



## PROPOSED PLAN OF REMEDIAL ACTION

Former SMO Gas Station  
Newark, Delaware  
DNREC Project No. DE-1537



September 2014

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:	
	
Timothy Ratsep, Environmental Program Administrator Site Investigation & Restoration Section	
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 Former SMO Gas Station 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 Former SMO Gas Station Site?**

The Former SMO Gas Station site is located at 701 Ogletown Road in Newark, Delaware, and consists of one tax parcel (09-021.00-002), totaling 0.63 acres (Figure 1). The property is located at the southeast corner of the intersection of Ogletown Road/Route 273 and Marrows Road. The Site consists of a paved parking area and grassy areas and is zoned commercial (Figure 2).

### **What happened at the Former SMO Gas Station Site?**

The Site was an automobile refueling station for approximately 40 years and had Underground Storage Tanks (USTs) for gasoline and diesel fuels, as well as heating fuel. At the time of the Brownfield Investigation (BFI), the building had been demolished and the Site consisted of areas of gravel, pavement, concrete and grass. The structures shown in Figure 2 have been removed. Several petroleum releases occurred, likely as a result of historic operations, which impacted the soil and groundwater beneath the Site.

### **What is the environmental problem at the Former SMO Gas Station Site?**

A Brownfield Investigation performed in 2013 and supplemental Brownfield Investigation sampling performed in 2014 at the Site found that the groundwater near the former fueling islands and in the off-site monitoring wells contained the following contaminants of concern: volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and total xylenes (BTEX) as well as semi-volatile organic compounds (SVOCs) including naphthalene, isopropylbenzene, and methyl-tert-butyl ether (MTBE). The contaminated groundwater has migrated off-site. Also, the human health risk assessment indicates that there is a potential risk from intrusion of benzene, ethylbenzene, isopropylbenzene, and naphthalene vapors if a building is constructed on the site.

### **What clean-up actions have been taken at the Former SMO Gas Station Site?**

A pump and treat system was installed by DNREC's Tank Management Section in December 1993 and a soil vapor extraction system was installed in August 1994. The pump and treat

system and soil vapor extraction system operated until June 2005 and August 2004, respectively. Approximately 10 cubic yards of soil was excavated during the removal of the USTs in May 2012. A Tier I Investigation Report, dated August 2012, stated that no soil samples exceeded applicable standards, but that groundwater samples exceeded the standard under DNREC's Tank Management Section (TMS). DNREC's TMS issued a No Further Action (NFA) letter for the site in August 2012.

### **What does the owner want to do at the Former SMO Gas Station Site?**

The Site will be used by Martin Honda as a parking lot.

### **What additional clean-up actions are needed at the Former SMO Gas Station Site?**

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

1. Implement an in situ treatment of the groundwater at the source area as per a DNREC-approved Remedial Action Work Plan. The Work Plan should include monitoring and sampling of MW-2 through MW-7. The sampling and monitoring requirements will include a pre-injection baseline, followed by four (4) seasonal quarters of groundwater sampling and monitoring. Additional monitoring under the Long Term Stewardship Plan may be necessary based on the results of the four quarters of monitoring.
2. An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) (UECA), will be recorded in the office of the Recorder of Deeds to include the following:
  - [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 the existing structures on the on the Property]without the prior written approval of DNREC-SIRS;
  - [c.] 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-SIRS and DNREC Division of Water; and
  - [d.] Compliance with Long Term Stewardship Plan. Perform all work required by the Long Term Stewardship Plan ("LTS Plan"), as issued, approved, modified or amended by DNREC;

[e.] **Building Restriction.** There shall be no construction of any structure on the property due to possible risk of vapor intrusion without the prior written approval of DNREC-SIRS.

3. Develop a DNREC approved CMMP to allow workers to safely handle any potential contaminated soil and groundwater at the Site.
4. Develop and implement a DNREC-approved Long-Term Stewardship (LTS) Plan. The LTS Plan will detail the groundwater monitoring network and schedule to be followed in order to monitor the expected attenuation of the groundwater contamination.

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

The Site use will be restricted to non-residential (commercial/industrial) purposes by recording the environmental covenant, and long term monitoring will be performed as per the LTS Plan. After the remedial actions have been performed, a Certificate of Completion of Remedy will be issued.

### **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 available at the DNREC office, 391 Lukens Drive in New Castle, 19720. Most documents are also found on:

