FINAL PLAN OF REMEDIAL ACTION

ICI Americas Inc. Atlas Point Site
Operable Unit 1 (Soil and Sediment)

315 Cherry Lane
New Castle, Delaware

September 25, 2011
DNREC Project No. 0049

This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) determination of appropriate remedial action to address soil and sediment contamination (OU1) at the ICI Inc. Atlas Point Site in New Castle.

DNREC issued public notice of the Proposed Plan for the Site on August 20, 2011, and opened a public comment period which ended on September 12, 2011. The Proposed Plan requires the remediation of Area of Concern "AN" by means of soil and sediment excavation. The Proposed Plan also acknowledged interim remedial actions that have been completed at 83 other Areas of Concern located throughout the plant.

The Proposed Plan also included the location of additional information found on the DNREC web page and in the DNREC office at Lukens Drive in New Castle.

There were no comments or questions from the public regarding the Proposed Plan. Therefore, the Proposed Plan (attached) is hereby adopted as the Final Plan

Approval:
This Final Plan meets the requirements of the Hazardous Substance Cleanup Act.

Timothy T. Ratsep, Administrator
Site Investigation and Restoration Section

SFJ:vdh; SFJ11014.doc; DE 0049 II B 9

Attachment:

Proposed Plan of Remedial Action
for the
ICI Inc. Atlas Point Site
New Castle, Delaware

PROPOSED PLAN OF REMEDIAL ACTION

ICI Americas Inc. Atlas Point Site
Operable Unit 1: Soil and Sediment
New Castle, Delaware
DNREC Project No. DE-0049

August 2011

Delaware Department of Natural Resources and Environmental Control
Division of Waste and Hazardous Substances
Site Investigation & Restoration Section
391 Lukens Drive
New Castle, Delaware 19720

CONTENTS

PROPOSED PLAN OF REMEDIAL ACTION

ICI Americas Inc. Atlas Point Site
Operable Unit 1: Soil and Sediment
New Castle, Delaware
DNREC Project No. DE-0049

Approval:

This Proposed Plan meets the requirements of the Hazardous Substance Cleanup Act.

Approved by:

Marjorie A. Crofts, Director
Division of Waste & Hazardous Substances

18 August 2011
Date

ICI Americas Inc. Atlas Point Site Operable Unit 1: Soil and Sediment

What is the Atlas Point Site Operable Unit 1? This industrial site is the historical location of the ICI Americas Atlas Point facility, (the 'Site'). It is now occupied by four owners: Croda Inc., FujiFilm Imaging Colorants, Inc, Arch Chemicals, and BioMed Realty. Croda Inc. purchased the ICI America portion of the facility in 2006, and a portion owned by SPI Polyol. In 2007 and has assumed responsibility for the environmental cleanup of the Site under the DNREC Hazardous Substance Cleanup Act (HSCA) Voluntary Cleanup Program.

The Site is situated in the northeastern portion of New Castle County, Delaware, in the Atlantic Coastal Plain physiographic province. The Site is located between I-295 and Cherry Lane. It is adjacent to the War Memorial park and visible from I-295. The Collins Park neighborhood is the closest residential area to the Atlas Point Site (see Figure 1).

The remedial actions described in this Proposed Plan will address soil and sediment at the Site as Operable Unit 1. Groundwater contamination will be addressed in a separate proposed plan as Operable Unit 2.

Tax Parcel Numbers: 10-016.00-002, 10-016.00-007 and 10-016.00-008, 10-015.00-020, 10-015.00-
003, 10-015.00-022, 10-015.00-021, 10-015.00-023, 10-015.00-024
Address: 315 Cherry Lane, 321 Cherry Lane, 213 Cherry Lane, 233 Cherry Lane, 1000 Uniqema Blvd., 900 Uniqema Blvd., 243 Cherry Lane,
Nearest major intersection: Cherry Lane and New Castle Avenue
Area: About 177 acres
Surrounding Property: Surrounding land use is commercial/office and residential. Part of the Site is adjacent to the Delaware War Memorial Park.
Zoning: M-3 Heavy Industry
Site Utilities: The Site is served by public utilities but the Croda plant maintains its own water supply wells and waste water treatment facilities for production processes.
Surface water: Delaware River and Lukens Marsh
Topography: The topography of the Facility is relatively flat and slopes gently to the east, from an elevation of approximately +40 feet mean sea level (msl) on the western side to approximately +10 feet msl at the eastern boundary (the Delaware River).
Groundwater: The Site overlays the Columbia and Potomac aquifers which are both important water supplies. A supply well belonging to the Artesian Water Company is located about 1/2 mile from the Site. Groundwater flow direction varies across the Site and is influenced by production water supply wells.

What happened at the Atlas Point Site? A chemical plant has existed on the property since 1936 producing a wide range of products. Throughout this period of operation, numerous small spills and incidents occurred which resulted in contamination of soil, sediment and ground water. There were also a number of locations on the property that were designated waste disposal areas for both solid and liquid wastes.

What is the environmental problem at the Atlas Point Site? The most significant environmental problem at the Site is the contamination of the ground water by bis (2-choroethyl) ether (BCEE) which will be addressed by a separate Proposed Plan of Remedial Action for OU-2. BCEE has also been found in soil and sediment. The remaining soil and sediment problem at the Site requiring active remediation is located in a flow channel and former shallow pond designated as Area of Concern AN (see Figure 6). This area was subjected to discharges from the production areas of the plant and also from paved parking lots. These practices left residual contamination in soils and sediments. Seventeen substances were identified above DNREC's Uniform Remediation Standards (URS) including carbon disulfide, BCEE, poly chlorinated biphenyls (PCBs), pesticides and metals (aluminum, barium, copper, lead, magnesium, mercury, nickel, selenium and zinc).

