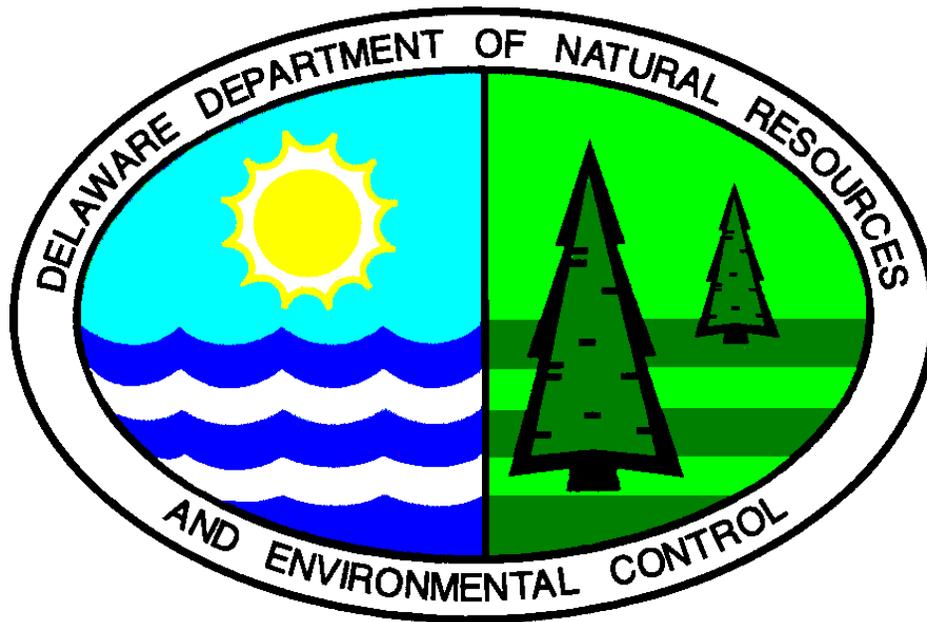


**PROPOSED PLAN OF REMEDIAL ACTION
FOR THE
GLASGOW FARMS SITE
NEWARK, DELAWARE**



January, 1999

DNREC Project DE-1122

**Prepared by:
Delaware Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation and Restoration Branch**

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I INTRODUCTION

The Glasgow Farms site (the Site) is located on an area bordered by Route 896, Route 40 and Route 72 in Glasgow, Delaware. The site is approximately 354± acres, and consists of several land parcels that are scheduled for light industrial and parkland development. The majority of the site is undeveloped, consisting of wooded and open, agricultural land.

In 1989 a finding of volatile organic compounds (VOCs) in an on-site water supply well, at the Dupont Glasgow facility, triggered an on-going United States Environmental Protection Agency (USEPA) Resource Conservation and Recovery Act (RCRA) Corrective Action Order at the site. Since 1989, the E.I. Dupont De Nemours Corporation (Dupont) has been remediating the groundwater in the near vicinity of Dupont Well #4 by means of an air stripping tower under the directive of the USEPA.

In 1994, Dupont “sold” the 354± acres to Glasgow Farms L.L.C. According to the terms of the “sale agreement” Dupont irrevocably appointed Glasgow Farms as its true and lawful attorney-in-fact to grant, sell, convey or contract for sale and conveyance the Dupont property. The Glasgow Farms L.L.C, the State of Delaware, Division of Parks & Recreation and the W.L. Gore Company decided to enter into the DNREC Voluntary Cleanup Program (“VCP”). Through the VCP agreement, parties agreed to further characterize the potential risks posed to public health and the environment. The State’s consultant, Tetra-Tech, Inc. was contracted to conduct the required tasks (performance of a Site Sampling Investigation (“SSI”)).

The purposes of the SSI were to: 1) understand the nature and extent of contamination to the soil, groundwater, sediment or surface water contamination at the site, 2) to evaluate any risks that may be posed to the public and environment associated with any identified contamination and 3) provide recommendations to the Department for any remedial action, if required by DNREC. The owner and potential purchasers of the site desire to obtain a Certificate of Completion of Remedy from DNREC upon completion of all required tasks.