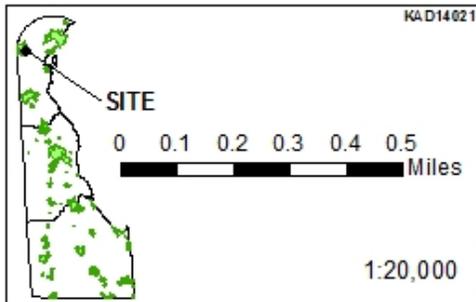
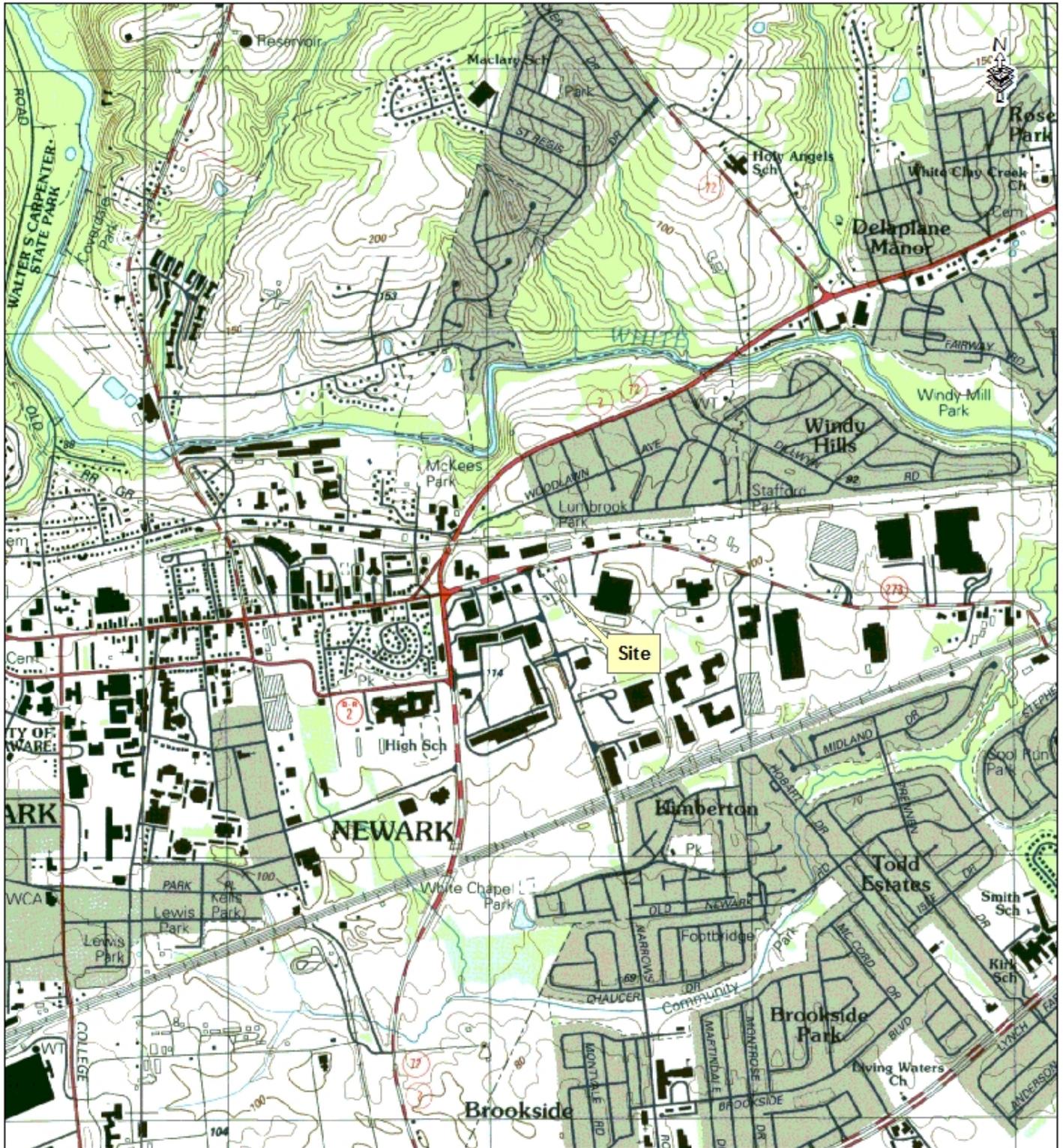
<http://www.nav.dnrec.delaware.gov/DEN3/>

The 20-day public comment period begins on September 21, 2014 and ends at close of business (4:30 pm) on October 13, 2014. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Kathryn Durant, Project Officer or Robert Newsome, Public Information Officer.

Figure 1: Site Location Map

Figure 2: 2012 Aerial Photo of Site

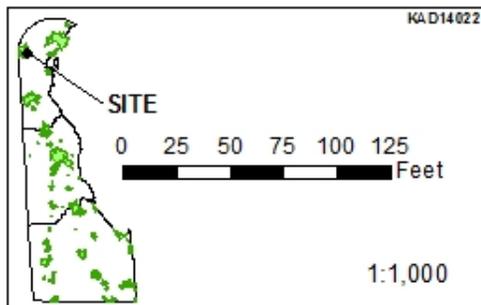
KAD:vdh  
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DE 1537 II B 8



**FIGURE 1  
FORMER SMO GAS STATION  
(DE-1537)  
SITE LOCATION MAP  
NEWARK, DE**

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**FIGURE 2**  
**FORMER SMO GAS STATION**  
**(DE-1537)**  
**2012 AERIAL PHOTO**  
**NEWARK, DE**

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## 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>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>Groundwater Management Zone</b>	A geographical area where DNREC restricts drilling for ground water because it is contaminated
<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>Risk</b>	Likelihood or probability of injury, disease, or death.
<b>Restricted Use</b>	Commercial or Industrial setting
<b>SIRS</b>	Site Investigation Restoration Section of DNREC, which oversees cleanup of sites that were contaminated as a result of past use, from dry cleaners to chemical companies