What does the owner want to do at the Atlas Point Site? The present owners, Croda Inc. and FujiFilm, plan to continue operation of their respective plants. Arch Chemicals has one laboratory building which has temporarily ceased operations and BioMed Realty maintains one office building and one laboratory building which have temporarily ceased operations on the Site. Croda will continue to work with DNREC for the investigation and remediation of the Site under the HSCA Voluntary Cleanup Program.

What clean-up actions have been taken at the Atlas Point Site? Over the course of the remedial investigation, DNREC identified 84 "areas of concern" (AOCs) where a potential release may have occurred to the soil or sediment by plant operations or spills. In addition, investigations were conducted at Magazine Ditch and Lukens Marsh. The "Summary of AOCs – Operable Unit 1" attached to this proposed plan summarizes the location, chemical contamination, and status of each area. Figure 2 shows the Site layout and property boundaries. Figures 3, 4, and 5 show the location of the AOCs. -All of the areas except for Area AN have been either remediated through removal of contaminated soil and sediment or through DNREC's determination that the human health and ecological risk of the residual contamination, if any, does not warrant active cleanup.

What additional clean-up actions are needed for contaminated soil and sediment at the former Atlas Point Site? DNREC proposes that the remaining contaminated soil and sediment found in AOC AN be addressed through excavation, removal from the Site, and capping. Institutional controls shall be placed upon the property to address residual contamination in AOC AN and other Areas of Concern throughout the property.

Remedial Action for AOC AN:

- The PCB hotspots in AOC AN will be excavated and remediated according to the requirements of the federal Toxic Substance Cleanup Act, following review and approval of the work plan by the US EPA. The cleanup standard shall be a concentration of total PCBs in soil of 25 mg/kg, consistent with the "low occupancy" designation described in the federal regulations.
- In the wetted area of the channel outside the PCB hotspots, contaminated sediment will be excavated to a depth of one-foot below the present grade. The material will be replaced with clean soil.
- Outside of the wetted area, there are two small areas of buried contaminated sediment. In these areas, the overlying uncontaminated soil will be removed and contaminated material will be excavated and disposed of off-site. In addition, there are three localized areas outside of the channel within the native soils where excavation and disposal off-site will be conducted. Clean soil will be used to bring the surface up to the existing grade.

Remedial Action for the Site as a whole:

- An environmental covenant shall be attached to the deed of the property where contamination remains in Areas of Concern in excess of applicable remediation standards. The covenant shall restrict the property to industrial or commercial uses and shall restrict disturbance of subsurface soils in the Areas of Concern without prior notification to DNREC. The Areas of Concern subject to restriction are shown on Figures 2 through 4.
- Croda shall prepare a Long Term Stewardship Plan, subject to DNREC approval, designating the procedures for maintaining the integrity of caps or covers in place to prevent migration of or contact with contamination in Areas of Concern.

What are the long term plans for the Atlas Point Site after the cleanup? Croda Inc. and FujiFilm plan to continue to operate their respective production facilities on the Site. Arch Chemicals has ceased operations and BioMed Realty will continue to maintain an office complex. No land use change is anticipated. Upon completion and confirmation sampling of Area AN and submittal of the final documentation that any required active remediation is complete for all AOCs in Operable Unit 1, as summarized in Table 1, the Site will be eligible for a Certificate of Completion of Remedy for Operable Unit 1, Soil and Sediment from DNREC.

How can I find additional information or comment on the Proposed Plan?

The complete file on the Site including the Remedial Investigation and Interim Action Reports are available at the DNREC office, 391 Lukens Drive in New Castle. Most documents are also found on:

http://www.nav.dnrec.delaware.gov/DEN3

The 20-day public comment period begins on Sunday, August 21, 2011 and ends at 4:30pm on Monday, September 12, 2011. Please send written comments to the DNREC office or call Stephen F. Johnson, PE, Project Manager or Robert Newsome, Public Information Officer, at 302.395.2600.

