

Tracking Number

5339



NEED

2/20/10
John
DWK with original signature

SHWMB

Branch

Action Requested

Originator Information

For Your Approval/Signature

Contact Person: Bryan Ashby phone #: 302-739-9403

Review & Comment

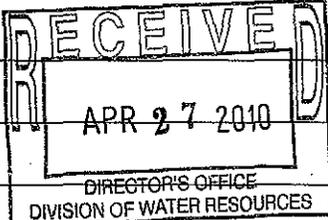
Topic: Memorandum of Agreement for Former DuPont Glasgow Facility SWMU 13 now Air Liquide Facility

For Your Information

DUE DATE: April 22, 2010

Approvals Required Prior to Final Submission

Name	Initials	Date
Bryan Ashby	4/15/10	Bryan Ashby
Nancy Marker	4/19/10	Nancy Marker
Marjorie Crofts	4.26.10	Marjorie Crofts
Katherine Bunting - Howarth	4/28/10	Katherine Bunting - Howarth
John Barndt	4-27	John Barndt
Scott Strahmeier		Scott Strahmeier



Brief Description of Action Requested from Director:

A Groundwater Management Zone to cover SWMU 13 of the former DuPont Glasgow site. After years of monitoring levels are shown to be low enough to not cause great concern but still slightly over drinking water standards. The GMZ will prevent groundwater from being withdrawn for use as drinking water.

Please sign

After Director - forward to: Denise Daniel

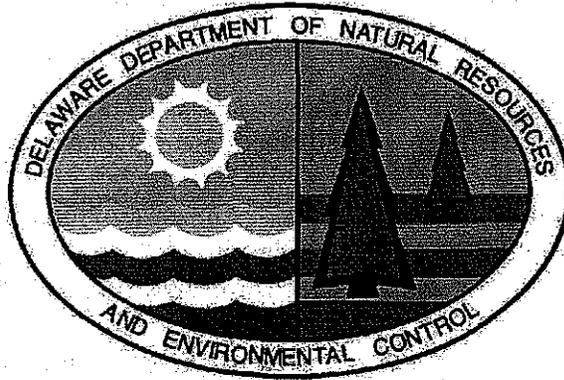
Final Distribution to: Denise Daniel by: _____

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

MEMORANDUM OF AGREEMENT

BETWEEN
DIVISION OF AIR AND WASTE MANAGEMENT
AND
DIVISION OF WATER RESOURCES



FOR
FORMER DUPONT GLASGOW FACILITY SWMU 13
NOW
AIR LIQUIDE FACILITY
GLASGOW, DELAWARE

March 2010

Whereas, the Former DuPont Glasgow Facility has been investigated by the Delaware Department of Natural Resources and Environmental Control (DNREC), Solid and Hazardous Waste Management Branch in conjunction with the United States Environmental Protection Agency (EPA) under the provisions of the Administrative Order on Consent RCRA-III-045-CA dated August 5, 1991; and

Whereas, the findings are available in the RCRA Facility Investigation Task 1, Description of Current Conditions, dated October 1991, which is contained in the administrative record; this report documents the extent of groundwater contamination within the site boundaries; and

Whereas, investigations conducted at the site detected concentrations of Tetrachloroethylene (PCE) in groundwater exceeding the uniform risk based standards within solid waste management unit (SWMU) 13; and

Whereas, the final remedy for SWMU 13 is outlined in the Explanation of Significant Differences and Corrective Action Completed issued by the EPA, dated February 25, 2010; and

Whereas, the DNREC Division of Air and Waste Management is responsible for ambient air quality and solid and hazardous waste management in the State of Delaware; and

Whereas, the DNREC Division of Water Resources (DWR) is responsible for management of the withdrawal of the waters of the State of Delaware; and

Whereas, DNREC intends to formally establish a groundwater management zone (GMZ) for a portion of the site, consistent with Subsections 2.2, 3.2, 3.6, 4.2, and 4.4 of Delaware's Comprehensive State Groundwater Protection Program (CSGWPP); and

