



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
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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 known as the 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 groundwater monitoring and related activities 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

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

The 44-acre Facility originally consisted of 26 buildings which housed administrative, research and development, manufacturing operations, and support facilities. Properties

Statement of Basis

Section 2: Facility Background (continued)

surrounding the Facility are primarily residential. A commuter railroad line borders the west side of the property.

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

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

The Facility has been subdivided into the following areas and parcels for purposes of investigation:

1. Building 14 Area and Building 23 Area housed manufacturing operations and were investigated individually;
2. the Residential Parcel is an approximate 1.5-acre parcel that encompasses administrative (formerly residential) buildings in a southeast corner of the Site and
3. the 18-acre Ballfields were transferred to Lower Gwynedd Township and the Borough of Ambler in 2002;
4. Sitewide Soils which consists of the remaining the 44 acres of the Facility, excluding the Building 14 Area; Building 23 Area; Residential Parcel and Ballfields Parcel, and
5. 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

Since 1980, multiple investigations and remedial activities have been conducted at the Facility. EPA has included the most relevant reports in the Administrative Record for this SB as listed in Attachment A.

The environmental investigations at the Facility have focused on soils, groundwater and potential for vapor intrusion. Sitewide investigations are described below. Table 1 summarizes the investigations, remediation reports and applicable institutional and engineering controls at each area.

Sitewide Soils

Investigations conducted in 2003 and 2004 focused on the areas at the Site most likely to be impacted by manufacturing operations. A 2006 investigation, an extension of the 2003 to

Section 3: Summary of Environmental Investigations (continued)

2004 investigation, was a more comprehensive evaluation of the entire Facility. In total, the 2003 to 2004 and the 2006 investigations included 286 soil 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 samples identified ethylbenzene, xylenes and arsenic at concentrations above their applicable non-residential Statewide Health Standards (SHS) under Act 2 and EPA's non-residential RSLs.

Excavations in the vicinity of Former Tank 2 removed 265 cubic yards of contaminated soils. Post-excavation confirmation soil 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 indoor air. Evaluation of whether there is a potential exposure risk of a contaminant volatilizing to building indoor air includes a number of factors, notably the natural tendency of the contaminant to volatilize to the air and the contaminant's location with respect to buildings. Ethylbenzene and xylene levels slightly exceed the criteria for potential volatilization at two isolated areas. The volatilization to indoor air criteria for soils of ethylbenzene is 9.5 mg/kg and 77 mg/kg for xylene. The highest soil concentration found for ethylbenzene is 91 mg/kg and 400 mg/kg for xylene. These two isolated areas are more than 100 feet (ft) from buildings and were detected more than 5 ft below ground surface. Assessment of this information shows that there is not a risk of volatilization to indoor air from contaminants remaining in soils.

The Final Report on the 2003 to 2004 and 2006 investigations on sitewide soils was submitted in 2008 and received PADEP Act 2 approval on June 18, 2015.

Land Use Restrictions - Current

An environmental covenant was recorded with the Montgomery County Recorder of Deeds on July 21, 2016. This covenant requires BASF and any future owner of Facility property to restrict land and groundwater use activities to those compatible with non-residential uses.

Building 14 Area

Pursuant to a 1986 Administrative Consent Order (AOC) (EPA Docket No. III-86-16-DC) issued to previous Facility owners Amchem Products, Inc. and Union Carbide Agricultural Products Company, Inc., the Respondents were required to develop a soil sampling plan to delineate any dioxin contaminated soils above 1 part per billion (ppb) around the southwestern side of Building 14. Approximately 380 cubic yards of dioxin-contaminated soil were excavated from the railroad siding and Building 14 Area. 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 cleanup criteria of 0.246 mg/kg. Arsenic cleanup tasks were successfully

Statement of Basis

Section 3: Summary of Environmental Investigations (continued)

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.

During the 2003 to 2004 investigation, 2,4,6-trichlorophenol, 2,4-dichlorophenol (2,4-DCP), 2,4-dichlorophenoxy acetic acid, 2,4,5-trichlorophenoxy acetic acid, naphthalene, dioxin and arsenic were found in soils at concentrations above the SHS and EPA RSLs in the Building 14 Area. EPA and PADEP determined that attainment of SHS and EPA RSLs was not feasible and required the installation of a cap

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.