SFJ:tlw
SFJ11010.doc
DE 0049 II B 8

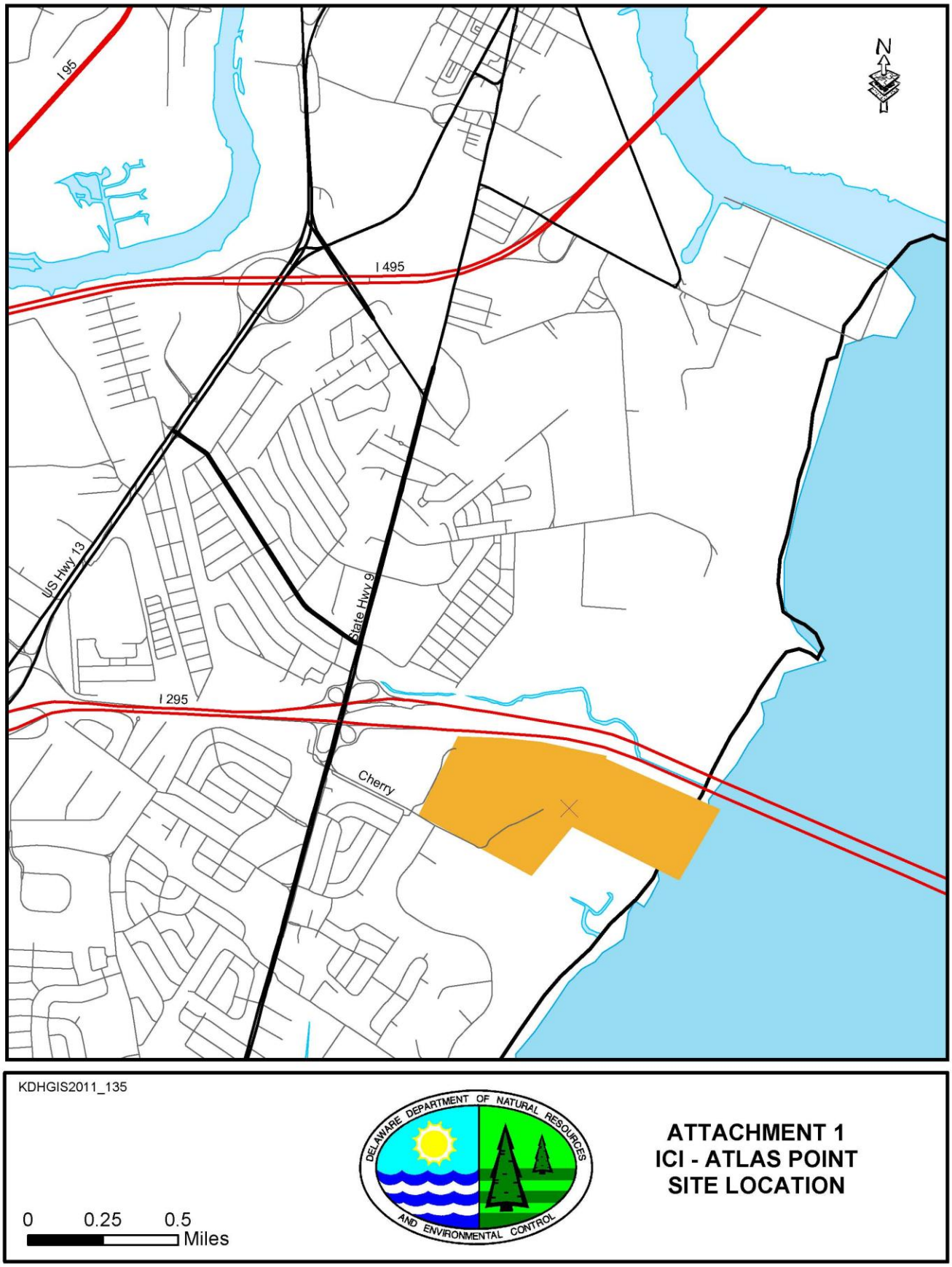

Figure 1. Site Location Map.

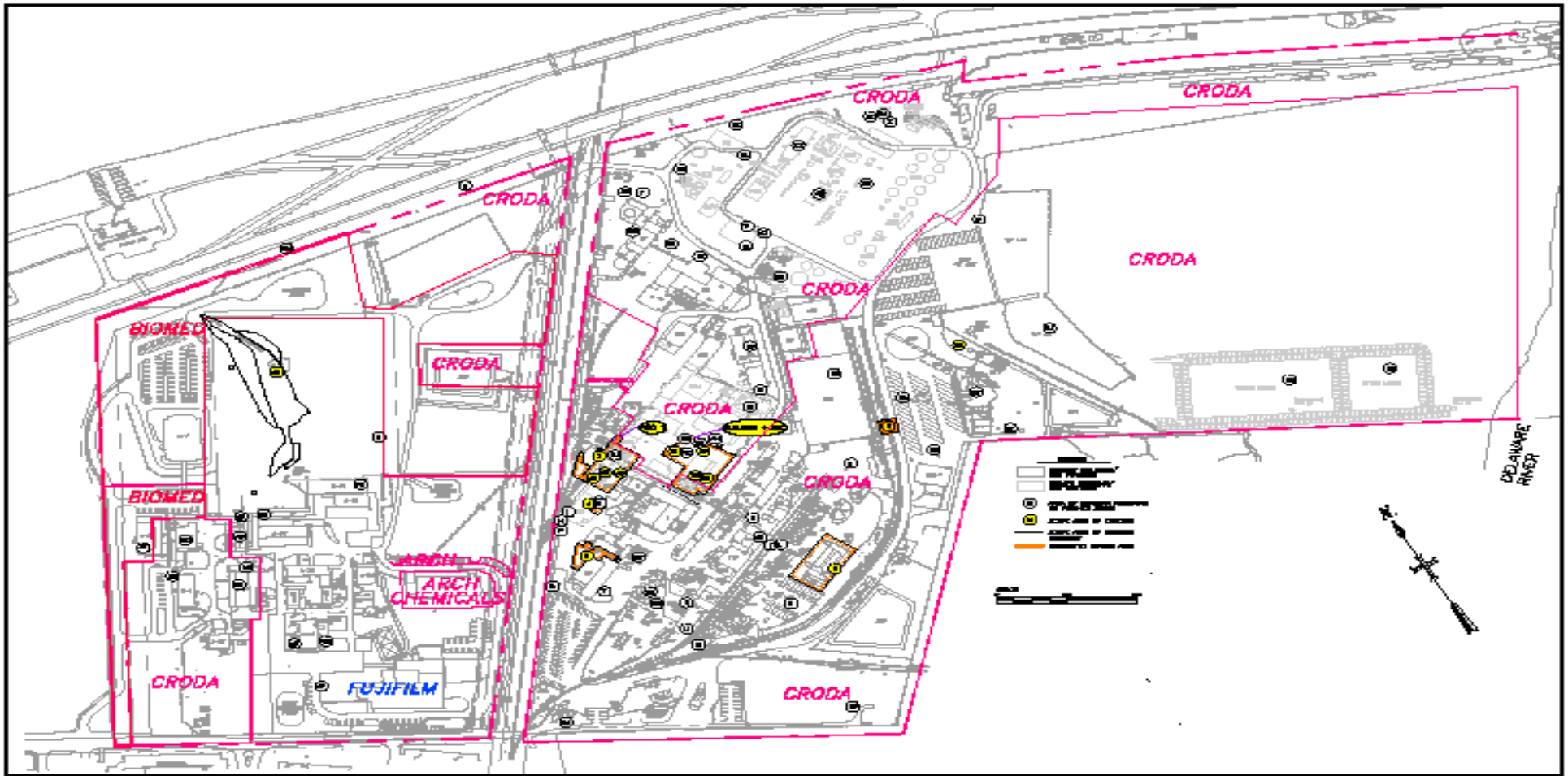

Figure 2. Area of Concern Locations.