Whereas, the near-surface water bearing unit beneath the site is part of the Columbia Formation, which is an approximately 30 feet thick unit of sand with some silt and a saturated thickness of 15 feet; beneath the Columbia Formation is a silty clay unit of the Potomac Formation of over 30 foot thickness that acts as a confining unit for the deeper Potomac Formation aquifers; and

Whereas, the Columbia Formation has been impacted by a release at the site; and

Whereas, the DNREC has determined that a GMZ for the site is appropriate for management of potential releases at the site and the protection of the public from exposure to chemicals of concern via groundwater contamination; and

Whereas, this GMZ agreement does not replace any future or existing remedial action at the site; and

Whereas, the site consists primarily of New Castle County tax parcel 11-022.00-021 (Lot 2A-2B; 5.36 acres) and tax parcel 11-022.00-012 (Lot 2A-1; 16.14 acres) and comprises

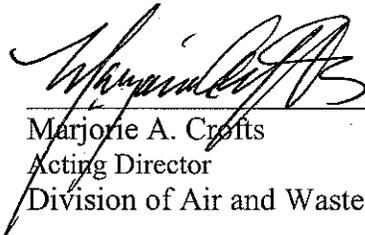
a total area of 21.50 acres near Glasgow, New Castle County, Delaware (Attachment 1);
and

Whereas, Attachments 2 & 3 define the areal extent of the GMZ.

Now, therefore, it is agreed by DAWM and DWR as follows:

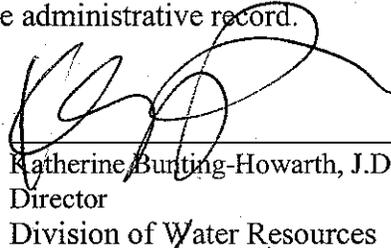
1. A GMZ shall be established to include portions of the site as defined in both the text above and on Attachments 2 & 3.
2. No new public or domestic water supply wells will be allowed or permitted within the site GMZ.
3. Non-potable wells (e.g., monitoring wells and contaminant recovery wells) may be installed in the GMZ following joint review and approval by the DWR and DAWM.
4. Permits for any wells in the GMZ may be issued by the DWR following joint review and approval by the DWR and DAWM.

This MOA may be modified or terminated only upon the agreement of both parties. Any modifications must be made in writing and signed by the Directors of the DAWM and the DWR. A copy of this MOA will be placed in the site administrative record.