This document is the Department’s Proposed Plan of Remedial Action for the site. It is based on the results of the previous investigations performed at the site. This Proposed Plan is issued under the provisions of the Delaware Hazardous Substance Cleanup Act (“HSCA”), 7 Del.C., Chapter 91 and the Regulations Governing Hazardous Substance Cleanup (“Regulations”). It presents the Department’s assessment of the potential health and environmental risk posed by the site.

The Department will provide public notice and opportunity to comment on the Proposed Plan in accordance with HSCA and Section 12 of the Regulations. At the conclusion of the comment period, the Department, after review and consideration of the comments received, shall issue a Final Plan of Remedial Action (“Final Plan”) which will designate the selected procedures and stipulations concerning current and future activities. The

Proposed Plan, the comments received from the public, the Department's responses to the comments, the Final Plan, and all of the documents which form the basis for the Proposed and Final Plans will constitute the remedial decision record required for issuing the Final Plan. The contents of the Proposed Plan include a description of the site, the analytical results of the investigation, and the rationale for the Final Plan for the site.

Section II provides a site description for the Glasgow Farms site. Section III provides a description of the investigation results. Section IV presents the proposed plan of remedial action. Section V discusses public participation requirements.

II SITE DESCRIPTION AND HISTORY

The Glasgow Farms site covers approximately 354± acres and is located in Pencader Hundred, Glasgow, Delaware. A total of six (6) parcels comprise the Glasgow Farms site (see figure 1), one of which (Parcel E) encompasses approximately half of Sunset Lake. It is understood that parcels A, C, and E are planned to be sold to the State of Delaware for parklands, while Parcels B, D, and F will be used for future industrial uses. Surrounding land uses include: lands owned by the E.I. duPont de Nemours & Co. to the west, private and corporately owned wooded/open land and portions of Sunset Lake to the North, east, and south. At the present time the Site is comprised of primarily wooded land and agricultural land.

III INVESTIGATION RESULTS

In 1989, DuPont detected VOCs in an on-site water supply well number 4 (DuPont Glasgow Well 4). An investigation determined that a low concentration VOC plume existed within the Columbia Formation in the area proximate to a former Borrow Pit. In 1990, DuPont designed and installed a groundwater recovery and treatment system to capture and remove VOCs from duPont Glasgow Well 4 water, to contain TCE-affected groundwater, and to prevent the migration of contaminants toward Newark Well 17. In 1991, DuPont initiated the groundwater monitoring program consisting of collection and analysis of groundwater samples and water-level measurements from wells located within the Borrow Pit area.

Ten years of analytical data have indicated that the total VOC concentrations in the Columbia aquifer have decreased significantly. The most recent analytical data (December 1998 / January 1999) and groundwater flow patterns indicate that VOCs are below detection limits at all wells and that groundwater continues to migrate toward Glasgow Well 4. Further, contaminant levels in Glasgow Well 4 have stabilized at or below the EPA Maximum Contaminant Levels (MCLs) since 1994, and are currently below detection limits.

DuPont has previously “sold” certain parcels of land at the Glasgow Site, lying between Route 896, Route 40, and Route 72, including the area known as the Borrow Pit which overlies the remediated groundwater plume. DuPont has acknowledged to the “Buyer” (Glasgow Farms) that DuPont has sole responsibility for compliance with the RCRA Corrective Action at the site, and following compliance will properly close and abandon all monitoring wells on the subject property.

In June 1998, Glasgow Farms L.L.C., W.L. Gore and the State Division of Parks & Recreation entered into a Voluntary Cleanup Program (“VCP”) agreement for a Sampling Site Investigation (“SSI”) on a portion of property owned by Glasgow Farms in Pencader Hundred, Newark, Delaware. The SSI was completed in December 1998 by the state’s consultant, Tetra-Tech, Inc., and was conducted in accordance with the SSI workplan previously approved by DNREC-SIRB. The objective of the SSI was to characterize the quality of the surface soils, the sub-surface soils, shallow groundwater, as well as the surface water and sediment in drainages to, and shallow depositional areas of Sunset Lake.