Land Use Restrictions - Current

An environmental covenant was recorded with the Montgomery County Recorder of Deeds on July 21, 2016. This covenant requires BASF and any future owner of Facility property to restrict land and groundwater use activities to those compatible with non-residential uses. In addition, the covenant requires inspection, maintenance, record-keeping and reporting to ensure the integrity of the engineered cap that overlies Building 14 Area. The engineering controls (cap) applicable to the Building 14 Area are described 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. Operations in Building 23 ceased in 2012. During that same year, an indoor air and a soils investigation was initiated. A total of 11 soil samples were collected from 10 locations. Levels of arsenic exceeded non-residential standards at three locations and 1,2-Dichloroethane (1,2-DCA) and 2,4-DCP exceeded non-residential SHS and EPA RSLs at one location.

Statement of Basis

Section 3: Summary of Environmental Investigations (continued)

Based on risk assessment calculations similar to those completed for the Building 14 Area, EPA determined 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. Given the current engineering controls associated with the Building 23 concrete slab, all exposure pathways were found to be incomplete, requiring no further remedial activities. A Post-Remediation Care Plan for conducting inspections, maintenance, record-keeping, and reporting of the concrete slab is detailed in the Final Report dated November 2015.

During the 2012 Building 23 investigation, concentrations of 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 SHS and EPA RSLs for indoor air.

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

Residential Parcel

The Residential Parcel 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 Facility, which includes the Residential Parcel. This Parcel meets PADEP's residential SHS and EPA RSLs. The Final Report for this Parcel was submitted in 2015 and received PADEP Act 2 approval on September 29, 2015.

Ballfields Parcel

In 2002, Cognis sold the Ballfields Parcel, approximately 18 acres in size, to Lower Gwynedd Township and the Borough of Ambler. The Ballfields Parcel included land situated to the northwest of Mathers Road. Approximately 2 acres of the Ballfields Parcel 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 human health and the environment to VOCs, SVOCs, and metals. After review of Facility files, in 2005, a subsequent investigation was performed to assess whether PCBs, pesticides, herbicides, and dioxin were at the Ballfields Parcel. EPA has determined that the investigations show that the Parcel meets PADEP's non-residential health standards and EPA RSLs.

Currently there are no buildings at the Ballfields Parcel, however the potential for vapor intrusion into future buildings was evaluated. VOCs above screening levels for potential indoor air were not found in the Ballfields vapor investigation therefore, EPA has determined that potential vapor intrusion is not a pathway of concern for future buildings.

Section 3: Summary of Environmental Investigations (continued)

A Final Report for the Ballfields Parcel was submitted to PADEP in 2006. PADEP approved the Report under Act 2 on May 3, 2006.

Sitewide Groundwater

Groundwater beneath the Facility has been evaluated since the early 1990s for VOCs, SVOCs and metals. Certain VOCs such as 1,1-Dichloroethene, 1,2-DCA, 1,2-DCP, trichloroethene, were found in the overburden and shallow bedrock aquifers above National Primary Drinking Water Standard Maximum Contaminant Levels (MCLs) promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141. 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 alternative goals may be evaluated in the future.

In 2007, 1,2-DCA was found in groundwater 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, such as vinyl chloride, which are related to 1,2-DCA (products of degradation) were also found periodically 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 Facility to address the groundwater contamination. Between 2007 and 2011, the first treatment 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.

In 2010, the second treatment 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 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 reduced 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.

Section 3: Summary of Environmental Investigations (continued)

Sampling in 2018 shows the overburden aquifer wells meet drinking water standards for 1,2-DCA and other associated contaminants. Three 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 Facility 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 Facility, other than directly adjacent to the former source area at former Tank Area 3. These impacted wells are located more than 100 feet from all existing buildings at the Facility. 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 Facility property boundary and does not extend off-site. There is no current human exposure to groundwater at the Facility, as all wells are used solely for environmental monitoring purposes.

Off-site exposure evaluation

In 2013, BASF submitted to EPA a summary and discussion of the potential indoor air pathway for off-site buildings. At the downgradient Facility 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. Assessment of the PADEP off-site well data and the on-site Facility perimeter well monitoring data demonstrates there is not an off-site component to the groundwater plume or potential for off-site exposure to Site contaminants.

