This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control’s (DNREC’s) intention to address environmental contamination at the Hamilton Park Site (Operable Unit-1).

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on March 21, 2010 and opened a 20-day public comment period. The Proposed Plan is attached. There were no comments from the public; therefore, the Proposed Plan is adopted as the Final Plan.

The following remedial actions have already been performed on OU-I of the Hamilton Park Site:

1. Removal of surface soil from the seven (7) properties containing elevated levels of lead, as performed in the 2009 Interim Action.

2. Capping the seven (7) properties with a minimum of two feet of DNREC-approved fill over a marker fabric, as performed in the 2009 Interim Action.

In addition, DNREC requires the following remedial actions be performed for OU-I of the Hamilton Park Site:

1. Recording of an environmental covenant consistent with Delaware’s Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) on the deeds of each of the 7 properties. The covenant will require written DNREC approval prior to any soil disturbance beneath the soil cap.

2. Implementation of the DNREC-approved Operation and Maintenance (O&M) Plan (November 2009). The O&M Plan details the regular inspection schedule to be followed in order to ensure the long-term integrity of the cap.

Approval:
This Final Plan meets the requirements of the Hazardous Substance Cleanup Act.
PROPOSED PLAN OF REMEDIAL ACTION

Hamilton Park Site
Operable Unit 1 (OU-1)
New Castle, Delaware
DNREC Project No. DE-1284

March 2010

Delaware Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation & Restoration Branch
391 Lukens Drive
New Castle, Delaware 19720

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- Attachment: What is a Proposed Plan?
PROPOSED PLAN OF REMEDIAL ACTION

Hamilton Park Site (OU-1)
New Castle, Delaware
DNREC Project No. DE-1284

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

Approved by:

Marjorie Crofts, Acting Director
Division of Air & Waste Management

3.11.10
Date
What is the Hamilton Park Site (OU-1)?

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 three operable units: OU-1, OU-2, and OU-3. OU-1 is defined as the seven (7) properties on which the interim action soil removal for lead took place in 2009 (Figure 2). OU-2 will be soils in the remaining portion of the neighborhood. OU-3 will be the groundwater flowing beneath the entire neighborhood. This Proposed Plan of Remedial Action applies only to OU-1 or the seven (7) properties listed below.

<table>
<thead>
<tr>
<th>Tax Parcel Numbers:</th>
<th>10-005.20.102, 10-005.20.103, 10-005.20.104, 10-005.20.128/129, 10-005.20.127, 10-005.20.135, 10-005.20.091</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addresses:</td>
<td>3 South Street, 5 South Street, 7 South Street, 8 South Street, 10 South Street, 10 Pyles Lane, 20 Center Street; New Castle</td>
</tr>
<tr>
<td>Area:</td>
<td>0.09 acres, 0.08 acres, 0.08 acres, 0.07 acres, 0.09 acres, 0.08 acres, 0.16 acres</td>
</tr>
<tr>
<td>Nearest major intersections:</td>
<td>New Castle Avenue (Route 9) and North Street, New Castle Avenue and Center Street, New Castle Avenue and South Street, and New Castle Avenue and Pyles Lane</td>
</tr>
<tr>
<td>Surrounding Property:</td>
<td>Commercial and industrial businesses generally surround the residential neighborhood. There is another residential neighborhood adjacent to the north.</td>
</tr>
<tr>
<td>Zoning:</td>
<td>Residential</td>
</tr>
<tr>
<td>Site Utilities:</td>
<td>Water and sewer service provided by the City of Wilmington. Electricity is provided by Delmarva Power.</td>
</tr>
<tr>
<td>Surface water:</td>
<td>The Delaware River is located approximately 1.5 miles east of the Site.</td>
</tr>
<tr>
<td>Topography:</td>
<td>The properties are all virtually flat.</td>
</tr>
</tbody>
</table>

What happened at the Hamilton Park Site (OU-1)?

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. Some of the highest concentrations were found on a previously vacant, wooded lot in the rear of the neighborhood. In the early 1900s, this lot was used as a foundry. That property has since been investigated and remediated as the “0 Miller Road” Site and has a private residence built on it. Elevated metals concentrations were not present on every property in the neighborhood.
A review of historical records indicate the source of contamination in the Hamilton Park neighborhood is most likely from contaminated historic fill. No single source of soil contamination at the Hamilton Park Site has been positively identified.

