



## PROPOSED PLAN OF REMEDIAL ACTION

Hamilton Park Site  
Operable Unit 2 (OU-2)  
New Castle, Delaware  
DNREC Project No. DE-1284



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

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**Approval:**

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

Approved by:
<i>Ellen Malenfant for MAC</i>
Marjorie Crofts, Director Division of Waste and Hazardous Substances
<i>8-11-2011</i>
Date



### **What is the Hamilton Park Site (OU-2)?**

The Hamilton Park Site (the Site) is a residential neighborhood located off of New Castle Avenue (Route 9) in New Castle, Delaware. The individual properties are owned by private residents. The Site is depicted on Figure 1.

The Hamilton Park Site has been divided into multiple operable units. OU-1 is defined as the seven (7) properties on which a surface soil cap was installed in 2009. OU-2 refers to the soils beneath the eight (8) properties on Pyles Lane that are immediately adjacent to the “O Miller Road” Site. OU-3 will be the groundwater flowing beneath the entire neighborhood. Subsequent operable units will include the soils beneath the remainder of the neighborhood. **This Proposed Plan of Remedial Action applies only to OU-2 or the eight (8) properties listed below.**

<p><b>Tax Parcel Numbers:</b> 10-006.10.027, 10-006.10.026, 10-006.10.025, 10-006.10.024, 10-006.10.023, 10-006.10.022, 10-006.10.021, 10-006.10.020</p> <p><b>Addresses:</b> 43, 47, 49, 53, 55, 57, 59, and 63 Pyles Lane; New Castle</p> <p><b>Area:</b> 0.27 acres, 0.26 acres, 0.25 acres, 0.25 acres, 0.23 acres, 0.20 acres, 0.36 acres, and 0.31 acres</p> <p><b>Nearest major intersections:</b> New Castle Avenue (Route 9) and Pyles Lane</p> <p><b>Surrounding Property:</b> Commercial and industrial businesses are located to the south of Pyles Lane and residences are adjacent to the north of the homes on Pyles Lane</p> <p><b>Zoning:</b> Residential</p> <p><b>Site Utilities:</b> Water and sewer service provided by the City of Wilmington. Electricity is provided by Delmarva Power.</p> <p><b>Surface water:</b> The Delaware River is located approximately 1.5 miles east of the Site.</p> <p><b>Topography:</b> The properties are all virtually flat.</p>
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### **What happened at the Hamilton Park Site (OU-2)?**

The DNREC initially investigated the Hamilton Park Site in 2003, as part of the “Tanneries Initiative”. However, further research using historical maps later indicated that no tannery was ever present within in the neighborhood. The soil samples collected during the initial environmental investigation did reveal elevated concentrations of metals in the soil on some properties in the neighborhood. A review of historical records, along with soil boring logs documented during multiple investigations, indicate the source of contamination in the Hamilton Park neighborhood is most likely from contaminated historic fill.

### **What is the environmental problem at the Hamilton Park Site (OU-2)?**

According to environmental investigations, various properties at the Hamilton Park Site have concentrations of metals in the surface soil, that exceed the DNREC's unrestricted use (residential), uniform-risk-based standard (URS) concentrations.

Between March and June of 2002, an environmental assessment was conducted at the Hamilton Park Site to evaluate the surface soil at the Site. During this sampling event, soil borings were advanced on most properties in the neighborhood. All samples were first screened for metals at the DNREC mobile laboratory and a subset was sent for metals analysis at a fixed laboratory. Additional soil samples were collected on some properties within the Hamilton Park neighborhood in September 2003 to further delineate the metals in the soil.

In 2010, a Remedial Investigation (RI) encompassing surface soil, subsurface soil and groundwater was completed on the entire Site. During the RI, samples were not only analyzed for metals, but were analyzed for the full suite of Hazardous Substance Cleanup Act (HSCA) constituents, which include volatile organic compounds, semi-volatile organic compounds, pesticides, and polychlorinated biphenyls. Once again, elevated concentrations of metals, namely arsenic, were detected in the surface soil, though not on every single lot in the neighborhood. During several investigations, arsenic concentrations above the Delaware Default Background Standard of 11 parts per million (ppm) were noted in surface soil samples collected on lots in OU-2. Samples collected from the subsurface soil beneath OU-2 did not indicate concentrations of arsenic above 11 ppm.

