UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

BASF Corporation
(Formerly Cognis Corporation)

300 Brookside Avenue
Ambler, Pennsylvania

EPA ID NO. PAD 002348324

Prepared by
RCRA Corrective Action Branch 2
Land, Chemicals and Redevelopment Division
August 2019

Table of Contents

List of Acronyms

AR	Administrative Record
COC	Constituent of Concern
EPA	Environmental Protection Agency
FDRTC	Final Decision Response to Comments
GPRA	Government Performance and Results Act
MCL	Maximum Contaminant Level
MSC	Medium Specific Concentration
PADEP	Pennsylvania Department of Environmental Protection
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SB	Statement of Basis
SHS	Statewide Health Standards

Section 1: 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 BASF Corporation (Formerly Cognis Corporation), Facility located in Ambler, Pennsylvania (hereinafter referred to as the Facility or Site). EPA's proposed remedy for the Facility consists of compliance with and maintenance of land-use restrictions, existing engineering controls, and continued monitoring; to be implemented through institutional controls. This SB highlights key information relied upon by EPA in proposing its remedy for the Facility.

The Facility is subject to EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property. The Commonwealth of Pennsylvania (Commonwealth) is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

EPA is providing a thirty (30) day public comment period on this SB. EPA 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 public comment period has ended.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating https://www.epa.gov/hwcorrectiveactionsites/contact-information-corrective-action-hazardous-waste-clean-ups-delaware.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 8, Public Participation, below, for information on how you may review the AR.

Section 2: Facility Background

BASF Corporation's (BASF's) Ambler facility is located at 300 Brookside Avenue, in Ambler, Pennsylvania (Figure 1). The Facility was formerly owned by Cognis Corporations (Cognis), Henkel Corporation, Union Carbide Corporation, the Rorer Group, and several privately-owned companies.

The original 44-acre Site consisted of 26 buildings which housed administrative, research and development, manufacturing operations, and support facilities. Properties surrounding the facility are primarily residential. A commuter railroad line borders the west side of the property.

Section 2: Facility Background (continued)

The site manufactured metal treatment products between 1923 and 2003. Herbicides and pesticides were manufactured between 1938 and 1980.

Specialty laboratory work and general business and site-support service were conducted between 2003 and 2010, when BASF purchased the property from Cognis Corporation. Operations at the Site ceased in 2012. Currently the property is being redeveloped and is known as Ambler Yards. Several of the buildings have been leased to tenants for commercial operations.

Originally, this site encompassed 44-acres, however during the investigation stage of redevelopment, the Site was generally sectioned into areas and parcels. These areas and parcels are discussed separately throughout this SB: Building 14 Area and Building 23 Area housed manufacturing operations and were investigated individually; the Residential Parcel of the property is an approximate 1.5-acre parcel that encompasses administrative (formerly residential) buildings in a southeast corner of the Site; the 18-acre Ballfields were transferred to Lower Gwynedd Township and the Borough or Ambler in 2002; the Sitewide Soils which includes the remainder of the 44 acres; and the groundwater which was evaluated at each of the areas and parcels as well as site-wide.

Section 3: Summary of Environmental Investigations

3.1 Environmental Investigations and Remediation

BASF, Cognis and previous owners directed several environmental investigations and/or remedial activities at the Facility between 1980 and present. Several of these actions were performed under oversight by Pennsylvania's Land Recycling Program (Act 2) and/or EPA. The data gathered during these investigations were compared to PADEP's residential, non-residential, site-specific, and used-aquifer Statewide Health Standards (SHS), which are comparable to EPA's Regional Screening Levels in addition to site specific standards derived from risk assessments at specific areas.

The environmental investigations at the site have focused on soils, groundwater and potential for vapor intrusion. Sitewide investigations are described below. Due to specific concerns with Buildings 14 and 23, the Residential Parcel, and the Ballfields, investigations and remedial actions taken at each are described separately. Table 1 summarizes the investigations, remediation reports and applicable institutional and engineering controls at each area.