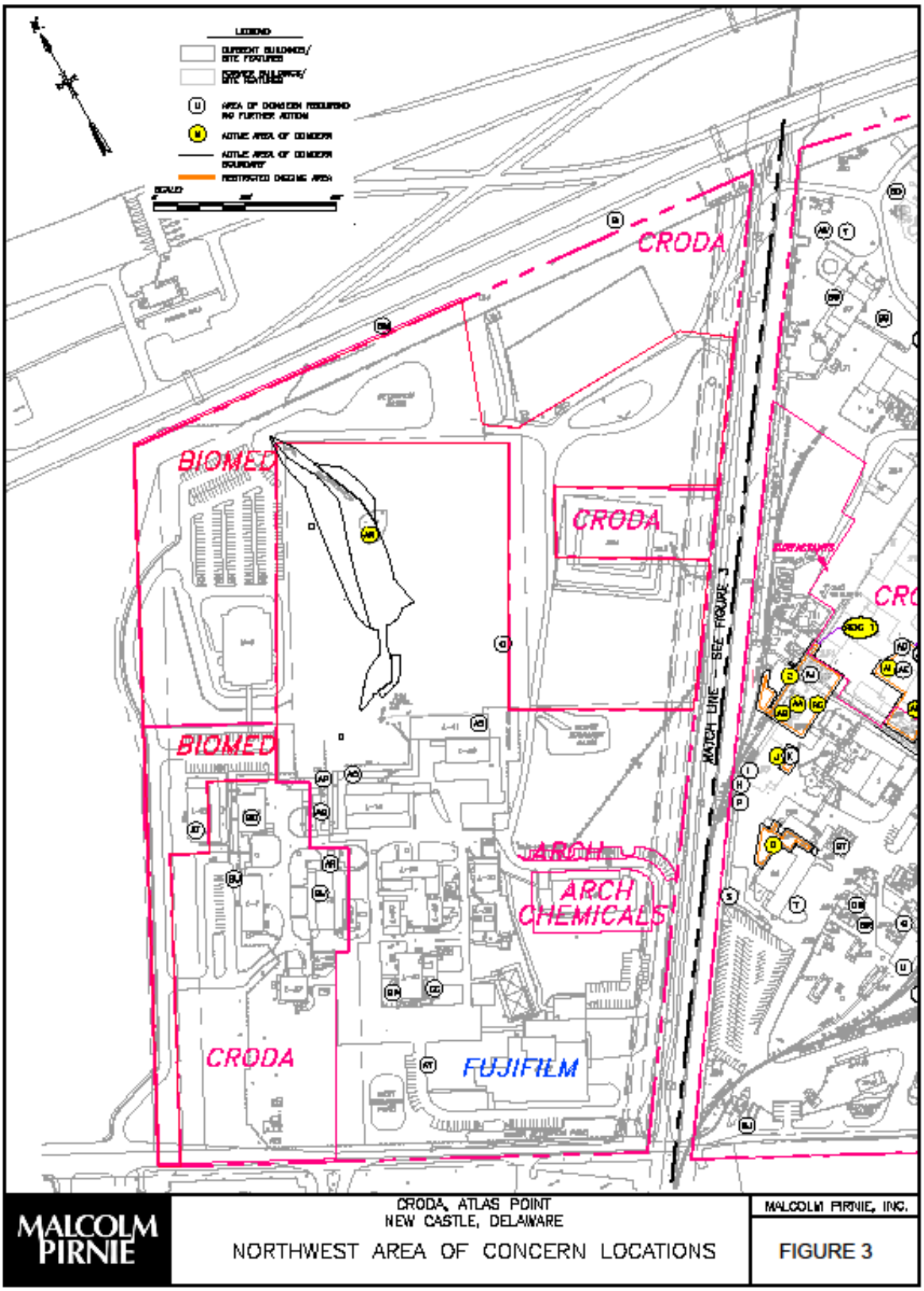

Figure 3. Northwest Area of Concern Locations

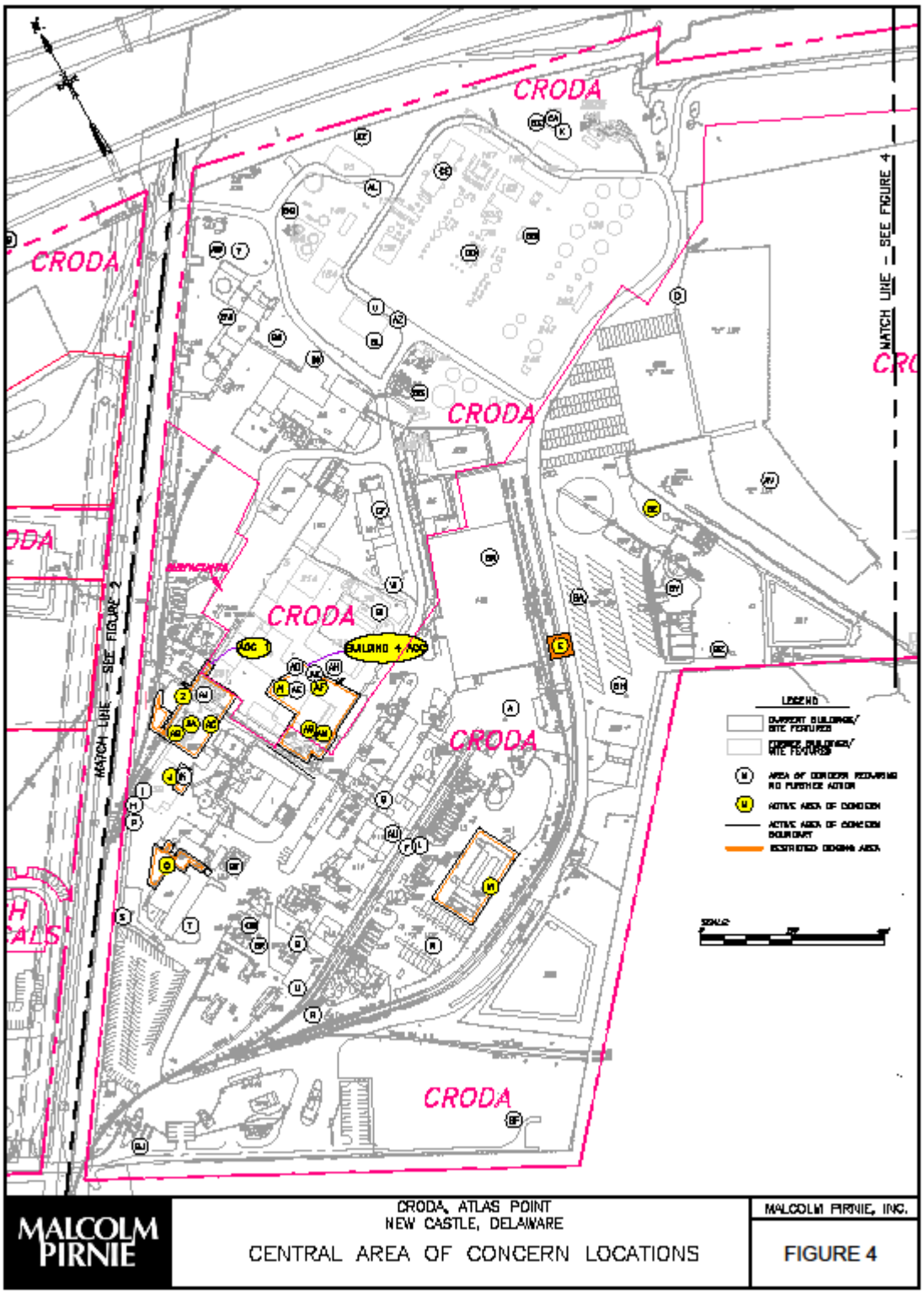

Figure 4. Central Area of Concern Locations

