

FINAL PLAN OF REMEDIAL ACTION



22A EAST 23RD STREET SITE

*22A East 23rd Street
Wilmington, Delaware*

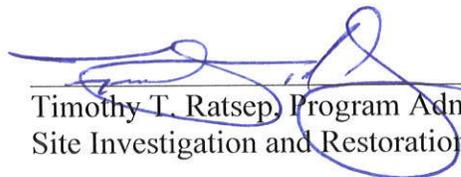
*October 2013
DNREC Project No. DE-1538*

This Final Plan of Remedial Action (Final Plan) presents clean-up actions required by the Department of Natural Resources and Environmental Control (DNREC) to address environmental contamination at the 22A East 23rd Street Site.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on September 25, 2013 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.

Approval:

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



Timothy T. Ratsep, Program Administrator
Site Investigation and Restoration Section

October 15, 2013

Date



PROPOSED PLAN OF REMEDIAL ACTION

22A East 23rd Street Site
Wilmington, Delaware
DNREC Project No. DE-1538



September 2013

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

CONTENTS

- Figures: 1 & 2
- Glossary of Terms

PROPOSED PLAN OF REMEDIAL ACTION

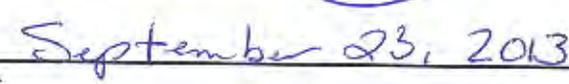
22A East 23rd Street Site
Wilmington, Delaware
DNREC Project No. DE-1538



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 Site. A legal notice is published in the newspaper to advertise the start of a 20-day public comment period. DNREC considers and addresses all public comments received and subsequently publishes a Final Plan of Remedial Action (Final Plan) for the Site.

What is the 22A East 23rd Street Site?

The 22A East 23rd Street Site is located at 22A East 23rd Street in Wilmington, Delaware. The Site consists of one (1) tax parcel (26-022.40-131) and is approximately 0.12 acres in size (Figure 1). The nearest intersection to the Site is East 23rd Street and Lamotte Street. The Site is currently a vacant lot covered with overgrown vegetation and is zoned for residential use (Figure 2).

What happened at the 22A East 23rd Street Site?

According to historical maps, at least since 1884, the Site has been maintained as a vacant lot. Area residents have indicated that illegal dumping of garbage and commercial waste has occurred over the years.

What is the environmental problem at the 22A East 23rd Street Site?

The results of the Brownfield Investigation performed at the Site in April 2013 indicated that exposure to the existing surface soil (0 to 2 feet below ground surface) across the Site may pose an unacceptable increased risk to human health in both restricted use (e.g. outdoor worker) and unrestricted use (e.g. residential) exposure scenarios. Concentrations of semi-volatile organic compounds (SVOCs) above Delaware's Screening Level Values were repeatedly detected in surface soil across the Site. Based on a human health risk assessment, benz[a]anthracene, benzo(a)pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene were identified as contaminants of concern (COCs) for surface soil. In the area of GP08, elevated concentrations of benzo(a)pyrene were detected in soil to a depth of 4 feet below ground surface. Remedial (cleanup) actions are necessary to eliminate the risk of future site users to the COCs in the existing surface soil.

Chloroform, a volatile organic compound (VOC), was determined to be a COC across the entire Site due to multiple detections above DNREC's Screening Level value in the groundwater samples collected from on-site. To a lesser extent, manganese (a metal), dibromochloromethane and benz[a]anthracene (SVOCs) were detected in groundwater samples and determined to be

localized COCs in smaller areas on the Site. Consumption of on-site groundwater would pose an unacceptable risk to human health.

What is the development plan for the 22A East 23rd Street Site?

The Site is a Brownfields Site. Currently, the development plan is the creation of a community garden.

What clean-up actions are needed at the 22A East 23rd Street Site?

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

1. Excavate the surface soil (0 to 2 feet below ground surface) across the Site and backfill with DNREC-approved fill material.
2. Excavate soil from 2 to 4 feet below ground surface in the vicinity of GP08 to remove a “hot spot” area with elevated concentrations of benzo(a)pyrene, and backfill with DNREC-approved fill material.
3. Record an Environmental Covenant, consistent with Delaware’s Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) (UECA), in the office of the Recorder of Deeds to include the following:
 - a. 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;

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

The complete file on the Site including the Brownfield Investigation report and other 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 26, 2013 and ends at close of business (4:30 pm) on October 15, 2013. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Lindsay Hall, Project Officer, or Robert Newsome, Public Information Officer.

Figure 1: Site Location

Figure 2: Site Layout

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Figure 2

Glossary of Terms Used in this Proposed Plan

Brownfield Investigation (BFI)	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.
Brownfield	A vacant industrial or commercial property that is not being used to its full potential where redevelopment is complicated by the potential threat of environmental contamination
Certification of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Contaminant of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a site contaminated with hazardous substances.
Groundwater Management Zone	A geographical area where DNREC restricts use of ground water due to the presence of contamination at unacceptable levels.
Hazardous Substance Cleanup Act (HSCA)	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.
"Hot Spot"	Localized area of contamination within the larger Site
Human Health Risk Assessment (HHRA)	An evaluation performed to characterize the potential human health risk associated with exposure to site related chemicals.
Risk	Likelihood or probability of injury, disease, or death.
Restricted Use	Commercial or industrial setting
SIRS	Site Investigation and Restoration Section of DNREC. Provides oversight of the investigation and cleanup of sites that were contaminated as a result of past use
Unrestricted Use	Setting in which there is no limitation on property use due to the presence of remaining contamination at an unacceptable level