### **What remedial action is proposed at the Hamilton Park Site (OU-2)?**

Due to the potential for exposure to arsenic above the Delaware Default Background Concentration, the top two feet of soil in all grass-covered areas on each OU-2 property will be excavated. The excavations will then be backfilled with DNREC-approved fill material that meets unrestricted (residential) use standards, and stabilized with grass.

The complete removal of the surface soil on the lots in OU-2 will eliminate any threat currently posed by arsenic present above the Default Background Concentration in the surface soil. Arsenic was not detected above the Default Background Concentration in subsurface soil.

DNREC requires the following remedial action be performed on the Hamilton Park Site (OU-2):

1. Removal of the top two feet of soil in the grass covered areas of each parcel within OU-2. Replace soil with DNREC approved fill material that meets unrestricted (residential) use standards and stabilize with grass.

**What are the long-term plans for the Site after the cleanup?**

There is no anticipated change in the use of the properties within the Hamilton Park neighborhood. The properties are currently used for residential purposes and will remain residences for the foreseeable future.

DNREC will issue a Certification of Completion of Remedy for the Hamilton Park Site (OU-2) following the completion of the aforementioned remedial action.

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

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

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

The 20-day public comment period begins on August 17, 2011 and ends at close of business (4:30 pm) on September 6, 2011. Please send written comments to the DNREC office or call Lindsay Hall, Project Manager, at: 302-395-2600.

## Glossary of Terms Used in this Proposed Plan

<b>Contaminant of Concern (COC)</b>	These are potentially harmful substances at concentrations above acceptable levels (e.g. metals and PAH).
<b>Certificate of Completion of Remedy (COCR)</b>	A formal determination by the Secretary of DNREC that remedial activities, as required by the site-specific Final Plan of Remedial Action, have been completed.
<b>Exposure</b>	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
<b>Final Plan of Remedial Action</b>	DNREC's adopted plan for cleaning up a hazardous site.
<b>Hazardous Substance Cleanup Act (HSCA)</b>	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.
<b>Proposed Plan of Remedial Action</b>	DNREC's initial plan for cleaning up a hazardous site, which is subject to public comment before being adopted as final.
<b>Risk</b>	Likelihood or probability of injury, disease, or death.
<b>Uniform Risk-Based Standards (URS)</b>	A set of concentration criteria for various contaminants potentially present in site media that are developed for protection of human health and the environment

## **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 cleanup 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/>