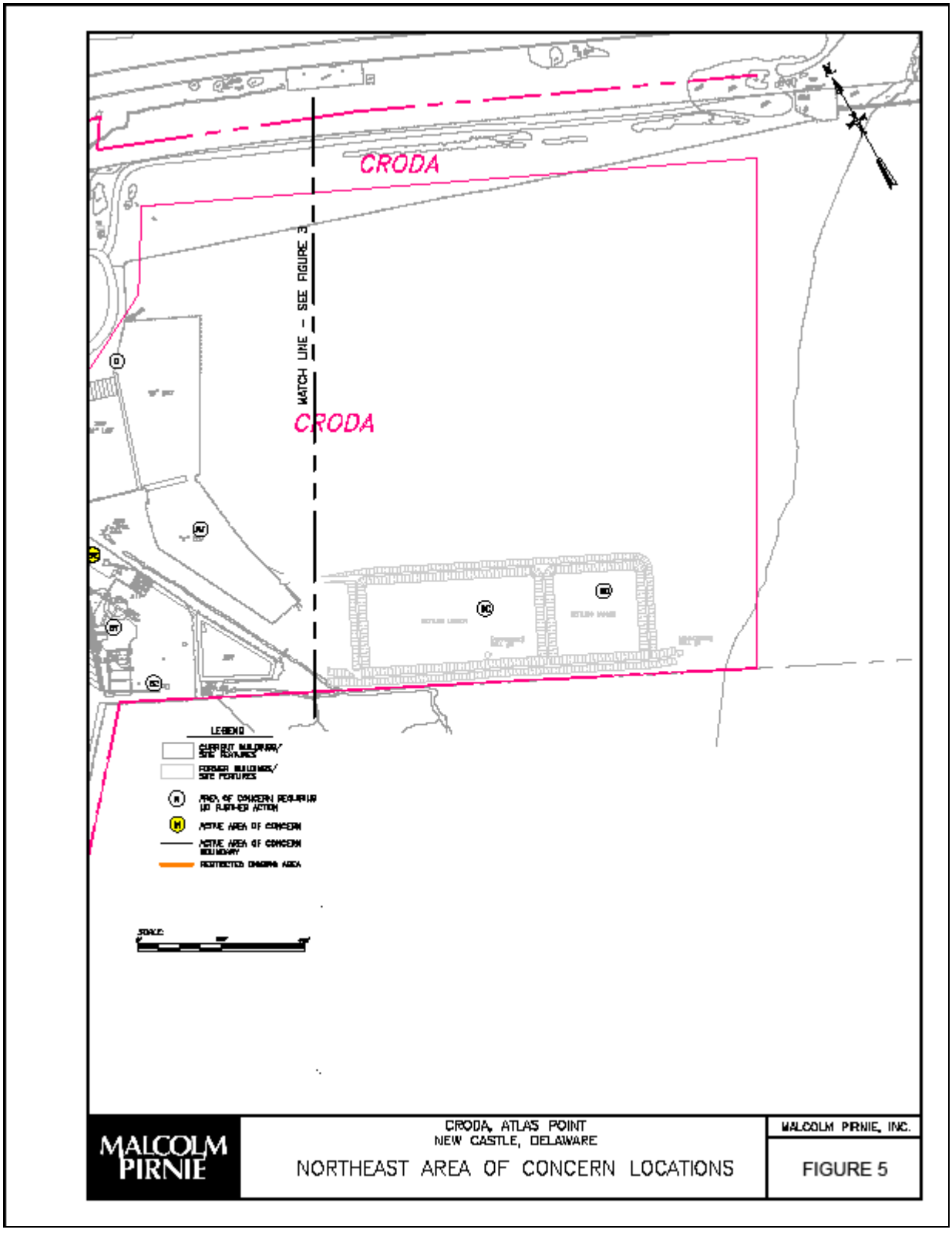

Figure 5. Northeast Area of Concern Locations.

Figure 6. Features of AOC AN located approximately 200 feet south of I-295.