Sitewide Soils

A number of soil investigations and remedial activities have taken place on the site. Investigations in 2003/2004 focused on the most likely industrial-impacted areas of the site. The

2006 investigation was a more comprehensive evaluation of the entire site. In total, the 2003/2004 and 2006 investigations included 286 samples collected from 167 locations and

included analysis for metals, Volatile Organic Compounds, (VOCs), semi volatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), cyanide and dioxin. Thirty-one (31) samples identified compounds at levels above the applicable non-residential Statewide Health Standards (SHS) under Act 2. These 31 detections for ethylbenzene, xylenes and arsenic, were found at 13 sampling points, generally near Former Tank 2.

Excavations at the areas that exceeded cleanup levels removed 265 cu yd of contaminated soils. Post-excavation confirmation sampling confirmed cleanup levels were met for ethylbenzene, xylenes and arsenic.

In sitewide soil investigations, ethylbenzene and xylene were the only constituents found to have the potential for volatilization to air. Ethylbenzene and xylene levels slightly exceed the criteria for potential volatilization at two isolated areas which are more than 100 ft from buildings and were detected more than 5 ft below ground surface. Soil does not pose a vapor intrusion risk to buildings.

The 2008 sitewide soils investigation and Final Report received PADEP Act 2 approval on June 18, 2015.

Use Restrictions - Current

An environmental covenant was recorded in Montgomery County July 11, 2011 and was updated July 21, 2016. This covenant requires BASF or any future owner of the property to restrict land and groundwater use activities to those compatible with non-residential, land-use categories. All institutional controls applicable to the Sitewide Soils are now contained in the July 21, 2016 Environmental Covenant.

Building 14 Area

As a special project, BASF directed several investigation and remediation tasks associated with soil around Building 14 and railroad (RR) siding that formerly existed along the southwestern side of Building 14. The majority of the actions related to the RR siding occurred between 1983 and 1994, and involved dioxin (2,3,7,8-TCDD) and arsenic in soil.

Approximately 380 cu yd of dioxin-contaminated soil where excavated from the RR siding area under a 1986 Administrative Consent Order (ACO) issued by EPA. The excavation ranged between 1 and 3-feet deep over an area of approximately 5,500 sq ft. Dioxin cleanup tasks were successfully performed to meet an EPA mandated cleanup criteria of 0.246 mg/kg. Arsenic cleanup tasks were successfully performed to meet an EPA and PADEP-approved, risk-based screening level of 3,066 mg/kg. EPA approved the clean-up by letter on January 22, 1999.

2,4,6-trichlorophenol, 2,4-dicholorphenol (2,4-DCP), 2,4-dichlorophenoxy acetic acid, 2,4,5-trichlorophenoxy acetic acid, naphthalene, dioxin and arsenic were found at to exist at

levels above the SHS in the Building 14 Area. EPA/PADEP agreed that attainment of SHS was not feasible and required additional efforts to remediate the Area through engineering controls and risk assessment evaluation.

Remedial action consisted of the installation of 4-inch thick asphalt cap on top of 1-ft deep fill along the entire south-southwestern side of the Building 14. Building 14 is roofed and constructed of concrete, brick, and steel. With the addition of the asphalt cap, the Building 14 area is completely surrounded by asphalt and concrete, which serves as an engineering control (cap) for the area.

A risk assessment was developed using landscape and outdoor maintenance workers as the anticipated receptors. The assessment indicates that the remaining concentrations of constituents at the Building 14 Area do not pose a risk to receptors.

Volatile organic compounds were not found in the Building 14 Area; therefore, potential vapor intrusion is not a pathway of concern for this area.

The 2008 Final Report which included engineering and institutional controls and a Post-Remediation Care Plan for Building 14 Area received PADEP Act 2 approval on June 18, 2015.

Use Restrictions - Current

An environmental covenant was recorded in Montgomery County July 11, 2011 and was updated July 21, 2016. This covenant requires BASF or any future owner of the property to restrict land and groundwater use activities to those compatible with non-residential, land-use categories. In addition, the covenant requires inspection, maintenance and record-keeping to assure the integrity of the engineered cap that overlies Building 14 Area. The engineering and institutional controls applicable to Building 14 are now contained in the July 21, 2016 Environmental Covenant.

