



## **PROPOSED PLAN OF REMEDIAL ACTION**

NVF Wilmington Site  
Wilmington, Delaware  
DNREC Project No. DE-1374



February 2021

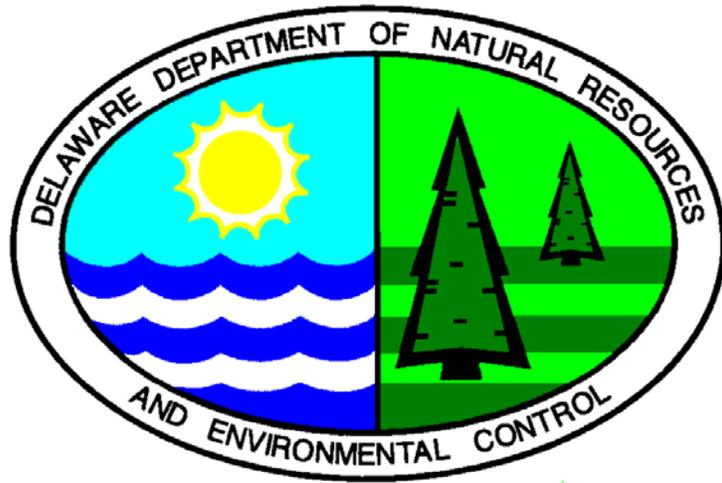
Delaware Department of Natural Resources and Environmental Control  
Division of Waste and Hazardous Substances  
Remediation Section  
391 Lukens Drive  
New Castle, Delaware 19720

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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

02/24/2021

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 for a 20-day comment period. DNREC considers and addresses all public comments received and publishes a Final Plan of Remedial Action (Final Plan) for the Site.

### **What is the NVF Wilmington Site?**

The NVF Wilmington Site is located at 700 Maryland Avenue in Wilmington, Delaware, and consists of tax parcel 2604230079, totaling approximately 2 acres (Figure 1). The Site occupies the entire block between Lower Beech and Lower Oak Street on Maryland Avenue. Multiple office/warehouse buildings are present on the parcel with the remaining area consisting of deteriorated asphalt parking areas and very little open space (Figure 2). The Site is currently zoned as commercial.

### **What happened at the NVF Wilmington Site?**

From the late 1800's through approximately 1900 the site was occupied by Morocco Manufacturing and used as a tannery. From approximately 1900 until approximately 1920 the Site was owned by Kartavert Manufacturing and from approximately 1920 through the 2005 the Site was owned by National Vulcanized Fiber. Both Kartavert and NVF manufactured asbestos containing products (fabrics and hardboards) at this location. Historic operations have impacted soil and groundwater at the Site.

### **What is the environmental problem at the NVF Wilmington Site?**

A Brownfield Investigation was performed at the Site in 2006. The investigation found elevated concentrations of carcinogenic polynuclear aromatic hydrocarbons (PAHs) and metals, primarily lead. While no light non-aqueous phase liquids were found in the monitoring wells installed during the 2006 investigation, a characteristic sheen was found at several locations within the courtyard of the property. Supplemental investigations in February 2018 and June 2019 were conducted to delineate lead impacted soil, better evaluate potential vapor intrusion risk, and to investigate groundwater contamination in the interior of the property. Based on current conditions, residential and commercial exposure to site soil exceeds an acceptable risk. This risk is driven by the concentration of benzo(a)pyrene, arsenic and lead. Groundwater exposure exceeds acceptable risk under residential or commercial use. Groundwater risk is driven by arsenic, cobalt, cyanide, and pesticides. Soil gas samples indicate that vapor intrusion does not exceed the acceptable risk for residential use.

## **What clean-up actions have been taken at the NVF Wilmington Site?**

Since taking possession of the property, the owner has removed trash and debris, installed a perimeter fence to prevent unauthorized access, demolished and removed buildings along Lower Beech Street and Maryland Avenue, and demolished and removed a former garage structure from the center of the Site. In January 2019, asphalt was milled from an area to increase oxygen concentration to speed biodegradation of volatile compounds beneath the former asphalt parking lot.

## **What does the owner want to do at the NVF Wilmington?**

The Site will be redeveloped for mixed residential and commercial use.