Land Use Restrictions – Current

An environmental covenant was recorded with the Montgomery County Recorder of Deeds on July 21, 2016. This covenant prohibits BASF or any future owner of Facility property to withdraw or extract groundwater for agricultural or potable purposes.

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) Migration of Contaminated Groundwater Under Control, and (2) Current Human Exposures Under Control. The Facility met these indicators on November 13, 2013 and September 23, 2016, 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 (caps) 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 Objective for these two Areas is to prevent exposure to hazardous constituents remaining in soils above non-residential and residential standards.
- c. Ballfields Parcel- 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

The soils at the Residential Parcel meet residential SHS and EPA residential RSLs. Therefore, 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. The maximum beneficial use of the impacted overburden and shallow bedrock aquifers under the Facility is use as drinking water.

Statement of Basis

Section 4: Corrective Action Objectives (continued)

Therefore, EPA's long-term Corrective Action Objective for Facility groundwater consists of on-going monitoring until MCLs (or RSLs where MCLs do not exist) are met.

EPA's intermediate Corrective Action Objective for Facility groundwater is compliance with, and maintenance of, groundwater-use restrictions at the Facility to prevent exposure to contaminants while levels remain above 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 - Sitewide Soils, Building 14 Area, Building 23 Area, and Ballfields Parcel

Because some contaminants remain in Sitewide Soils, Building 14 Area, Building 23 Area, and Ballfields Parcel 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. 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 EPA provides prior written approval for such use.
- B. Engineering controls (caps) shall be required at Buildings 14 and 23 Areas, consistent with their Post-Remediation Care Plans detailed in their respective Final Reports. Inspection, maintenance, reporting, and recordkeeping is required, in compliance with their Post-Remediation Care Plans detailed in their respective Final Reports.

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 for groundwater is to monitor and treat the groundwater until MCLs are met and require the compliance with, and maintenance of, groundwater-use restrictions that restrict groundwater use to non-potable and non-agricultural uses at

Section 5: Proposed Remedy (continued)

the Facility in order to prevent exposure to contaminants while levels remain above drinking water standards.

B. EPA's Proposed Remedy requires an update of the Groundwater Monitoring Plan (Plan) for EPA approval. The Plan must identify future monitoring activities, schedules, and additional treatment alternatives, as appropriate. 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. If EPA determines that any such alternative cleanup levels are appropriate, EPA will solicit public comments on any such cleanup levels prior to amending the FDRTC and including them in the final remedy for the Facility.

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 to confirm plume is shrinking. 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 throughout the plume.
3) Remediating the Source of Releases	<p>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.</p> <p>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.</p>

Section 6: Evaluation of Proposed Remedy (continued)

Balancing Criteria	Evaluation
4) Long-term effectiveness	The Facility is, and 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 at this time.

Once the post-remedial groundwater monitoring program is established and groundwater data is generated, EPA will reevaluate the need for financial assurance if the additional treatment options are implemented.

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

Attachment A: Index to Administrative Record

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

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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