Marjorie A. Crofts
Acting Director
Division of Air and Waste Management

Date: 4.26.10



Katherine Bunting-Howarth, J.D., Ph.D.
Director
Division of Water Resources

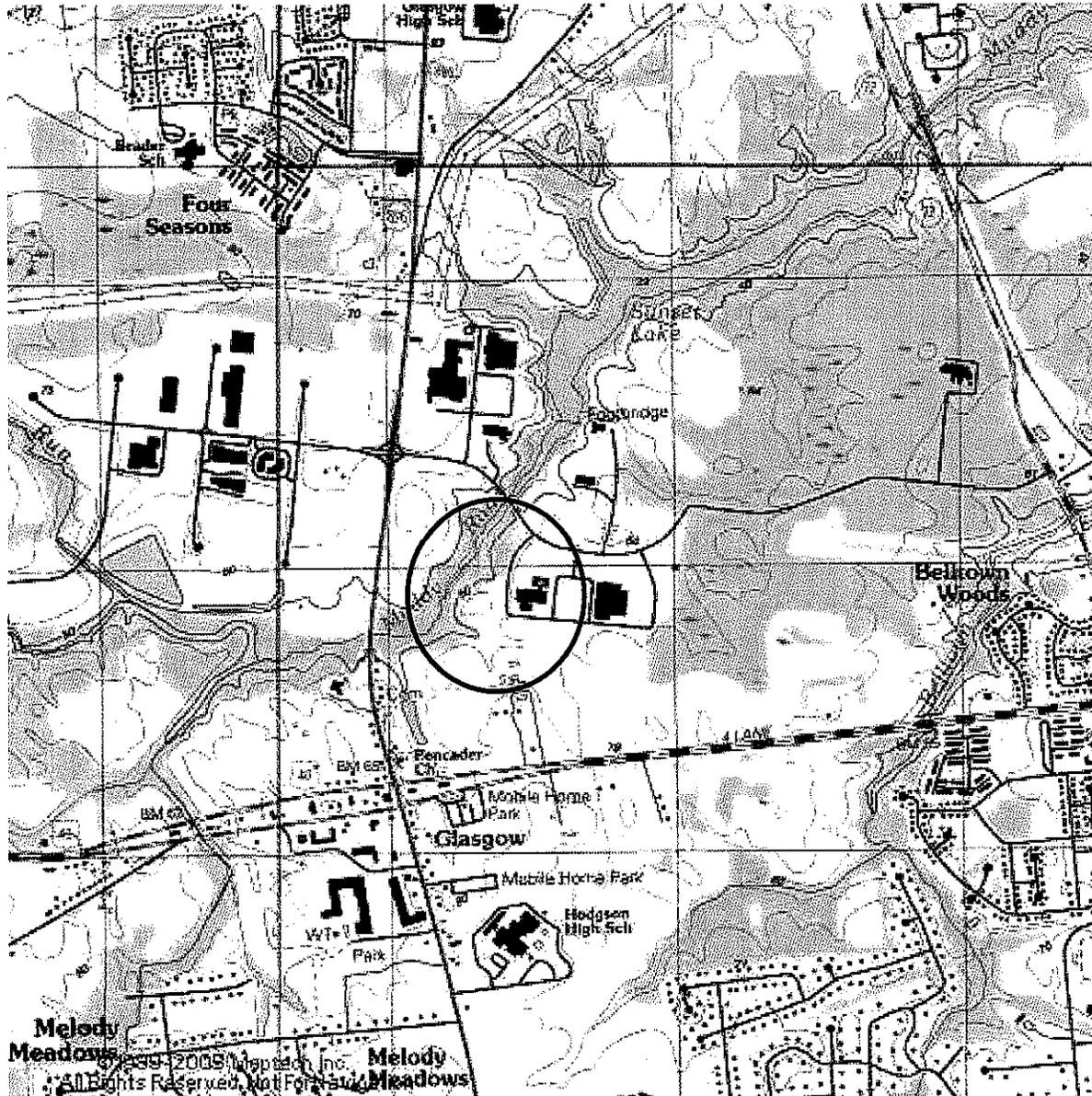
Date: 4/29/10

Attachments: Attachment 1, Site Location Map
Attachment 2, GMZ Boundary Map
Attachment 3, GMZ Boundary Description Document

BAA: DRZ: dtd
DuPont Glasgow\General Correspondence\DRZ10016

Cc: Doug Zeiters, DNREC SHWMB
Josh Kasper, DNREC DWR

Site Location Map



Former DuPont Glasgow Facility USGS St. Georges Quadrangle

Attachment 1

GMZ Boundary Map
Solid Waste Management Unit 13
Former DuPont Glasgow Facility



Limit of GMZ —————

Drawn by FMG

ATTACHMENT 3

GMZ Boundary Description

Solid Waste Management Unit 13

Former DuPont Glasgow Facility

The coordinate system is Universal Transverse Mercator (UTM), Zone 18 South.

SWMU 13:

Northeast Corner:	436,579.02 mE	4,384,956.64 mN
Northwest Corner:	436,219.01 mE	4,385,008.06 mN
Southwest Corner:	436,186.54 mE	4,384,889.75 mN
Southeast Corner:	436,563.32 mE	4,384,840.00 mN

These coordinates describe the red rectangle shown on the boundary map in Attachment 2.

Nancy - Background - Recent EPA action on the site.