## **What additional clean-up actions are needed at the NVF Wilmington Site?**

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

1. A Remedial Action Work Plan (RAWP) must be submitted to DNREC for approval within 60 days of the issuance of the Final Plan of Remedial Action.
2. The Site (including earthen basements) must be capped with at least two foot of clean fill or impervious material (e.g. buildings, asphalt, or concrete) pursuant to the schedule indicated in the DNREC approved RAWP.
3. A proposed Environmental Covenant must be submitted to DNREC for approval within 60 days of the issuance of the approved Long-Term Stewardship (LTS) Plan.
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 Recorder of Deeds within 60 days of the issuance of the LTS Plan. The Environmental Covenant must include the following activity and/or use restrictions:

[a.] 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 the existing structures on the on the Property] without the prior written approval of DNREC;

[b.] Limitation of Groundwater Withdrawal. No groundwater wells shall be installed and no groundwater shall be withdrawn from any well on the Property without the prior written approval of DNREC-RS and DNREC Division of Water;

- [c.] Compliance with the Long Term Stewardship Plan. All work required by the Long Term Stewardship Plan must be performed to DNREC's satisfaction in accordance with the Plan; and
- [d.] 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. The May 2018 DNREC approved Contaminated Materials Management Plan (CMMP) must be implemented during all soil and groundwater disturbing activities.
6. A LTS Plan shall be submitted to DNREC for approval in accordance with the schedule set forth in the approved RAWP. The LTS plan will detail the site-inspection schedule to be followed in order to ensure the long-term integrity of the remedy.
7. The LTS Plan must be implemented within 60 days of its approval by DNREC.
8. A Remedial Action Completion Report (RACR) must be submitted to DNREC within 60 days of the completion of the remedial actions required in this Proposed Plan.
9. Request a Certification of Completion of Remedy (COCR) within 60 days of DNREC approval of the RACR.

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

The Site use will be rezoned and redeveloped for mixed residential and commercial use. The CMMP is complete and available for the Site. A LTS plan will be completed and used to ensure the long-term integrity of the selected remedy.

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

The complete file on the Site including the Brownfield Investigation and the various reports are viewable online at:

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

The 20-day public comment period begins on February 28, 2021 and ends at close of business (4:30 pm) on March 22, 2021. Please send written comments to Patrick Boettcher, Project Officer, at [RS\\_Public\\_Comments@delaware.gov](mailto:RS_Public_Comments@delaware.gov).