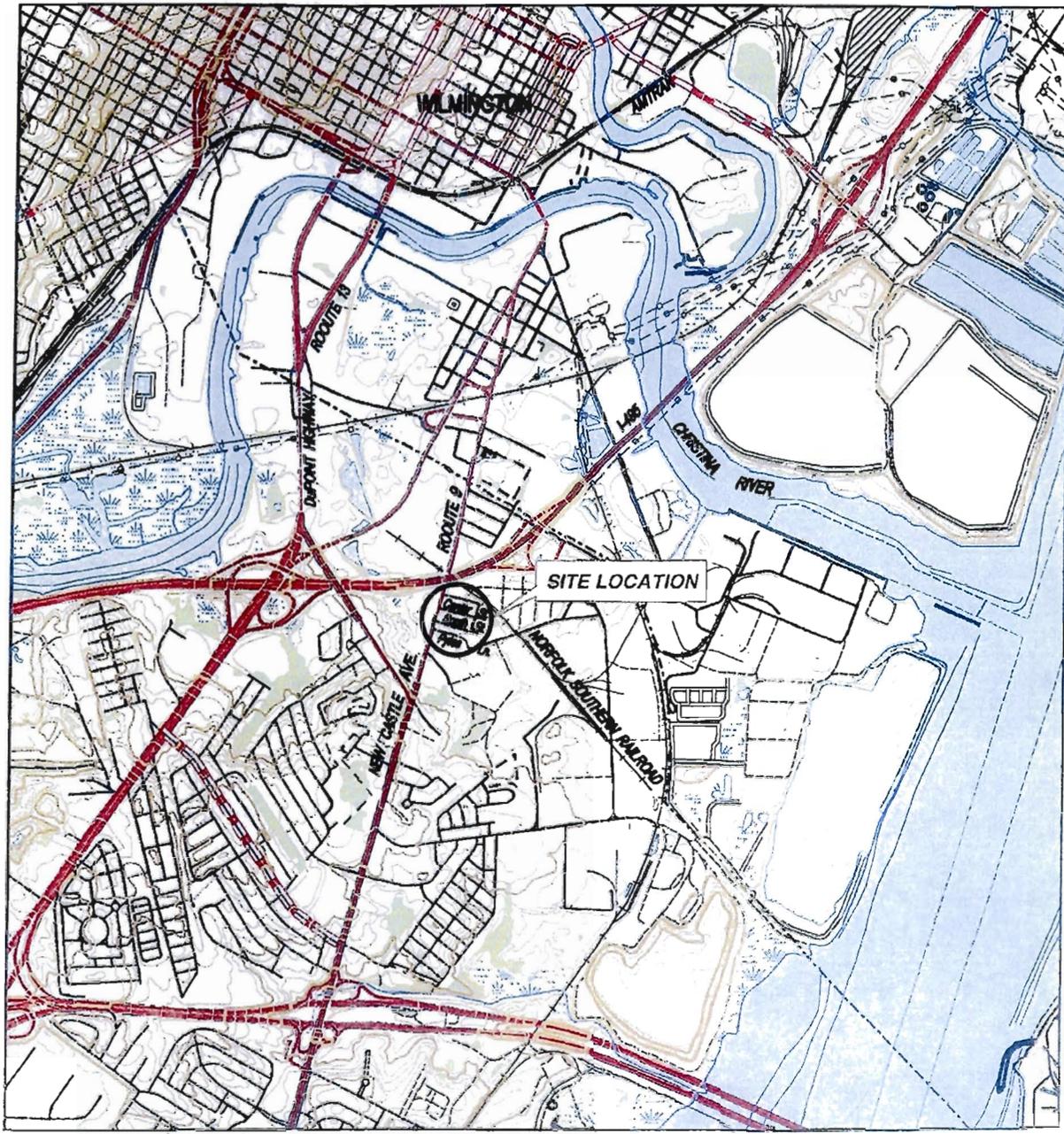
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DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of 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.

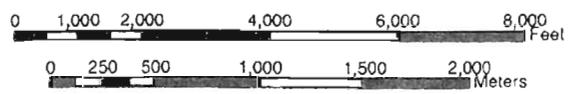
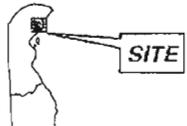
Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.

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Source: USGS Digital Raster Graphic, NAD 83, UTM Zone 18 Meters. Production date varies by quadrangle.

