



## **PROPOSED PLAN OF REMEDIAL ACTION**

Barbara Hicks Park Site OU-1  
Wilmington, Delaware  
DNREC Project No. DE-1804



February 2023

Delaware Department of Natural Resources and Environmental Control  
Division of Waste and Hazardous Substances  
Remediation 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:



Qazi Salahuddin, Environmental Program Administrator  
Remediation Section

2/9/2023

Date



### **What is the Proposed Plan of Remedial Action?**

The Proposed Plan of Remedial Action (Proposed Plan) summarizes the clean-up (remedial) actions that are being proposed to address contamination found at the Site for public comment. A legal notice is published in the newspaper advertising a 20-day comment period. The Department of Natural Resources and Environmental Control (DNREC) considers and addresses all public comments received and publishes a Final Plan of Remedial Action (Final Plan) for the Site.

### **What is the Barbara Hicks Park Site?**

The Barbara Hick's Park Site OU-1 is located at 410-420 Bradford Street in Wilmington, Delaware, and consists of eight tax parcels: 26-058.00-002, 26-058.00-006, 26-058.00-009, 26-058.00-003, 26-058.00-004, 26-058.00-005, 26-058.00-007 and 26-058.00-008. It is approximately 1.35 acres in size (Figure 1). The site is a community park and recreational space surrounded by residential and commercial buildings.

This proposed plan addresses Operable Unit -1 (OU-1), which consists of the soils within the area of the current park. Operable Unit -2 consists of groundwater at the site. There is no current drinking water exposure pathway for the site's groundwater, and the Site falls within the City of Wilmington's Groundwater Management Zone. OU-2 would be addressed under a separate Proposed Plan of Remedial Action.

### **What happened at the Barbara Hicks Park Site?**

Historical aerial photographs from 1940 to 1982 show the site as undeveloped. There is evidence of filling on the site based on 1940 and 1965 aerial photographs. The basketball court and playground were erected in 1982. There have been no major operations on the site since then.

### **What is the environmental problem at the Barbara Hicks Park Site?**

A Limited Phase II Investigation was conducted of the sites soil in June 2022. Following the results of the limited Phase II, the Site was entered into the DNREC Voluntary Clean-up Program (VCP) to conduct a further remedial investigation to characterize the potential contamination of the soil at the site.

A Remedial Investigation (RI) was further conducted on the site soil in September 2022. Surface, shallow, and deep soil samples were collected on the site. Analytical data for the soil was

compared to the February 2022 HSCA Screening Levels. Benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz(a,h)anthracene, indeno[1,2,3-cd]pyrene, naphthalene, antimony, arsenic, barium, cadmium, copper, lead, manganese, nickel, thallium, and cyanide were detected at concentrations exceeding the February 2022 HSCA Screening Levels for soil. The calculated human health risk potentially posed by exposure to soils was determined to be unacceptable under residential and recreator exposure scenarios. Risk posed by exposure to soil is acceptable under excavation worker, outdoor worker, and trespasser exposure scenarios.

### **What clean-up actions have been taken at the Barbara Hicks Park Site?**

There have been no clean-up actions performed to date at the Barbara Hick's Park site.

### **What does the owner want to do at the Barbara Hicks Park Site?**

The City of Wilmington Department of Parks and Recreation intends to continue use of this Site as a recreational park and playground for the surrounding community

### **What additional clean-up actions are needed at the Barbara Hicks Park Site?**

**DNREC proposes the following remedial actions for the Site, which need to be completed before a Certification of Completion of Remedy (COCR) can be issued:**