**EXPLANATION OF SIGNIFICANT DIFFERENCES
And CORRECTIVE ACTION COMPLETED**

**DuPont Glasgow Business Community Facility
Glasgow, Delaware
RCRA ID: DED 042 263 764**

I. INTRODUCTION

The U.S. Environmental Protection Agency, Region III (EPA) is proposing to modify the selected corrective measure for the former DuPont Glasgow Business Community Facility (Facility). EPA proposes this modification to document that RCRA Corrective Action has been completed at this facility.

EPA prepared this Explanation of Significant Differences (ESD) to explain to the public why it is proposing to modify the selected corrective measure for the facility. This ESD summarizes the information that supports the corrective measures modification and completion of corrective action at this Facility. The corrective measures goal is to protect human health and the environment, and based on the data collected over the years, EPA proposes that the corrective measures goal has been met at this Facility.

EPA is proposing to remove two requirements from the Final Decision corrective measures (August 2000) for the Facility. First, EPA proposes to remove the requirement for the facility to maintain a deed notice for Solid Waste Management Unit (SWMU) 13 with New Castle County, Delaware. Other protective institutional controls will be placed on the property by the State of Delaware. Delaware's institutional controls will control groundwater use for drinking water purposes. Second, EPA proposes removing the requirement for on-going ground water monitoring at SWMU 13 because the contaminants of concern in groundwater are at or just above drinking water standards and are attenuating.

Once these two proposed requirements are removed from the corrective measures listed in the Final Decision dated August 2000, DuPont will have completed all RCRA Corrective Action requirements for this Facility. This ESD and the supporting documents are part of the Administrative Record for the Facility. The Administrative Record is located at the State of Delaware Department of Natural Resources and Environmental Control office at the address shown under Section VII. Information on the Corrective Action Program can be found at <http://www.epa.gov/reg3wcmd/correctiveaction.htm>

II. SUMMARY OF SITE HISTORY, CONTAMINATION AND THE SELECTED REMEDY

The Facility is located near the intersection of State Routes 896 and 40 in Glasgow, New Castle County, Delaware (see the attached location map). The current Facility consists of a 22-acre lot with two buildings, a parking lot and some open space. The Facility was originally part

of a 977-acre tract purchased by E.I. du Pont de Nemours & Company, Inc. (DuPont) in 1966. DuPont constructed several buildings for medical instrument systems and products manufacturing operations, with most of the site remaining undeveloped. DuPont sold 750-acres in 1995, only retaining a small fraction of the original property.

In August 1991, DuPont entered into an Administrative Order on Consent with EPA to study and remedy releases of contaminants at Solid Waste Management Units (SWMUs) and areas of concern (AOCs) at the Facility. EPA issued the Order under Section 3008(h) of the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984 (RCRA), 42 U.S.C. Section 6928(h).

EPA and DuPont identified 24 potentially contaminated areas in the Facility, and after further investigation, identified only six units which needed further study to determine if releases of contamination had occurred. Investigations found that releases occurred at the six units. DuPont investigated, removed contaminant sources or otherwise treated contamination at three of the six units to meet EPA's clean-up goals. The three remaining units needing further corrective action were listed in the Final Remedy decision document, which EPA issued in August 2000. The locations of the three units are shown on the attached location map.

The following discussion for the three remaining units explains what corrective measures were required at the three remaining units and what was completed.

1. SWMU 12 (Well No. 4): Well No. 4 supplied drinking and process water to the Facility. Well No. 4 was sampled in 1988 and volatile organic compounds (VOCs), mostly trichloroethylene (TCE) were found. The source(s) of contamination are unknown; however, uncontrolled disposal of chemicals is suspected. In 1990, DuPont installed a groundwater treatment system that pumped contaminated groundwater through air sparging and carbon absorption units to remove the VOCs. The system treated about 50 million gallons of groundwater a year. About ten years of treatment and groundwater sampling showed that the treatment system was successful in removing VOCs from the groundwater. In 2000, DuPont completed the final confirmatory groundwater monitoring requirements to document the removal of volatile organic compounds (VOCs) from the groundwater. The groundwater was cleaned-up to drinking water standards. Therefore, EPA Corrective Action is completed, and no further action (NFA) is necessary.