Glossary of Terms Used in this Proposed Plan

Area of Concern (AOC)	A discrete section of the Site representing the local bounds of contamination in soil or ground water.
Contaminant of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels.
Certificate of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's proposal for cleaning up a hazardous site after it has been reviewed by the public and finalized.
Hazardous Substance Cleanup Act (HSCA)	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
Poly chlorinated biphenyls (PCBs)	A synthetic, carcinogenic chemical formerly used in a wide variety of industrial applications but banned from most uses by the US EPA in 1979.
Proposed Plan of Remedial Action	A plan for cleaning up a hazardous site developed by DNREC and subject to public comments.
Risk	Likelihood or probability of injury, disease, or death.
Risk Assessment Guidance for Superfund (RAGS)	An EPA guidance document for superfund sites
Toxic Substance Cleanup Act (TSCA)	The federal statute requiring and regulating the cleanup of PCBs.

What is a *Proposed Plan?*

A Proposed Plan of Remedial Action (Proposed Plan) is a summary of how DNREC plans to clean up a contaminated site. A Final Plan of Remedial Action (Final Plan) is the adoption of the Proposed Plan, after all comments made by the public within the comment period of twenty days have been considered and addressed by DNREC.

The Delaware State Legislature passed the Hazardous Substance Cleanup Act (HSCA) in 1990. The Legislature made sure that members of the public would be informed about environmental problems in their own neighborhoods and have a chance to express their opinion concerning the clean up of those environmental problems before DNREC takes action.

After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. All of the documents and reports created by DNREC or consultants during the course of the investigation of the site are available to the public at the offices of DNREC-SIRB or at DNREC's website:

http://www.nav.dnrec.delaware.gov/DEN3

DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of the News Journal and/or the Delaware State News. The public comment period begins on the day (Wednesday), or the day after (Sunday) the newspaper publishes the legal notice for the Proposed Plan.

DNREC frequently holds public meetings during the comment period. Those meetings are usually held near the site in the evening. Citizens can request a public meeting if DNREC did not already schedule one.

Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

AOC	AOC Description	COCs	AOC Status
A	Former on-site solid waste disposal area located between Buildings 109 and 148. Used from 1937 to 1945.	NA	No further action per DNREC approval of Phase I RIR[1].
B	Former on-site solid waste disposal area located across Conrail RR tracks north of Building 97. Used from 1946 to 1949. All or part of area now State property.	NS	No further action per DNREC approval of Phase I RIWP[2].
C	Former Solid Waste Disposal Area	PCBS, pesticides, and metals	No further action - remediation complete. No further action per DNREC October 7, 2002 letter.
D	Former on-site solid waste	Biphenyl, Dibenzofuran, and 1,1:2,1- terphenyl	No further action per DNREC approval of Phase I RIR[1].
E	Delaware River dredging disposal area used by Army Corps of Engineers.	Mercury	No further action per DNREC's August 8, 2010 letter approving the July 2010 Closure Plan. Inspection and maintenance program in effect at the Facility to facilitate communication for restricted excavation area. AOC to be included in HSCA Operable Unit 1 Operation and Maintenance Plan (O&M Plan).
F	Building 100 (#4 Kettle) track area.	Biphenyl and lead	No further action per DNREC approval of Phase I RIR[1].
G	Original 1937 PA wastewater outfall located just north of Building 110.	NS	No further action per DNREC approval of Phase I RIR[1]. Removed as an AOC; ICI Letter of November 25, 1997.

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

AOC	AOC Description	COCs	AOC Status
H	Former #3 Kettle hot well overflow to sewer (1945-1976).	Ethylbenzene and toluene	No further action per DNREC approval of Phase I RIR[1].
I	Surface water drain near RR track area north of Building 30.	Benzene	No further action per DNREC approval of Phase II RIR[3].
J	Former Dowtherm boiler and storage tank	Biphenyl	No further action required because capping remediation complete in accordance with DNREC approved Closure Plan dated February 2007. Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.
K	Former 1,000 gallon fuel oil UST located outside of Building 30 (removed in mid-1995).	Total petroleum hydrocarbons	No further action per DNREC approval of Phase II RIR[3].
L	Former 2,000 gal fuel oil UST located east of Building 100 and 7 feet east of RR tracks (removed in June 1995).	Total petroleum hydrocarbons	No further action under HSCA per DNREC approval of Phase I WP[2].

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

AOC	AOC Description	COCs	AOC Status
M	Former waste accumulation area	Lead, mercury, and biphenyl	No further action required because remediation completed by constructing a concrete drum storage pad which provides engineering control as approved in DNREC February 23, 1998 letter. Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.
N	Former empty, un-rinsed raw material drum storage area.	Surfactants	No further action per DNREC approval of Phase I RIR[1].
O	Former Drum Storage Area	bis (2-chloroethyl) ether (BCEE)	No further action required because remediation complete by partial excavation and capping as approved in DNREC December 30, 2002 letter. Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.
P	Former phenol drum melting pit.	NA	No further action per DNREC approval of Phase I RIR[1].
Q	Ejector discharge point in area of present #4 autoclave loading tank system.	NA	No further action - remediation completed as a capital improvement project. No further action per DNREC August 29, 1997 letter.

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

AOC	[redacted]	[redacted]	[redacted]
R	Former tank car washing station.	NA	No further action per DNREC approval of Phase II RIR[3].
S	Field behind Building 80.	NA	No further action per DNREC approval of Phase I RIR[1].
T	Cement ramp to Building 80.	NA	No further action per DNREC approval of Phase I RIR[1].
U	Storage pad south of Building 112.	NA	No further action per DNREC approval of Phase I RIR[1].
V	Former 8,250 gallon fuel oil UST (closed in-place 9/82).	Total petroleum hydrocarbons	No further action per DNREC May 9, 1996 letter.
W	Abandoned sump.	Iron and cadmium	No further action per DNREC approval of Phase I RIR[1].
X	Site of historic MEA spill.	NA	No further action per DNREC approval of Phase I RIR[1].
Y	30,000 gallon heating oil UST north of power house (Building 97) across RR tracks that services the power house.	NA	No further action under HSCA per DNREC approval of Phase I RIWP[2].