1. Submittal and approval of a Remedial Action Work Plan (RAWP) to DNREC-RS.
2. Placement of a one-foot soil, stone, or impervious cap/cover over impacted areas to restrict access to underlying soil, or excavation of soil with elevated concentrations of polyaromatic hydrocarbons (PAHs) or metals and disposal off-site.
3. A proposed Environmental Covenant must be submitted to DNREC for approval within 60 days of the issuance of the Final Plan of Remedial Action, should the site be capped.
4. An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (7 Del.C. Chapter 79, Subchapter II) must be recorded in the Office of the New Castle County Recorder of Deeds within 90 days of the issuance of Final Plan of Remedial Action. The Environmental Covenant must include the following activity and/or use restrictions:
  - a. Use Restriction. Use of the Property shall be restricted solely to those non-residential type uses permitted within Commercial, Manufacturing, or Industrial Districts;
  - b. Interference with Remedy. There shall be no digging, drilling, excavating, grading, constructing, earth moving, or any other land disturbing activities on the Property [including any repair, renovation or demolition of any existing structures on the Property] without prior written approval from DNREC.

- c. Compliance with Contaminated Materials Management Plan. All work required by the Contaminated Materials Management Plan must be performed to DNREC's satisfaction in accordance with the Plan.
5. A Contaminated Materials Management Plan (CMMP) must be submitted to DNREC for approval within 60 days of the issuance of the Final Plan of Remedial Action.. The CMMP will provide guidance to enable construction workers top safely handle any potential contaminated soil at the Site.
6. Preparation and implementation of a site-specific Long-Term Stewardship (LTS) Plan, if the cap/cover option is selected, which shall be submitted to DNREC for approval within 60 days of DNREC's approval of the RAWP. The LTS plan will detail cap monitoring requirements and schedule to be followed in order to monitor the integrity of the site capping components.
7. Submittal of a Remedial Action Completion Report (RACR) to DNREC-RS within 60 days of the completion of the required remedial actions.
8. A request for a Certificate of Completion of Remedy (COCR) must be submitted to DNREC within 60 days of the approval of the RACR.

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

The City of Wilmington Department of Parks and Recreation plans to add improvements to the Site, while continuing to use it as a recreational park and playground for the surrounding community.

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

The complete file on the Site, including the Remedial Investigation, are available online at:

<https://den.dnrec.delaware.gov/>

The 20-day public comment period begins on February 12, 2023 and ends at close of business (4:30 pm) on March 6, 2023. Please send written comments to the DNREC Project Officer, Shahroze Ali, via email to [RS\\_Public\\_Comments@delaware.gov](mailto:RS_Public_Comments@delaware.gov), or written letter to 391 Lukens Drive, New Castle, DE 19720

Figure 1: Site Map

Figure 2: Soil Sample Locations

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QS23030





**Figure 1**



**Figure 2**

## Glossary of Terms Used in this Proposed Plan

<b>Voluntary Clean-up Program (VCP)</b>	Available to all parties who may be liable for the contamination of a property, but who wish to settle their liabilities with the Department of Natural Resources and Environmental Control (DNREC) under the Hazardous Substance Cleanup Act (HSCA).
<b>Remedial Investigation (RI)</b>	Thorough environmental study of a site which includes 1) sampling of site environmental media and/or wastes on the property and 2) conducting a preliminary risk assessment using the data collected to determine the risk posed to human health and the environment.
<b>Certification of Completion of Remedy (COCR)</b>	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
<b>Contaminant of Concern (COC)</b>	Potentially harmful substances at concentrations above acceptable levels.
<b>Contaminated Materials Management Plan (CMMP)</b>	A written plan specifying how potentially contaminated material at a Site will be sampled, evaluated, staged, transported and disposed of properly.
<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>Human Health Risk Assessment (HHRA)</b>	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
<b>Phase II Environmental Site Assessment</b>	An investigation during which environmental samples are collected on a property to identify the most likely negative environmental impacts as identified in the Phase I Environmental Site Assessment -a research exercise summarizing the site's physical and operational history.
<b>Preliminary Risk Assessment</b>	A quantitative evaluation of only the most obvious and likely risks at a site
<b>Risk</b>	Likelihood or probability of injury, disease, or death.
<b>RS</b>	Remediation Section of DNREC, which oversees cleanup of sites that were contaminated as a result of past use