Map Extent



1 inch equals 2,500 feet

Figure 1

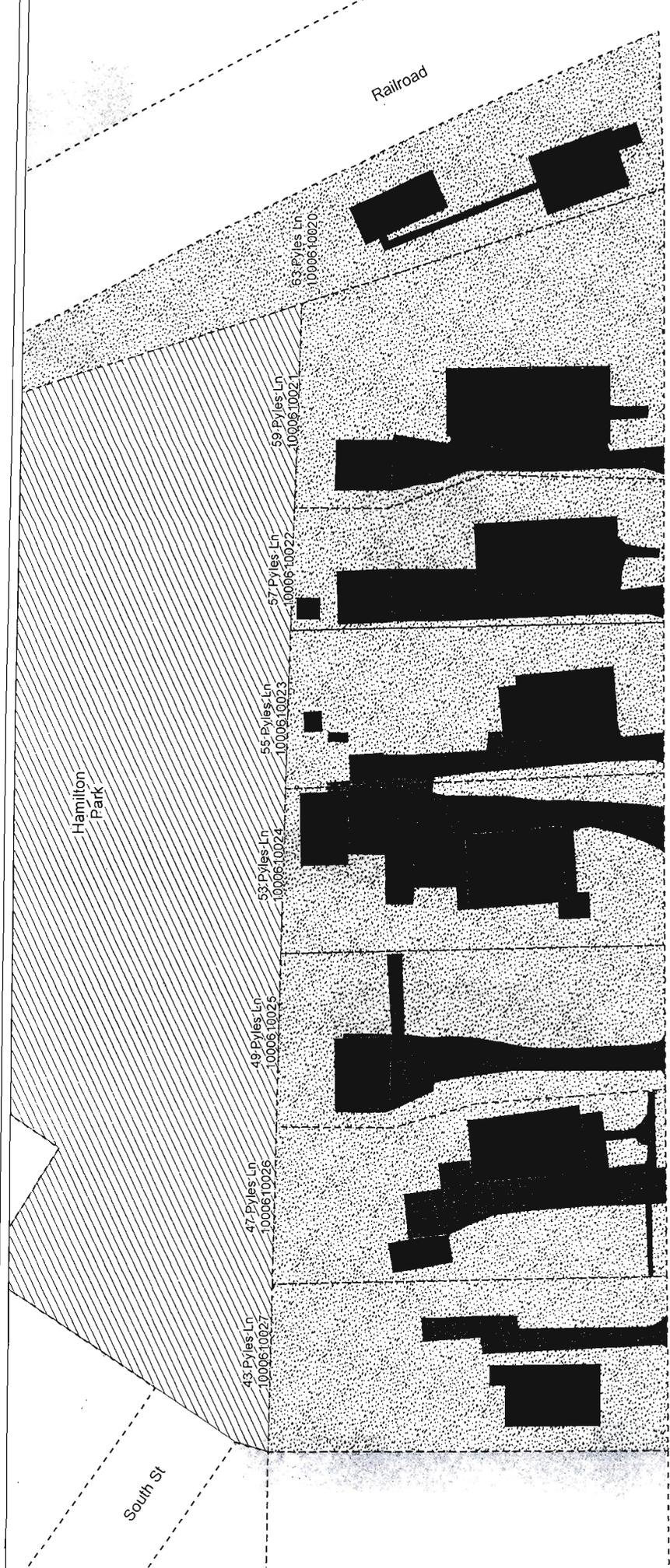


**TETRATECH**  
 240 Continental Drive, Suite 200  
 Newark, Delaware 19713  
 PH: (302) 738-1500 FAX: (302) 454-3988  
 WWW.TETRATECH-DE.COM

BENCH: T13844  
 DRAWN BY: JDE  
 SCALE: AS NOTED  
 CHECKED / APPROVED BY: RHB  
 DATE: 10 APRIL 2009  
 CAD FILE: N:/Project/T13844/Figure-1Site Loc map.dwg

State of Delaware  
 Department of Natural Resource  
 and Environmental Control  
**HAMILTON PARK SITE  
 INTERIM REMEDIAL  
 ACTION REPORT**  
 New Castle County  
 New Castle, Delaware

**SITE LOCATION MAP  
 HAMILTON PARK SITE**  
 DRAWING NUMBER: **FIGURE 1**



**Legend**

- - - Parcel Boundary
- Structure
- Impervious Surface
- ▨ Area to be Removed
- ▤ Hamilton Park

**Hamilton Park Site**

Address	Parcel ID	Total Parcel (Sq Ft)	Impervious Surface and Structure (Sq Ft)		Total To Be Removed (Sq Ft)
			Structure	Impervious Surface	
43 Pyles Ln	1000610027	11,523	2,107	9,416	9,416
47 Pyles Ln	1000610026	11,400	3,929	7,471	7,471
49 Pyles Ln	1000610025	10,504	2,628	7,876	7,876
53 Pyles Ln	1000610024	10,939	5,195	5,744	5,744
55 Pyles Ln	1000610023	9,898	2,933	6,965	6,965
57 Pyles Ln	1000610022	8,685	3,993	4,692	4,692
59 Pyles Ln	1000610021	15,159	2,673	12,486	12,486
63 Pyles Ln	1000610020	12,913	1,884	11,029	11,029

**BrightFields, Inc.**  
 Environmental Evaluation  
 Investigation, and Remediation  
 801 Industrial Street, Suite 1  
 Wilmington, Delaware 19801  
 302-656-8600  
 302-656-9700 fax

Site Layout  
 Hamilton Park Site (DE-1284)  
 New Castle, Delaware

By: [Signature] Date: 5/10/11 Scale: 4800  
 Drawn: DPL File Name: Site\_Layout.mxd  
 Checked: GHC Fig. No. 4800  
 Project # 0886.54.52 Figure 1

0 20 40 Feet