Building 23 Area

Building 23 was an operational research and development laboratory that could not be accessed for purposes of an environmental investigation at the time of site-wide assessment activities in 2006. Building activities ceased in 2012, and a soils investigation was initiated. This was followed by an indoor air investigation also in 2012. A total of 11 soil samples were collected from 10 soil locations. Levels of arsenic exceeded non-residential standards at three (3) soil locations and 1,2-Dichloroethane (1,2-DCA) and 2,4-DCP exceeded non-residential standards at one (1) soil location.

Risk assessment calculations similar to those completed for the Building 14 Area were

used to determine that the remaining concentrations of constituents in soils at the Building 23 Area do not pose a risk to receptors, provided the building slab remains in place. Using the current engineering controls associated with the Building 23 concrete slab, all exposure Section

pathways were found to be incomplete, requiring no further remedial activities. A Post-Remediation Care Plan for conducting inspections and maintenance is detailed in the Final Report dated November 2015.

During the Building 23 investigation, 1,2-DCA,1,2 dichloropropane (1,2-DCPP) and chloroform in soil exceeded the screening values for potential risk for vapor intrusion to indoor air. A further investigation directly sampling the indoor air quality found no constituents above health-based levels for indoor air.

The 2015 Building 23 Area Final Report received PADEP Act 2 approval on January 26, 2016.

Use Restrictions – In Progress

BASF is working with PADEP to modify the July 2016 Environmental Covenant in order to incorporate Building 23 Area and its associated Post-Remediation Care Plan.

Residential Parcel

The residential parcel of the property is an approximate 1.5-acre parcel that encompasses administrative (formerly residential) buildings as well as landscaped and parking area. Between 2012 and 2014, a focused environmental investigation and remedial actions were performed in the southern portions of the site. This area meets PADEP's Residential Statewide Health Standards and received PADEP Act 2 approval on September 29, 2015.

Use Restrictions – None

As this area no longer requires land-use restrictions, BASF worked with PADEP to modify the July 2011 Environmental Covenant to remove this area from site property that will conform to non-residential land-use restrictions. This new Environmental Covenant was recorded on July 21, 2016.

Ballfields

Cognis sold approximately 18 acres to Lower Gwynedd Township and the Borough of Ambler in 2002. The divested parcel generally included land situated to the northwest of Mathers Road. Approximately 2 acres of this area was filled with various construction/demolition debris by Cognis predecessors between 1950 and 1980. In 2000, an investigation was completed, concluding that there were no unacceptable risks to a select list of pollutants. After review of facility files, a further investigation was performed in 2005 to assess whether additional parameters, including dioxin and pesticides, were at the parcel. The investigations show that the parcel meets PADEP's non-residential health standards.

Volatile organic compounds above screening levels for potential indoor air were not found in the Ballfields investigation therefore, potential vapor intrusion is not a pathway of concern for this area.

Section 3: Summary of Environmental Investigations (continued)

A Final Report for the Ballfields was submitted in 2006. PADEP provided Act 2 approval on May 03, 2006 for work associated with the 18 acres transferred to Lower Gwynedd Township and the Borough of Ambler.

Use Restrictions – In Progress

At this time, BASF, Lower Gwynedd Township and the Borough of Ambler are working with PADEP to execute an Environmental Covenant for the property to ensure non-residential land-use.

Sitewide Groundwater

Groundwater beneath the property has been evaluated since the early 1990s for VOCs, SVOCs and metals. Certain VOCs; 1,1-Dichloroethene, 1,2-DCA, 1,2-DCP, trichloroethene, were found in the overburden and shallow bedrock aquifers above Maximum Contaminant Levels (MCLs) for drinking water. Sampling shows the most impacted interval is from 20-50 feet below ground surface (bgs). Lesser impacts are shown from 50-80 feet bgs. Deeper impacts were not found. This bedrock aquifer is known as the Stockton Formation and is used as a drinking water source for the local public water utility. However, the depth of the public water supply wells averages 306 feet, which is significantly deeper than the impacted groundwater at the Facility, and these public water supply wells are at a significant distance from the Facility. Further evaluation of using MCLs as appropriate clean-up goals has been discussed with the Facility and may be submitted to EPA in the future.