A total of 144 soil samples (direct push and test pits), 35 direct push groundwater samples, 8 surface water samples, and 10 sediment samples were collected along with Quality Assurance/Quality Control (QA/QC) duplicates and blanks during the December 1998 field sampling activity (see Figures 2, 3 and 4).

The scope-of-work for the SSI also included approximately 50 direct push soil and groundwater locations. Three samples were collected from each direct push boring: (1) a surface sample (0-6” depth), (2) a sub-surface soil sample (at the encountered water table interface), and (3) a sample of shallow (unconfined) groundwater (see Tables 1 and 2). In addition, a total of 12 backhoe-excavated test pits were conducted on parcels B and F, and two shallow monitoring wells were installed on parcels A and F (see Figure 5). Sampling of the 2 new wells and 8 existing wells was also conducted during the SSI.

The DNREC Mobile Laboratory screened solid matrix samples for metals, VOCs, semivolatile polynuclear aromatic compounds (SVOCs), pesticides/herbicides, and polychlorinated bi-phenyls (PCBs). Aqueous matrixes were screened for VOCs. Selected samples (approximately 20%) were analyzed either by Envirotech Research, Inc., a Delaware certified Hazardous Substance Cleanup Act (HSCA) laboratory, or the DNREC Division of Water Resources Laboratory, using Standard Operating Procedures for Chemical Analytical Programs (SOPCAP) (DNREC, 1997) procedures and methods.

The screening results were compared to the Uniform Risk Standard (URS) for Human Health (HH) and Protection of the Environment (PE) which are part of the DNREC Remediation Standards Guidance Documents. The criteria used for the URS were the Critical Water Use Area, Unrestricted Use.

The SSI concluded, based on the screening and laboratory analytical data, along with the past site history that no contaminants or discrete sources of contaminants were

detected in the rigorous sampling of the groundwater and soil at the Glasgow Farms site. The evaluation of sediment and water quality at Sunset Lake did not demonstrate the presence of “source-related” organic contamination, although the west-southwest border of the Sunset Lake did have metal concentrations above the URS. These metals have a limited distribution. Consequently no overall impact upon sediment or surface water quality was indicated in the sampling data.

The following is a description of the results of the SSI:

Soils: No VOCs were detected. No metals were detected above URS values except for iron. This metal is considered native to the soil. There were scattered detections of PAHs and 2 detections for PCBs, but neither the PAH nor the PCB detections exceeded the URS benchmark.

Groundwater: No trichloroethylene (TCE) or related VOCs were detected. Only Carbon Disulfide was detected in 2 samples, both below 10 ug/L. The URS standard for Carbon Disulfide is 100 ug/L.

Sediment: No VOCs were detected. No atypical metals were detected above background concentrations. PAH detections were detected in 6 samples, however, not above URS benchmarks. No detection of PCBs was encountered.

Surface Water: No VOCs were detected. No other contamination was detected above the URS benchmarks.

Based upon the information obtained from the previous environmental assessments and the SSI performed at the Glasgow Farms site, no potential risk to the public, future workers, or the environment are associated with the Glasgow Farms site.

IV PROPOSED PLAN OF REMEDIAL ACTION

Based upon the information and results of the investigation performed at the Glasgow Farms site, in Glasgow, Delaware, the Department recommends that no further action, or investigation be required.

V PUBLIC PARTICIPATION

The Department actively solicits public comments or suggestions on the Proposed Plan of Remedial Action and welcomes opportunities to answer questions. Please direct written comments to:

Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
Attn: Paul W. Will
391 Lukens Drive
New Castle, Delaware 19720

Or call (302) 395-2600. The public comment period for this Proposed Plan of Remedial Action begins February 2, 1999 and closes on February 22, 1999. Comments and/or requests for a public hearing may be submitted in writing to Paul W. Will by close of business (4:30 p.m.) on February 22, 1999 at the above address. If so requested, a public meeting on the Proposed Plan will be held. The meeting time and place will be announced if said meeting is requested.

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