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

Z	Now part of AOC 1. # 3 Railroad track north of Building 3	Benzene, ethylbenzene, toluene, xylenes, naphthalene, BCEE, and lead	AOCs Z, AA, AB, and AC consolidated and Re-named AOC 1. No further action required because capping remediation complete in accordance with Closure Plan dated February 2007 approved in DNREC April 8, 2007 letter. Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.
AA	Now part of AOC 1. Former lead and mercury recovery system associated with former electrolytic sorbitol process west of Building 3.	Lead and mercury	
AB	Now part of AOC 1. Just west of tanks at loading dock Building 3	Lead, mercury, zinc, and benzene.	
AC	Now part of AOC 1. Site of former tank (at least partially underground) used for fuel oil and spent sulfuric acid.	Benzene	
AD	Location of former mercury sump in northeast corner of Building 4.	NA	No further action per DNREC approval of Phase I RIR[1].
AE	Location of product coolers used in former electrolytic sorbitol process. Were installed near wall of Building 4-68 adjoining courtyard.	NA	No further action per DNREC approval of Phase I RIR[1].

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

AF	Now part of Building 4 AOC. Two former wooden ASTs used in former electrolytic sorbitol process were located just outside NE corner of Building 4-72.	Lead and mercury	AOCs AF, AG, AI and AM consolidated and Re-named Building 4 AOC.
AG	Now part of Building 4 AOC. Pit which housed accumulation tank and circulation pump for former electrolytic cells.	Biphenyl	No further action required because capping remediation complete as approved in DNREC May 10, 2006 letter.
AI	Now part of Building 4 AOC. Manhole in eastern corner of Building 4 courtyard.	Lead and mercury	Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.
AM	Now part of Building 4 AOC. Site of former fuel oil UST located by Building 4-72.	Mercury, biphenyl, naphthalene, and dibenzofuran	
AH	Location of product coolers for former E Battery cells.	NA	No further action per DNREC approval of Phase I RIR[1].
AJ	Former lead processing area.	NA	No further action per DNREC approval of Phase II RIR[3].
AK	Former electrolytic hydrogen cell room.	NA	No further action per DNREC approval of Phase I RIR[1].
AL	Former coke storage bins just south and adjacent to Building 95.	NS	No further action per DNREC approval of Phase I RIWP[2].
AN	Drainage channel and former pond area.	Pesticides, PCBs, and metals.	Remedial Action Work Plan scheduled to be submitted fourth quarter 2011. Proposed work includes excavation, off-site disposal and capping. Operation and maintenance program will be put in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

AO	Former septic tank system under pad behind L-16.	NA	No further action per DNREC approval of Phase I RIR[1].
AP	Former solvent disposal system.	NA	No further action per DNREC approval of Phase I RIR[1].
AQ	Solvent drum storage rack and dispensing station.	NA	No further action per DNREC approval of Phase I RIR[1].
AR	Former temporary drum storage location.	NA	No further action per DNREC approval of Phase I RIR[1].
AS	Former drum storage location.	NA	No further action per DNREC approval of Phase I RIR[1].
AT	Former 550 gallon gasoline UST (removed 12/93).	NA	No further action under HSCA per DNREC approval of Phase I RIWP[2].
AU	#4 Kettle basement drain to marsh.	NS	No further action per DNREC approval of Phase I RIWP[2].
AV	Sludge pile from cleaning out wastewater treatment plant equalization and neutralization tanks.	NS	No further action per DNREC approval of Phase I RIWP[2].
AW	Former coal storage area north of power house to RR property.	NA	No further action per DNREC approval of Phase I RIR[1].
AX	Ash pile from former production of producer gas.	NA	No further action per DNREC approval of Phase I RIR[1].
AY	Historic caustic spills at Chemical Engineering Laboratories portion of the Facility.	NS	No further action per DNREC approval of Phase I RIWP[2].
AZ	Brine pit for ion exchange regeneration.	Biphenyl	No further action per DNREC approval of Phase II RIR[3].
BA	Former coal ash and cinder storage area.	Mercury	No further action per DNREC approval of Phase II RIR[3].
BB	Former 30,000 gallon heating oil UST	NA	No further action under HSCA per DNREC approval of Phase I RIWP[2].

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

BC	Two former settling lagoons.	SVOCs, pesticides, and metals.	No further action - remediation complete. Remediation to the site- specific standards was achieved. Closure Report submitted to DNREC October 2009.
BD			No further action per DNREC approval in its December 1, 2009 and March 10, 2010 letters.
BE	Former unlined ditch to raw waste tanks.	VOCs and SVOCs	No further action required because capping remediation complete in accordance with DNREC approved Closure Plan dated April 2010 and approved in DNREC correspondence dated May 11, 2010.
BF	Former scrap metal accumulation area.	NA	No further action per DNREC approval of Phase I RIR[1].
BG	Historic aromatic petroleum solvent spill.	NA	No further action per DNREC approval of Phase I RIR[1].
BH	Historic fiber pack and wood pallet burning area.	NA	No further action per DNREC approval of Phase I RIR[1].
BI	Former building drain.	NA	No further action per DNREC approval of Phase I RIR[1].
BJ	Former Two 3,000 gallon gasoline USTs and one 3,000 gallon diesel UST removed 12/88.	NA	No further action under HSCA per DNREC approval of Phase I RIWP[2].
BK	Pit in Building 88.	NA	No further action per DNREC approval of Phase I RIR[1].
BL	Pit in Building 87.	NA	No further action per DNREC approval of Phase I RIR[1].
BM	Drainage swale to Magazine Ditch.	NA	No further action per DNREC approval of Phase I RIWP[2].
BN	Former storage area for drums of powdered nickel catalyst.	NS	No further action per DNREC approval of Phase I RIWP[2].