1,2-DCA is the primary contaminant, and in 2007 was found at levels above 100,000 ug/l in the shallow bedrock aquifer, at the source area near the former Tank Area 3. The MCL for 1,2-DCA is 5 ug/l. Other compounds which are related to 1,2-DCA (products of degradation) were also found above MCLs, however at much lower levels and in smaller areas within the larger 1,2-DCA plume. In this SB, 1,2-DCA is used as an indicator parameter for discussion of sitewide groundwater contamination.

Two types of treatment technologies have been employed at the site to address the contamination. The first phase consisted of low-flow extraction and ex-situ ozone-peroxide treatment of contaminants from the shallow bedrock aquifer. This step removed much of the most highly contaminated parts of the plume. However, it was determined that this technology would be inefficient in remediating the remaining contamination. This first phase was carried out between 2007 and 2011.

The second phase used hydraulic and pneumatic fracturing in conjunction with in-situ injections of a biodegradation product which stimulates chemical reduction of organic

contaminants. The effectiveness of this second phase, started in 2010, was evaluated periodically to determine if modifications were needed to the system. Subsequent sampling showed 1,2-DCA levels as well as the size of the plume were decreased significantly. In 2012, the most contaminated well showed a level of 76,000 ug/l and the extent of contamination was

reduce by half from 2007. In 2018, the most contaminated well showed a level of 4,200 ug/l and the plume extent was reduced significantly.

Sampling in 2018 shows the overburden aquifer wells meet drinking water standards for 1,2-DCA and other associated contaminants. Three (3) weathered rock wells adjacent to the former source area show several volatile organic compounds slightly above their drinking water standards. Several shallow bedrock wells showing 1,2-DCA and other associated contaminants above drinking water standards were mostly located within 200 feet of the source area. Annual monitoring across the site is planned to determine if the remedial strategy continues to reduce contaminant plume concentration and size.

On-site exposure evaluation

In 2018, groundwater results show that the overburden aquifer does not exceed the screening levels for potential indoor air pathway across the site, other than directly adjacent to the former source area. These impacted wells are located more than 100 feet from all existing buildings on the Site. Therefore, potential vapor intrusion for on-site buildings is not an exposure pathway of concern.

The 2018 sampling shows that the plume is contained within the property boundary and does not extend off-site. There is no current exposure to groundwater, as all wells are used solely for environmental monitoring purposes.

Off-site exposure evaluation

In 2013, BASF submitted a summary and discussion of the potential indoor air pathway for off-site buildings. At the downgradient property boundary, all volatile organic compounds in both overburden and bedrock wells are below the screening levels for potential volatilization to indoor air; demonstrating that off-site building vapor intrusion is not a pathway of concern.

Historic PADEP sampling has shown 1,2-DCA is not found above drinking water levels in off-site wells downgradient of the Facility. This demonstrates there is not an off-site component to the groundwater plume or potential for off-site exposure to site contaminants.

Use Restrictions – Current

An environmental covenant was recorded in Montgomery County July 11, 2011 and was updated July 21, 2016. This covenant requires BASF or any future owner of the property to restrict site-wide groundwater use activities to those compatible with non-potable and non-agricultural uses. The institutional controls applicable to the sitewide groundwater are now contained in the July 21, 2016 Environmental Covenant.