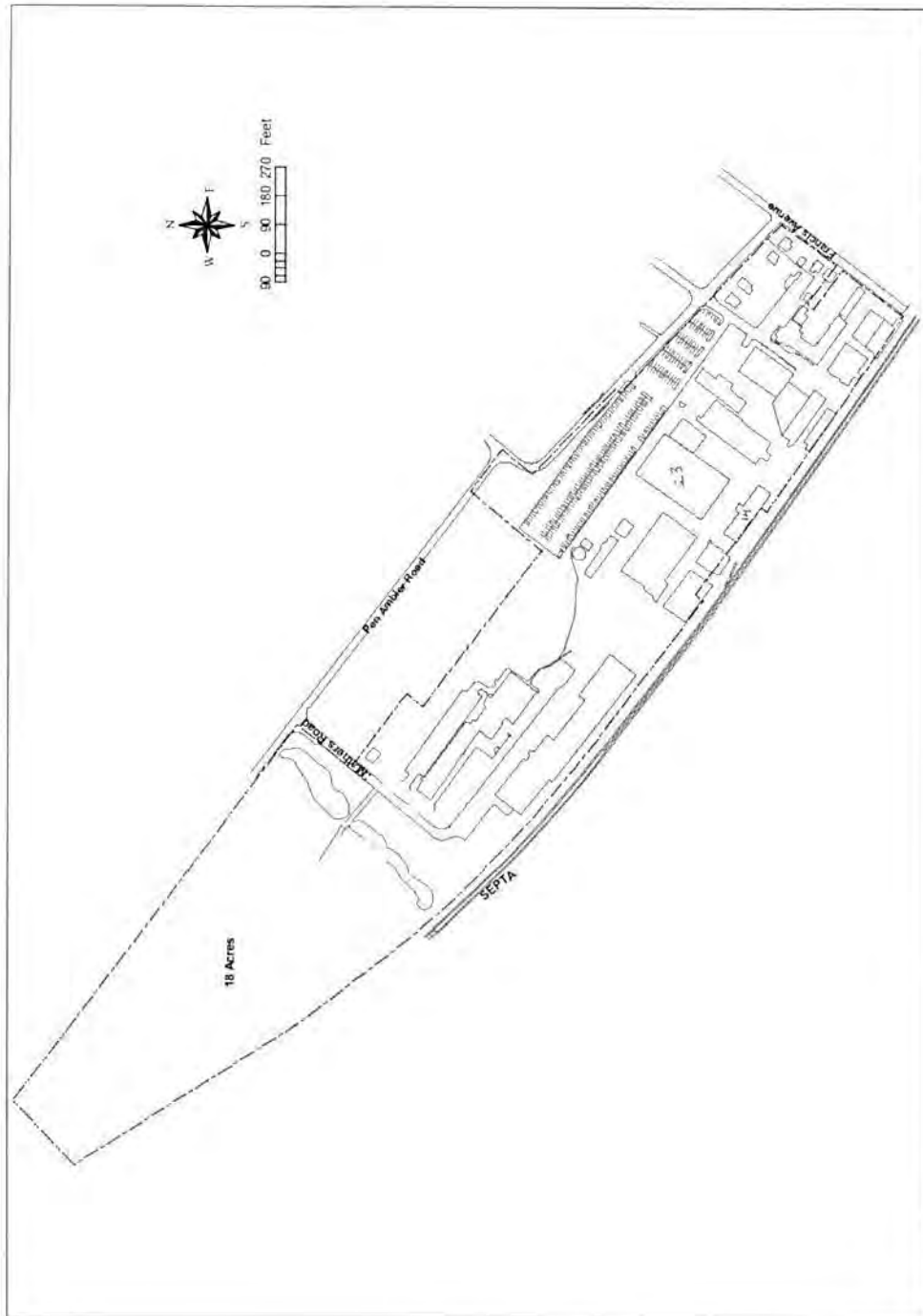
Final Report: Site Investigation Results & Remedial Action Report for Building 23 AEC Soil,
dated November 2015 and Addendum, dated January 27, 2016

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



Ambler, Pennsylvania

AMO Environmental Decisions
(March 15, 2006)

Table 1

Parcel	Remedial Report	Proposed Control/Remedy	PADEP Act 2 Report Approval	Remedy Instrument/ Covenant Date
Sitewide Soils	<i>Final Report: Site Investigation Results & Remedial Action Report for Soil</i> , October 14, 2008	Non-residential land use restriction.	June 18, 2015	July 11, 2011: superseded by July 21, 2016
Building 14 Area	<i>Final Report: Site Investigation Results & Remedial Action Report for Soil</i> , 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	<i>Final Report: Site Investigation Results & Remedial Action Report for Building 23 AEC Soil</i> , 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	<i>Final Report: Site Investigation Results & Remedial Action Report for Residential Parcel Soil</i> , July 2015	None	September 29, 2015	None
Ballfields (18 acres sold to Lower Gwynedd Township and the Borough of Ambler 2002)	<i>Final Report Ball Field Area Investigation Results & Demonstration of Attainment of Statewide Health Standards</i> , March 2006	Non-residential land-use restriction.	May 03, 2006	Covenant in progress with BASF, Lower Gwynedd Township, Borough of Ambler, and PADEP
Groundwater	Annual GW remediation progress monitoring reports	Non-potable use restriction. Continued monitoring. 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**.

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