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

BO	Historic methylene chloride spills.	NS	No further action per DNREC approval of Phase I RIWP[2].
BP	Historic acetone and toluene spills at L-44.	NS	No further action per DNREC approval of Phase I RIWP[2].
BQ	Current sulfuric acid handling facility.	NA	No further action per DNREC approval of Phase I RIR[1].
BR	Culvert near Building 183.	NA	No further action per DNREC approval of Phase I RIR[1].
BS	Electrical Substation #3.	NA	No further action per DNREC approval of Phase I RIR[1].
BT	#1 Substation (Building 183).	NA	No further action per DNREC approval of Phase I RIR[1].
BU	Transformer at Building L-1.	PCB	NFA approved by DNREC in its December 12, 1997 letter.
BV	Building L-13 surfactants pilot plant.	NS	No further action per DNREC approval of Phase I RIWP[2].
BW	Transformer at Building 97.	NS	No further action per DNREC approval of Phase I RIWP[2].
BX	Transformer at Building 181.	NA	No further action per DNREC approval of Phase I RIR[1].
BY	Transformer at Building 205.	NS	No further action per DNREC approval of Phase I RIWP[2].
BZ	Transformer at Substation 170.	NA	No further action per DNREC approval of Phase I RIR[1].
CA	Cooling Tower 181 area.	NA	No further action per DNREC approval of Phase I RIR[1].
CB	Cooling Tower 203 area.	NA	No further action per DNREC approval of Phase I RIR[1].

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

CC	Historical Dowtherm™ - G spill area at L-44.	NA	No further action per DNREC approval of Phase I RIR[1].
CD	Former glycerin distillation area.	NA	No further action per DNREC approval of Phase I RIR[1].
CE	Nickel catalyst building area.	Nickel	No further action per DNREC approval of Phase II RIR[3].
CF	Maintenance Building area.	NA	No further action per DNREC approval of Phase I RIR[1].
Magazine Ditch	Drainage Areas/Channels receiving Plant discharge north of the Site.	NA	No further action per DNREC's October 2, 2006 letter approving the November 2002 Phase II Screening-Level Environmental Risk Assessment.
Lukens Marsh	Drainage Areas/Channels receiving Plant discharge south and east of the Site.	NA	No further action per DNREC's October 2, 2006 letter approving the November 2002 Phase II Screening-Level Environmental Risk Assessment.
AOC 1	AOCs Z, AA, AB, and AC consolidated and Re-named AOC 1.	See individual AOCs above for COCs.	No further action required because capping remediation complete in accordance with DNREC approved Closure Plan dated February 2007. Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.
Building 4 AOC	AOCs AF, AG, AI and AM consolidated and Re-named Building 4 AOC.	See individual AOCs above for COCs.	No further action required because capping remediation complete as approved in DNREC May 10, 2006 letter. Operation and maintenance program in effect to facilitate communication for restricted excavation area and evaluate and maintain cap integrity. AOC to be included in HSCA O&M Plan.

TABLE 1
SUMMARY OF AREAS OF CONCERN (AOCS) – Operable Unit 1

Table 1 Notes:
Additional details regarding AOC status can be found in the referenced documents.

AOC - Area of Concern.
NA - Not Applicable. If the target constituents that were analyzed for at a particular AOC were either not detected or detected below DNREC Screening Levels, then it is concluded that there are no COCs at that AOC. Therefore, COCs are not applicable.
NS - No samples collected for laboratory analyses
NFA - No Further Action
COC - Contaminant of concern
RIWP - Remedial Investigation Work Plan
RIR - Remedial Investigation Report
UST - Underground Storage Tank
VOCs - Volatile Organic Compounds
SVOCs Semi-volatile Organic Compounds
[1] - AOC approved for NFA based on NFA recommendation in September 1998 Phase I RI Report. Phase I RI Report approved by DNREC in letter dated November 9, 1998.
[2] - Phase I RI Work Plan. Phase I RI Work Plan approved by DNREC in letters dated October 17, 1996, October 31, 1996, and August 28, 1997.
[3] - AOC approved for NFA based on NFA recommendation in October 1999 Phase II RI Report. Phase II RI Report approved by DNREC in letter dated January 26, 2000.

Glossary of Terms Used in this Proposed Plan

Area of Concern (AOC)	A discrete section of the Site representing the local bounds of contamination in soil or ground water.
Contaminant of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels.
Certificate of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's proposal for cleaning up a hazardous site after it has been reviewed by the public and finalized.
Hazardous Substance Cleanup Act (HSCA)	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
Poly chlorinated biphenyls (PCBs)	A synthetic, carcinogenic chemical formerly used in a wide variety of industrial applications but banned from most uses by the US EPA in 1979.
Proposed Plan of Remedial Action	A plan for cleaning up a hazardous site developed by DNREC and subject to public comments.
Risk	Likelihood or probability of injury, disease, or death.
Risk Assessment Guidance for Superfund (RAGS)	An EPA guidance document for superfund sites
Toxic Substance Cleanup Act (TSCA)	The federal statute requiring and regulating the cleanup of PCBs.

What is a *Proposed Plan?*

A Proposed Plan of Remedial Action (Proposed Plan) is a summary of how DNREC plans to clean up a contaminated site. A Final Plan of Remedial Action (Final Plan) is the adoption of the Proposed Plan, after all comments made by the public within the comment period of twenty days have been considered and addressed by DNREC.

The Delaware State Legislature passed the Hazardous Substance Cleanup Act (HSCA) in 1990. The Legislature made sure that members of the public would be informed about environmental problems in their own neighborhoods and have a chance to express their opinion concerning the clean up of those environmental problems before DNREC takes action.

After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. All of the documents and reports created by DNREC or consultants during the course of the investigation of the site are available to the public at the offices of DNREC-SIRB or at DNREC's website:

http://www.nav.dnrec.delaware.gov/DEN3

DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of the News Journal and/or the Delaware State News. The public comment period begins on the day (Wednesday), or the day after (Sunday) the newspaper publishes the legal notice for the Proposed Plan.

DNREC frequently holds public meetings during the comment period. Those meetings are usually held near the site in the evening. Citizens can request a public meeting if DNREC did not already schedule one.

Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.