Section 3: Summary of Environmental Investigations (continued)

3.2 Environmental Indicators

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control, and (2) Migration of Contaminated Groundwater Under Control. The Facility met of these indicators on September 23, 2016 and November 13, 2013, respectively.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objectives for the specific environmental media/areas at the Facility are the following:

1. Soils – Facility and Ballfields

EPA has determined that Pennsylvania's Act 2 non-residential SHS are protective of human health and the environment provided that the Facility is not used for residential purposes.

a. Sitewide Soils - There is no contaminant in Sitewide Soils in concentrations above its non-residential standard. EPA's Corrective Action Objective for Sitewide Soils at the Facility is to prevent exposure to hazardous constituents remaining in soils above residential standards.

b. Building 14 Area and Building 23 Area – Some contaminants at Building 14 Area and Building 23 Area remain above non-residential SHS. Currently there are engineering controls in place at each of these Areas which prevent exposure to these contaminants. The engineering controls consist of permanent slab/asphalt caps. EPA's Corrective Action Objectives for these two (2) Areas are to prevent exposure to hazardous constituents remaining in soils above non-residential and residential standards.

c. Ballfields - There is no contaminant in Ballfields soils in concentrations above its non-residential standard. EPA's Corrective Action Objective for Ballfields soils is to prevent exposure to hazardous constituents remaining in soils above residential standards.

2. Soil - Residential Parcel

All contaminants at the Residential Parcel meet residential SHS. This Parcel meets standards for unrestricted use. Therefore, no EPA Corrective Action Objective is needed for this Parcel.

3. Groundwater

EPA expects final remedies to return "usable" groundwaters to their maximum beneficial use, wherever practicable, within a timeframe that is reasonable given the particular circumstances of the facility. As the maximum beneficial use of the impacted overburden and shallow bedrock aquifers under the Facility is potential potable usage,

Section 4: Corrective Action Objectives (continued)

and as some areas of groundwater under the Facility do not meet drinking water standards, EPA's Corrective Action Objective for Facility groundwater is to prevent exposure to groundwater where hazardous constituents remain above their associated drinking water standards.

Section 5: Proposed Remedy

1. General

The Facility shall provide EPA with a coordinate survey as well as a metes and bounds survey, of the Facility and Area/Parcel boundaries, and the survey limits where engineering controls are required by the Post-Remediation Care Plans for Building 14 and 23. Mapping the extent of the land use restrictions will allow for presentation in a publicly accessible mapping program such as Google Earth or Google Maps.

2. Soils

Because some contaminants remain in Facility soils at levels which exceed residential use, EPA's Proposed Remedy requires compliance with, and maintenance of, the following use restrictions and engineering controls:

A. Sitewide Soils, Building 14 Area, Building 23 Area, and Ballfields- These areas shall be restricted to commercial/recreational and/or industrial purposes and shall not be used for residential purposes, unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy, and the Facility provides prior written approval from EPA for such use.

1. EPA acknowledges that currently, the July 2016 Environmental Covenant signed by PADEP restricts land-use to non-residential purposes for the Sitewide Soils, Building 14 Area, and Building 23 Area.

2. EPA acknowledges that BASF, Lower Gwynedd Township and the Borough of Ambler are currently working with PADEP to execute an environmental covenant to restrict land use at the Ballfields parcel to non-residential uses. Once this covenant is recorded, the proposed remedy requirement to restrict land use of the subject Facility to non-residential uses will be met.

B. Engineering controls shall be required at Buildings 14 and 23, consistent with their Post-Remediation Care Plans detailed in their respective Final Reports.

1. Requirements to comply with the Post-Remediation Care Plan for Building 14 are contained in the July 2016 Environmental Covenant signed by PADEP.

2. The July 2016 Environmental Covenant is currently being modified by PADEP and BASF to incorporate the Post-Remediation Care Plan for Building 23. Once this modified covenant is recorded, the proposed remedy requirement will be met.

3. Soils – Residential Parcel

As the soils at the Residential Parcel meet residential SHS, no remedial action is necessary. This Parcel meets standards for unrestricted use.

4. Groundwater

A. EPA's proposed remedy requires compliance with use limitations that restricts groundwater use to non-potable and non-agricultural uses.

1. The July 2016 Environmental Covenant signed by PADEP restricts the entire Facility groundwater to non-potable and non-agricultural uses.

B. To fully meet the Corrective Action Objectives, EPA's Proposed Remedy requires the Facility to submit an updated Groundwater Monitoring Plan, for approval, which identifies future monitoring activities and schedules and includes discussion of future treatment. This Groundwater Monitoring Plan may also include a proposal for alternative cleanup levels which are protective of human health and the environment based on Facility-specific scenarios and groundwater use.

