analyzed for target compound list (TCL) SVOCs, DRO, total petroleum hydrocarbons (TPH), and iron (sump only), as well as oil and grease, biochemical oxygen demand (BOD), chemical oxygen demand (COD), and total suspended solids (TSS). The results were compared to the PADEP non-residential, TDS less than or equal to 2,500 mg/L, used-aquifer MSCs. For the monitoring well groundwater samples, the following SVOCs, DRO, and TPH concentrations were detected. The concentrations were below the MSCs, with the exception of bis(2-ethylhexyl)phthalate which was detected at above the MSC in sample MW-4. The highest detected concentrations were reported in sample MW-4, which was the closest monitoring well to Tioga Fuel. <p>See complete results of sampling in the Clean-up Plan and Final Report completed August 2010</p>

III. SUMMARY OF ENVIRONMENTAL HISTORY

Area	Description
3.5 Facility Parcel (entire facility)	In 2006, the facility owners constructed a new, three foot thick concrete floor in the IHOP basement. The new floor was situated above the seasonal high groundwater level to eliminate infiltration of potentially impacted groundwater, to remove a potential exposure pathway. As part of the construction activities, the two sumps were disconnected and removed from the basement.

The remediation efforts have been implemented in accordance with the requirements of the PADEP's Land Recycling and Environmental Remediation Standards Act (Act 2).

Environmental Protection Levels (EPLs) and Threshold Limit Values (TLVs) have been established in accordance with EPA risk assessment guidance. EPA has determined that the cleanup levels are protective of human health and the environment for non-residential land use.

IV. CORRECTIVE ACTION OBJECTIVES

EPA's Corrective Action Objectives for the facility are the following:

1. Soils

Imperial Chemical has demonstrated through limited sampling that soil contamination levels at its facility do not pose unacceptable risk to residential occupants. EPA's Corrective Action Objective for facility soils and groundwater is to maintain the impervious pavement by current and future owners through use of a deed covenant.

2. Groundwater

facility drinking water is provided by the City of Philadelphia and no drinking water wells or process water wells are known to exist on the property. EPA's Corrective Action Objective for facility groundwater is to prohibit residential and agricultural uses of the property by current and future owners.

V. PROPOSED REMEDY

Implementation of institutional controls (ICs) to minimize the potential for human exposure to contamination and protect the integrity of the proposed remedy decision.

EPA's preferred instrument to enforce IC's is an Environmental Covenant prepared under Pennsylvania's Uniform Environmental Covenants Act, 27 Pa. C.S. §6501 et seq. (UECA).

Environmental Covenants are required under Pennsylvania Law for remediated facilities that require land use restrictions and are being relied upon by EPA's Corrective Action program.

The facility recorded the Environmental Covenant for its parcel with City of Philadelphia Recorder of Deeds on April 1, 2011.

VI. EVALUATION OF PROPOSED REMEDY

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

Threshold Criteria	Evaluation
1) Protect human health and the environment	Groundwater exposures have been remediated to risk based levels in accordance with PADEP and EPA guidance. Since current and anticipated land use is non-residential, ICs have been implemented at the facility to restrict future property use to ensure that human health and the environment will remain protected. Groundwater use restrictions are controlled by PADEP and the City of Philadelphia with the recording of the environmental covenant.
2) Achieve media cleanup objectives	Media cleanup objectives have been based on protection of human health and the environment. EPA's proposed remedy requires the implementation of ICs to minimize the potential for exposure. Therefore, EPA's proposed decision meets the media cleanup objectives based on current and reasonably anticipated land and water resource use.
3) Remediating the Source of Releases	In all proposed remedy decisions, 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 remediated the sources of releases. Therefore, EPA has determined that this criterion has been met.

VII. FINANCIAL ASSURANCE

EPA has evaluated whether financial assurance for corrective action is necessary to implement the proposed remedy at the former Imperial Metal and Chemical facility. EPA has determined that the final remedy has been implemented at this site, along with a deed covenant being filed with the city. EPA is proposing that financial assurance not be required.

A public meeting will be held upon request. Requests for a public meeting should be made to Grant Dufficy, at the address listed below

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:

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

VIII. PUBLIC PARTICIPATION

Interested persons are invited to comment on EPA's proposed decision. The public comment period will last thirty 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. Grant Dufficy at the address listed below.

Contact: Grant Dufficy (3LC30)
Phone: (215) 814-3455
Fax: (215) 814 - 3113
Email: dufficy.grant@epa.gov

IX. INDEX TO ADMINISTRATIVE RECORD

-Phase 1 ESA – GZA GeoEnvironmental, Inc., 2005

- Phase 2 ESA - GZA GeoEnvironmental, Inc.,
February 1, 2006

- Site Characterization Report and Request for Liability
Relief - GZA GeoEnvironmental, Inc., February 8, 2008

- Site Characterization Report and Request for Liability
Relief - GZA -GeoEnvironmental, Inc. (Revised), June
5, 2008

- PADEP Clean-up Plan and Final Report, September 2,
2010

- Imperial Metal and Chemical Environmental
Covenant, including Activity and Use Plan, Recorded in
the City of Philadelphia on April 1, 2011

Date: _____

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