Figure 1: Area  
Figure 2: Sample Locations

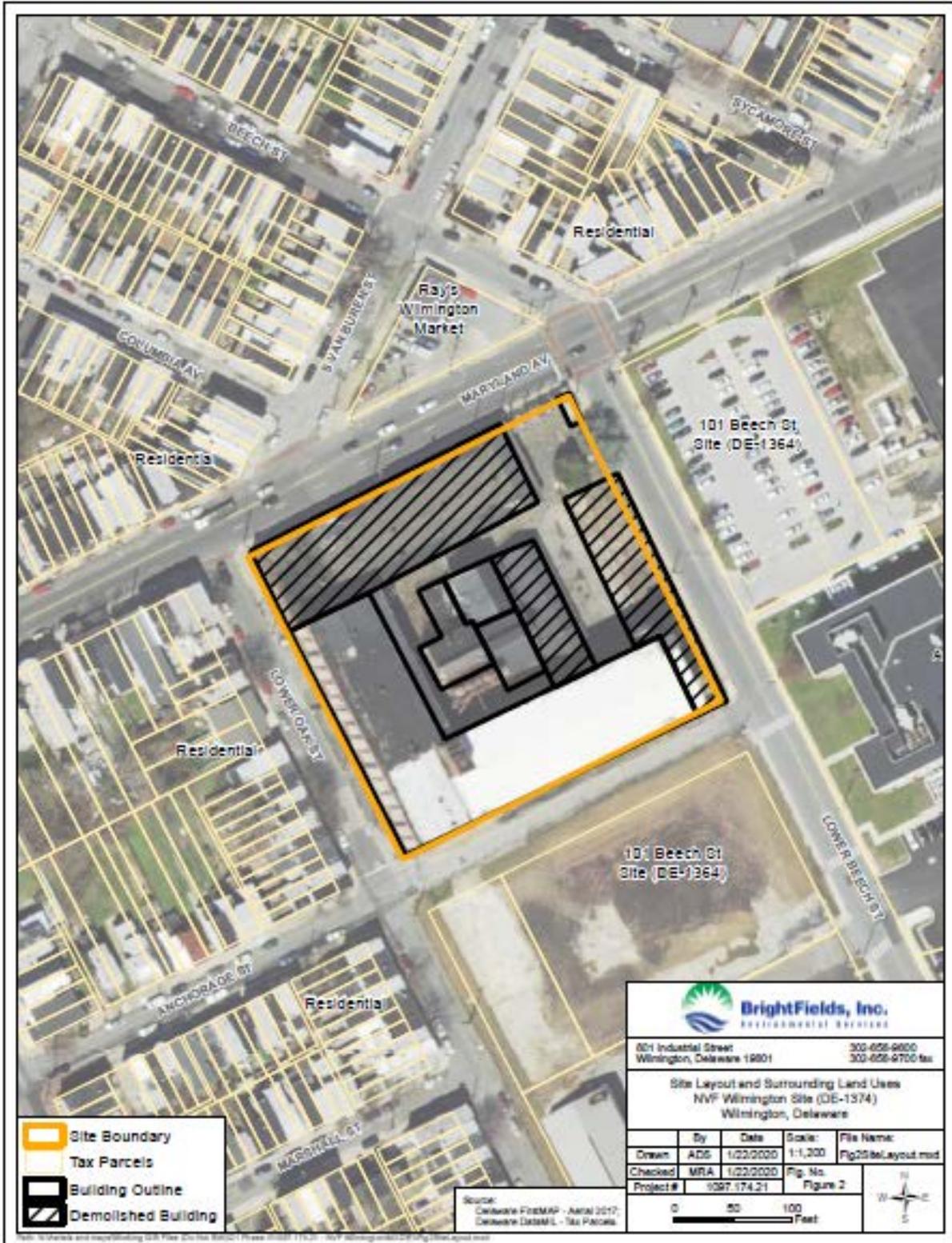


Figure 1

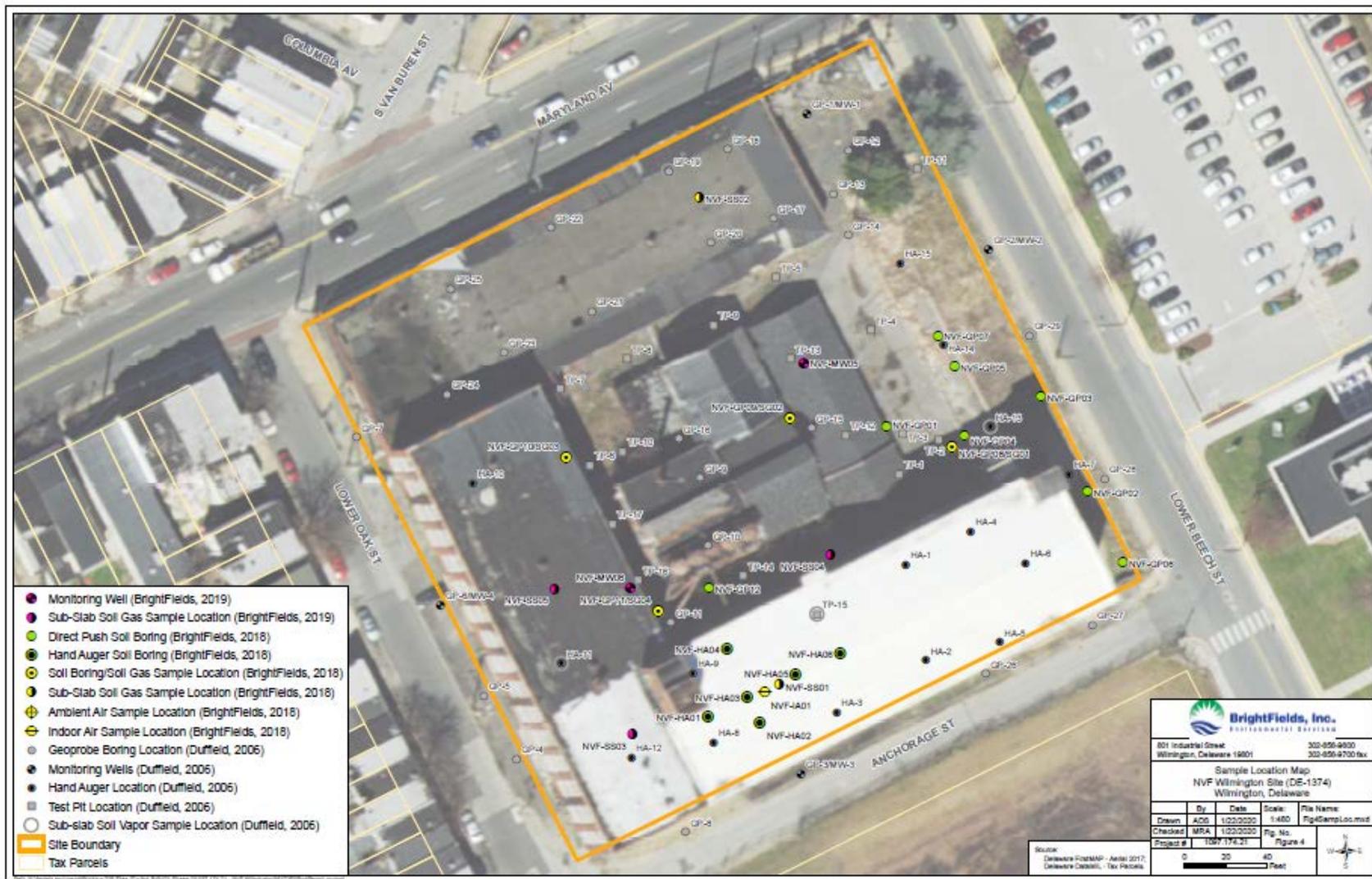


Figure 2

## Glossary of Terms Used in this Proposed Plan

<b>Brownfield Investigation (BFI)</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>Certified Brownfield</b>	A Brownfield that DNREC has determined is eligible for partial funding through the Delaware Brownfields Program
<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</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>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.