2. SWMU-13 (Permasep Building and groundwater plume): In 1993, DuPont encountered VOCs in soil while excavating at the Permasep Building. Subsequent groundwater investigations showed the same VOCs in groundwater in a plume associated with the Permasep Building. The contamination resulted from cleaning paint brushes in a drum using PCE outside the northern door to the building. In June 1999, DuPont removed the soil source of contamination located along the northern side of the Permasep building. A small portion of contaminated soil was left under the building (about 1.5 yds³) due to concerns about undermining the foundation and structural integrity of the building. The Final Remedy was for monitored natural attenuation of the low level VOCs in the groundwater, and recording a deed restriction/notification of contamination associated with the building with the County. Over nine years of groundwater monitoring data has shown that natural attenuation reduced the size of the plume and the amount of VOCs in groundwater, with VOC levels (PCE and cis-1,2-DCE) at or near EPA's drinking water levels (clean-up goal). Recent soil samples collected beneath the building are below EPA's clean-up goals. Therefore, EPA is proposing: (1) eliminating the requirement for the county deed restriction because State institutional controls are adequate for

restricting groundwater use at the facility, and (2) discontinuing groundwater monitoring. If there are no modifications to the proposal after public comment, then NFA will be required.

3. Area of Concern D: In 2002, DuPont excavated zinc and copper contaminated sediments from the drainage ditch, replaced pipe and lined the channel. This remedied the sediments and prevents any leaching of metals into the channel. Therefore, no further action is required.

III. DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE BASIS FOR CURRENT CHANGES TO THE SELECTED CORRECTIVE MEASURE

This ESD proposes to modify or update the selected corrective measures of the Final Remedy Decision issued by EPA in 2000, with no further corrective action required for this Facility. Delaware DNREC will designate SWMU-13 as a groundwater management zone (GMZ). The GMZ designation restricts groundwater use. If a property owner applies to the State for a groundwater permit and the area is designated as a GMZ, then Delaware can deny the request, and/or impose conditions in the permit to protect human health and the environment. Currently, State restrictions do not allow use of the aquifer beneath SWMU-13 for domestic (private) wells. EPA and the Delaware Department of Natural Resources and Environmental Control (DNREC) propose eliminating the SWMU-13 deed notice with New Castle County because the State institutional controls provide adequate protections for public health.

This ESD also proposes that groundwater monitoring at SWMU-13 be discontinued, as the nine years of data show that VOC levels in groundwater have attenuated EPA drinking water levels or just above these levels. EPA expects the VOCs will continue to attenuate to below drinking water levels.

IV. STATE AGENCY REVIEW

DNREC is the lead agency for oversight and clean-up at this Facility. EPA consulted with DNREC regarding this modification and corrective action completion and DNREC concurs with this ESD.

V. AFFIRMATION OF DECLARATION

Given that contaminants are cleaned-up to EPA's risk based goals and State institutional controls are adequately protective of public health, EPA and Delaware DNREC propose that corrective action is complete and the remedies have achieved the goals of protecting human health and the environment.

VI. PUBLIC PARTICIPATION

The public is invited to comment on EPA's two proposed modifications to the Final Decision as discussed in this ESD. The public comment period will last thirty (30) calendar days from the date the notice is published in the Delaware News Journal. A public meeting will be held upon request.

This ESD is available for public review at the location listed in Section VII below and at http://www.epa.gov/reg3wcmd/public_notices.htm. Comments or questions regarding the ESD may be submitted to:

Ms. Barbara Smith
U.S. EPA, Region III
1650 Arch Street (3LC20)
Philadelphia, PA 19103
(215) 814-3226
FAX (215) 814-3113
Email: smith.barbara@epa.gov

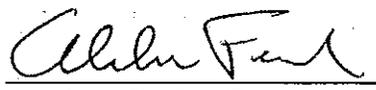
EPA will respond to all comments received. On the basis of comments received or other relevant information, if EPA makes minor changes to the ESD, the ESD will become effective upon those changes being made. If EPA makes significant changes to the ESD, EPA may seek additional public comments. All comments received during the thirty (30) day comment period will become part of the Administrative Record for the Site, as will EPA responses to the significant comments.