What is the environmental problem at the Hamilton Park Site (OU-1)?
According to environmental investigations, various properties at the Hamilton Park Site have concentrations of metals in most notably, the surface soil, that exceed the DNREC's unrestricted use (residential), uniform-risk-based standard (URS) concentrations. The parcels of OU-1, in particular, were found to have the highest concentrations of lead in the surface soil.

Between March and June of 2002, an environmental assessment was conducted at the Hamilton Park Site to further 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.

The results of a targeted round of sampling performed in 2007 indicated that some properties had concentrations of lead that warranted remedial action. This investigation positively identified seven (7) properties that required an interim action of surface soil removal due to elevated lead concentrations. These seven (7) properties are referred to as OU-1.

During 2010, the soil on the remaining properties in the Hamilton Park neighborhood will be addressed as OU-2. Groundwater beneath the neighborhood will be addressed as OU-3.

What do the owners want to do at the Hamilton Park Site (OU-1)?
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.

What clean-up actions have been taken at the Hamilton Park Site (OU-1)?
In the spring/summer of 2009, an Interim Action was completed on the seven (7) properties comprising OU-1. Due to the potential for exposure to elevated concentrations of lead, the top two feet of soil in all grass-covered areas on each property was excavated. Marker fabric was placed in the bottom of the excavations and the excavations were then backfilled with DNREC-approved clean fill material and stabilized with grass.

The DNREC concludes that the Interim Action eliminated the previous risk posed by surface soils on these properties. The Site is now meets the unrestricted use standards, which includes use of the properties as residences. Due to the complete removal of the lead-impacted surface
soil, the DNREC considers the marker fabric and soil cap to be the final remedial action for the soils at the seven (7) Hamilton Park (OU-1) properties.

OU-2 and OU-3 will be addressed at a later date in a separate Proposed Plan of Remedial Action.

What additional clean-up actions are needed at the Hamilton Park Site (OU-1)?

In addition to the completed Interim Action to remove surface soil on properties with elevated lead, the DNREC’s Proposed Plan for OU-1 includes the prohibition of any land disturbance beneath the soil caps without DNREC’s approval, as well as, compliance with a DNREC-approved Operation and Maintenance Plan (O&M Plan).

The following remedial actions have already been performed on OU-1 of the Hamilton Park Site:

1. Removal of surface soil from the seven (7) properties containing elevated levels of lead, as performed in the 2009 Interim Action.
2. Capping the seven (7) properties with a minimum of two feet of DNREC-approved fill over a marker fabric, as performed in the 2009 Interim Action.

DNREC requires the following remedial actions be performed on OU-1 of the Hamilton Park Site:

1. Recording of an environmental covenant consistent with Delaware’s Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) on the deeds of each of the 7 properties. The covenant will require written DNREC approval prior to any soil disturbance beneath the soil cap.
2. Implementation of the DNREC-approved Operation and Maintenance (O&M) Plan (November 2009). The O&M Plan details the regular inspection schedule to be followed in order to ensure the long-term integrity of the cap.

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

There are no plans to change the use of the properties in the Hamilton Park neighborhood. The DNREC has already approved a site-specific O&M Plan for the properties in OU-1 and the Plan shall be followed to ensure that the cap will remain protective of human health and the environment.

DNREC will issue a Certification of Completion of Remedy for the Hamilton Park Site (OU-1) following the recording of an environmental covenant on the deeds for each of the 7 properties in OU-1. The covenant will prohibit digging beneath the 2 foot soil cap without prior written DNREC approval. The implementation of the DNREC-approved O&M Plan will ensure the continued integrity of the cap.
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 are also found on:

http://www.awm.delaware.gov/SIRB/Pages/SIRBPlans.aspx

The 20-day public comment period begins on March 22, 2010, and ends at close of business (4:30 pm) on April 12, 2010. Please send written comments to the DNREC office or call Lindsay Hall, Project Manager, at: 302-395-2600.
Figure 1

SITE LOCATION MAP
HAMILTON PARK SITE
INTERIM REMEDIAL ACTION REPORT

New Castle County
New Castle, Delaware

1 inch equals 2,500 feet

Map Extent
## Glossary of Terms Used in this Proposed Plan

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

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:


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.