Table 1 summarizes Proposed Remedy elements which have been completed and those which are incomplete.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1) Protect human health and the environment	EPA's proposed remedy for the Facility protects human health and the environment by eliminating, reducing, or controlling potential unacceptable risk through the implementation and maintenance of use restrictions and engineering controls. Under EPA's proposed remedy, there would be no risk associated with the soil as long as the Facility property use remains non-residential. Soil sampling showed exceedances of industrial screening levels. EPA's proposed remedy requires compliance with Post-Remediation Care Plans for those Areas. Groundwater is shown to be above MCLs and is being monitored. Therefore, EPA is also proposing to restrict land use to non-residential and groundwater use to non-potable purposes at the Facility.
2) Achieve media cleanup objectives	EPA's proposed remedy meets the media cleanup objectives. The cleanup objective for soils is to contain the hazardous constituents that remain in place and control exposure to those wastes in an industrial land-use scenario. The proposed remedy meets this objective through the implementation and maintenance of land-use restrictions and engineering controls. The cleanup objective for groundwater is to prevent access to potable uses of groundwater and to restore to maximum beneficial use. The groundwater at the Facility does not meet drinking water standards and its use is being restricted. It is being monitored and until protective cleanup levels are met.
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment and the Facility met this objective. The source of contaminants has been removed from the soil at the Facility, thereby, eliminating, to the extent practicable, further releases of hazardous constituents from on-site soils.

Section 6: Evaluation of Proposed Remedy (continued)

Balancing Criteria	Evaluation
4) Long-term effectiveness	The Facility remains an industrial site and which is expected to remain non-residential. Therefore, the proposed long-term effectiveness of the remedy for the Facility will be maintained by the implementation of use restrictions and engineering controls.
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	The reduction of toxicity, mobility and volume of hazardous constituents will continue by restricting land uses at the Facility. Groundwater is being monitored post-treatment to document plume reduction.
6) Short-term effectiveness	EPA's proposed remedy does not involve any activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment. EPA anticipates that the land use restrictions and Groundwater Monitoring Plan will be fully submitted and implemented shortly after the issuance of the Final Decision and Response to Comments.
7) Implementability	EPA's proposed remedy is readily implementable. EPA proposes to implement the use restrictions through an enforceable mechanism such as an Environmental Covenant, permit or order.
8) Cost	EPA's proposed remedy is cost effective. The costs associated with this proposed remedy have already been incurred and the remaining costs are minimal.
9) Community Acceptance	EPA will evaluate community acceptance of the proposed remedy during the public comment period, and it will be described in the Final Decision and Response to Comments.
10) State/Support Agency Acceptance	PADEP has reviewed and concurred with the proposed remedy for the Facility.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. EPA's proposed remedy does not require any further construction actions to remediate soil, groundwater or indoor air contamination at this time. EPA estimates that the cost of implementing the two (2) Post-Remediation Care Plans and the continued groundwater monitoring will be $10,000 annually. Therefore, EPA is proposing that no financial assurance be required.

Section 8: Public Participation

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, or electronic mail to Linda Matyskiela at the contact information listed below.

A public meeting will be held upon request. Requests for a public meeting should be submitted to Linda Matyskiela in writing at the contact information 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:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Linda Matyskiela (3LD20)
Phone: (215) 814-3420
Fax: (215) 814-3113
Email: Matyskiela.Linda@epa.gov

Attachments:
Attachment A: Index to Administrative Record
Figure 1: Figure of Facility
Table 1

Date: _____ _____

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

Environmental Indicator Inspection Report For Cognis Corporation (formerly Amchem Products and Henkel Corporation), 300 Brookside Avenue Ambler, PA 19002, August 2004.