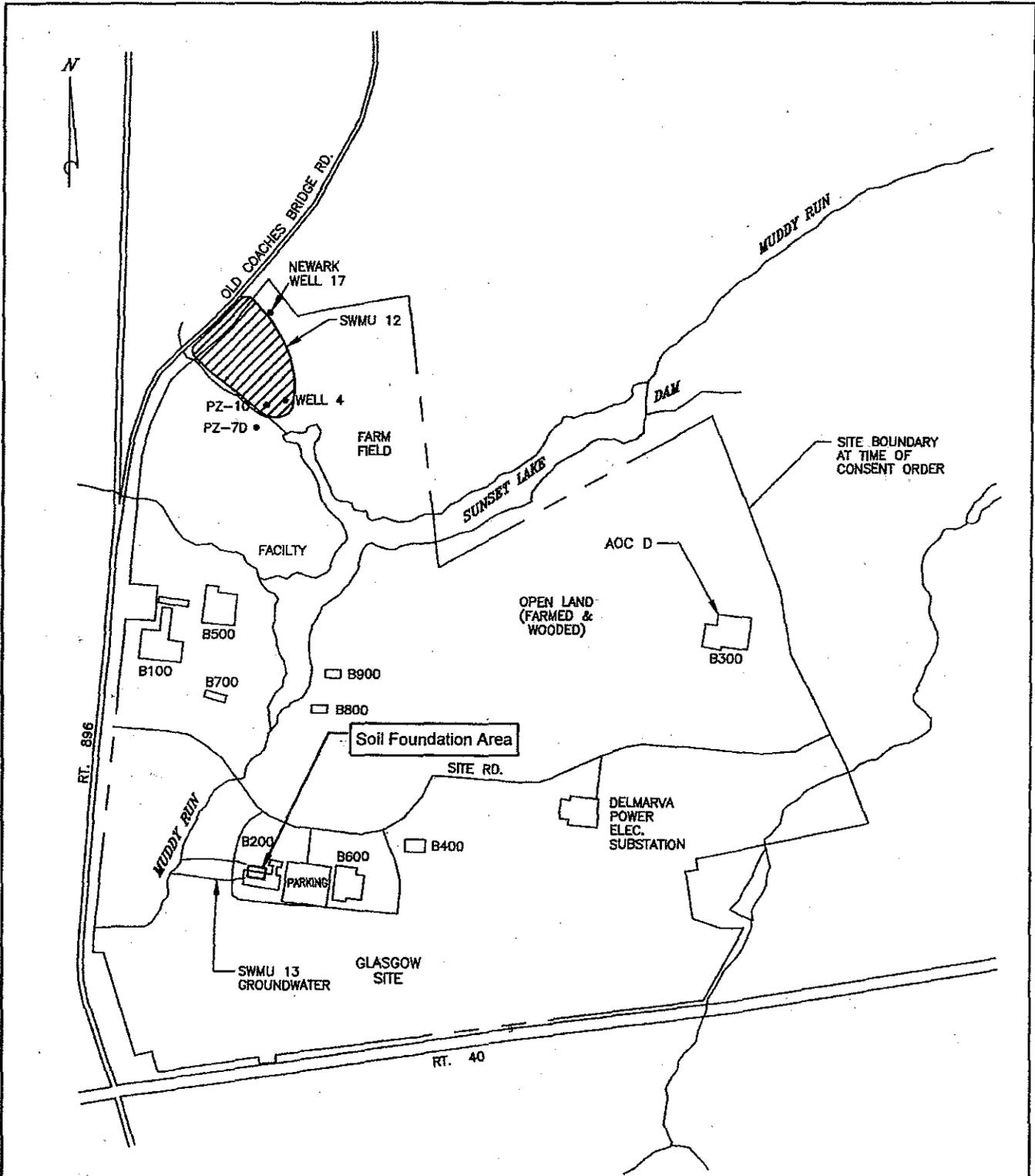
VII. ADMINISTRATIVE RECORD

The Administrative Record supporting this ESD will be available for public review on Mondays through Fridays, from 8:00 a.m. to 4:00 p.m., by contacting the DNREC Project Manager, Mr. Douglas Zeiters, at:

State of Delaware
Department of Natural Resources and Environmental Control
Solid and Hazardous Waste Management Branch
89 Kings Highway
Dover, DE 19901
Phone: (302)739-9403

2/25/10
Date


Abraham Ferdas, Director
Land and Chemicals Division
U.S. EPA Region III



LEGEND

• PZ-10 = APPROXIMATE WELL LOCATION

 = BORROW PIT AREA

SCALE



Corporate Remediation Group

*An Alliance between
DuPont and The F-C Diamond Group*

Borley Mill Plaza, Building 27
Wilmington, Delaware 19880-0027

SITE LOCATION MAP

DuPont Glasgow Site
Glasgow, Delaware

SCALE 1"=1400'	DESIGNED	DWNN DEL	DWG FILE NO. 7212A001
DATE 10/29/09	CHECKED D. WIEK	APPROVED M. BRILL	PAGE 1

**DuPont Glasgow Business Community Facility, Glasgow, DE.
Public Notice**

DATE OF THIS NOTICE: March 9, 2010

PURPOSE OF THIS NOTICE: The U.S. Environmental Protection Agency (EPA) is announcing its proposed 'Explanation of Significant Differences' (ESD) to modify the Final Decision for corrective measures issued by EPA in 2000 for the DuPont Glasgow Business Community Facility (Facility). All Corrective Action taken at the Facility was in accordance with the Resource Conservation and Recovery Act, as amended (RCRA).

FACILITY DESCRIPTION: The 22-acre Facility is located near the intersection of State Routes 896 and 40 in Glasgow, New Castle County, Delaware. The Facility consists of two buildings, a parking lot and open space and was previously used in manufacturing water treatment membranes. DuPont ceased using the Facility and currently leases the Facility to another company. In 1991 EPA and DuPont entered into an Administrative Order on Consent to study and remedy releases at units within the larger DuPont Glasgow tract. In 1993, DuPont discovered soil and groundwater contamination at the 22-acre Facility. DuPont removed the contaminated soil and monitored the volatile organic compounds (primarily PCB) in groundwater. Soil meets EPA's clean -up levels and the groundwater plume has attenuated to acceptable levels.

INFORMATION AVAILABILITY: Information regarding EPA's proposed decision is available on EPA's website at www.epa.gov/reg3wcmd/public_notices.htm. The Administrative Record contains the information considered in EPA's proposed decision, and is available from the Delaware Department of Natural Resources and Environmental Control. To receive a copy of the Administrative Record, please contact Mr. Douglas Zeiters, Project Manager, at DNREC, 89 Kings Highway, Dover, DE 19901; Phone: (302)739-9403 or E-mail: Douglas.Zeiters@state.de.us.

COMMENT PROCESS: People wishing to comment on EPA's proposed decision must submit comments to EPA within the 30-day comment period ending April 8, 2010. People interested in a public hearing on this proposed remedy may request one. All comments and/or requests for a hearing must be submitted in writing via mail, fax or e-mail to the EPA Project Manager, Ms. Barbara Smith, EPA-III, 1650 Arch Street (3LC20), Philadelphia, PA 19103; Fax: (215)814-3113; Email: smith.barbara@epa.gov; Submissions must be received prior to April 9, 2010. All comments will be considered in making a final decision.

FINAL DECISION: EPA will make a final decision modification after considering all comments, consistent with applicable RCRA requirements and regulations. If the decision is substantially unchanged from the one proposed in this notice, EPA will issue the proposed ESD and inform all persons who submitted written comments or requested notice of EPA's final determination. If the final decision is significantly different from the one proposed, EPA will issue a public notice explaining the new decision and will reopen the comment period.