Order on Consent, Docket No. III-86-16-DC, Amchem Products, Inc. and Union Carbide Agricultural Products Company, Inc., August 19, 1986

Groundwater

2014 Groundwater Remediation Progress Monitoring Report; BASF Corporation, Ambler, Pennsylvania Property, April 29, 2015

2015 Groundwater Remediation Progress Monitoring Report; BASF Corporation Ambler, Pennsylvania Property, February 16, 2016

2016 Groundwater Remediation Progress Monitoring Report; BASF Corporation Ambler, Pennsylvania Property, February 16, 2017

Unconsolidated Units Groundwater Monitoring Results & Assessment; BASF Corporation Ambler, Pennsylvania Facility, February 16, 2016

Unconsolidated Units Groundwater Monitoring Results & Assessment; BASF Corporation Ambler, Pennsylvania Facility, February 16, 2017

2017 and 2018 Analytical Results Summaries for Groundwater; BASF Corporation Ambler, Pennsylvania Property, September 11, 2018

Soil and Groundwater Results Summary Tables 2014

Down-Gradient Groundwater Summary Project Memorandum, BASF Corporation, Ambler, Pennsylvania March 01, 2013

Soils:

Final Report: Site Investigation Results & Remedial Action Report for Soil, Cognis Corporation, Ambler, Pennsylvania Facility, Submitted under Pennsylvania's Land Recycling and Environmental Remediation Standards Act (Act 2), October 14, 2008

PADEP - Letter of Substantive Deficiency of Site Investigation Results & Remedial Action Report for Soil, Cognis Corporation, Ambler, Pennsylvania Facility, October 2008, June 17, 2009

Attachment A: Index to Administrative Record (continued)

PADEP- Statewide Health Nonresidential and Site-Specific Standard Final Report Approval Cognis Corporation/BASF Corporation, June 18, 2015

Environmental Covenant recorded July 11, 2011, superseded

Final Report: Site Investigation Results & Remedial Action Report for Residential Parcel Soil, BASF Corporation, Ambler, Pennsylvania Facility, July 2015

PADEP- Statewide Health Standard Final Report Approval, BASF Corporation – Ambler, September 29, 2015

Environmental Covenant recorded July 21, 2016

Final Report: Site Investigation Results & Remedial Action Report for Building 23 AEC Soil, dated November 2015 and Addendum, dated January 27, 2016

PADEP- nrSHS and SSS Final Report Approval, BASF Corporation, Building 23, January 26, 2016

Final Report: Ball Field Area Investigation Results & Demonstration of Attainment of Statewide Health Standards regarding former portion of Cognis Corporation's Ambler, Pennsylvania Facility, March 2006

PADEP Act 2 Approval of Ball Fields Investigation, May 03, 2006

Figure 1: Figure of Facility

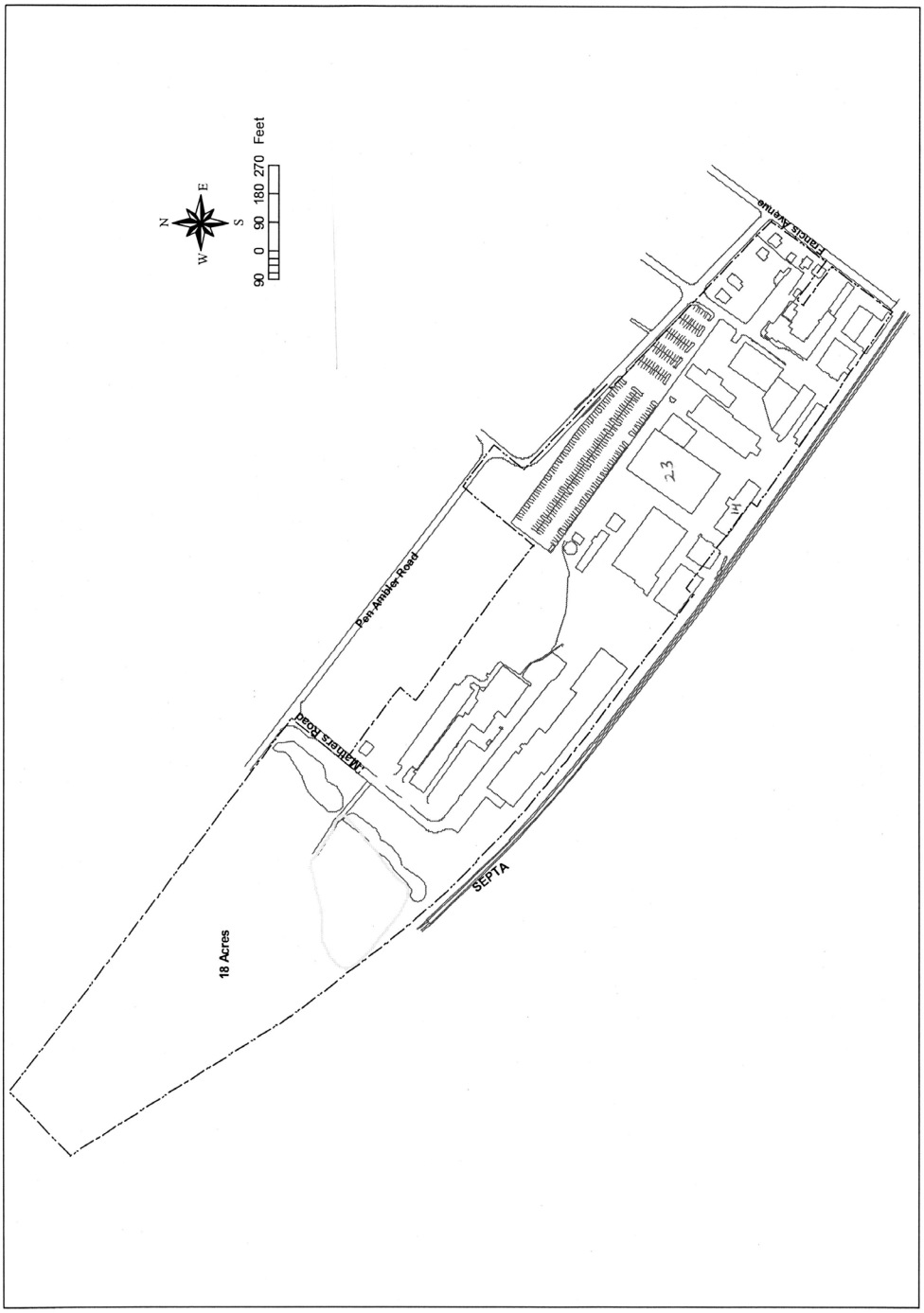

Table 1

Parcel	Remedial Report	Proposed Control/Remedy	PADEP Act 2 Report Approval	Remedy Instrument/ Covenant Date
Sitewide Soils	*Final Report: Site Investigation Results & Remedial Action Report for Soil*, October 14, 2008	Non-residential land use restriction.	June 18, 2015	July 11, 2011: superseded by July 21, 2016
Building 14 Area	*Final Report: Site Investigation Results & Remedial Action Report for Soil*, October 14, 2008	Building slab and Post-Remedial Care Plan. Non-residential use restriction.	June 18, 2015	July 11, 2011: superseded by July 21, 2016
Building 23 Area	*Final Report: Site Investigation Results & Remedial Action Report for Building 23 AEC Soil*, November 2015	Building slab and Post-Remedial Care Plan. Non-residential use restriction.	January 26, 2016	**Covenant in progress with BASF and PADEP**
Residential Parcel	*Final Report: Site Investigation Results & Remedial Action Report for Residential Parcel Soil*, July 2015	None	September 29, 2015	None
Ballfields (18 acres sold to Lower Gwynedd Township and the Borough of Ambler 2002)	*Final Report Ball Field Area Investigation Results & Demonstration of Attainment of Statewide Health Standards*, March 2006	Non-residential land-use restriction.	May 03, 2006	**Covenant in progress with BASF, Lower Gwynedd Township and PADEP**
Groundwater	Annual GW remediation progress monitoring reports	Non-potable use restriction. **Submit Groundwater Monitoring Plan**	Non-use GW restriction in covenant subsequent to 2008 Sitewide Soils report approval. GW Report has not been submitted for Act 2 at this time.	July 11, 2011: superseded by July 21, 2016.

All Proposed Remedy elements are completed except those in BOLD.