FINAL PLAN OF REMEDIAL ACTION

CROZIER CENTER SITE – OPERABLE UNIT 3

4051 Ogletown Road *November 2012*
Newark, Delaware *DNREC Project No. DE-1428*

This Final Plan of Remedial Action (Final Plan) presents the clean-up actions required by the Department of Natural Resources and Environmental Control (DNREC) to address environmental contamination at the Crozier Center Site – Operable Unit 3.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for Operable Unit 3 (OU-3) of the Site on October 10, 2012 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

11/28/2012
Date

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PROPOSED PLAN OF REMEDIAL ACTION

Crozier Center Site OU-3
Newark, Delaware
DNREC Project No. DE-1428

October 2012

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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PROPOSED PLAN OF REMEDIAL ACTION

Crozier Center Site OU-3
Newark, Delaware
DNREC Project No. DE-1428

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

Approved by: FOR MARJ CROFTS

Marjorie A. Crofts, Director
Division of Waste Management

10/3/12

Date

What is a Proposed Plan?

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 publish a Final Plan of Remedial Action (Final Plan) for the Site.

What is the Crozier Center Site OU-3?

The Crozier Center Site OU-3 (Site) is located at 4051 Ogletown Road in Newark, Delaware and consists of a portion of one tax parcel (09-023.00-028), totaling approximately 4.80 acre (Figure 1). The nearest intersection to the Site is Christiana Road and Ogletown Road. The Site consists of an office building (formerly named Sabre Wing) and asphalt parking area and is zoned commercial (Figure 2). The Site is bordered by Crozier Center OU-2 to the north and west, Cedarwood Apartments to the east, and Christiana Road to the south.

What happened at the Crozier Center Site OU-3?

The source of the contamination is unknown but is believed to have originated on the Site.

What is the environmental problem at the Crozier Center Site OU-3?

During the remedial investigation, free product aka non-aqueous phase liquid (NAPL) in the form of heating oil was found on the groundwater in a monitoring well (SW-MW05) installed to the northeast of the Sabre Wing adjacent to the property boundary with the Cedarwood Apartments. The NAPL soil area is shown in Figure 2. The groundwater contamination originated at OU3 has migrated to Crozier OU-2 but has not migrated off the Crozier Site.

Vapor intrusion sampling of the adjacent building did not indicate a risk for the onsite office building.

What clean-up actions have already been taken for the Crozier Center Site OU-3?

NAPL is being removed from the well on a periodic basis.

What does the owner want to do at the Crozier Center Site OU-3?

Buccini Pollin Group Office Partners XIII Iron Hill LLC (BPG) will continue to lease the property for use as an office building.

What additional clean-up actions are needed at the Crozier Center Site OU-3?

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. Remove NAPL from SW-MW05 until it can be documented that an active remedy is no longer necessary to protect human health and the environment.
2. Prepare a recoverability report to determine NAPL recoverability and removal time frame.
3. Establish a groundwater management zone (GMZ) to prevent groundwater withdrawal without DNREC approval.
4. An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) (UECA), to be recorded in the office of the Recorder of Deeds to include the following:
    - Prohibit Interference with Remedy;
    - Prohibit land disturbing and slab disturbance activities without prior written approval by DNREC;
    - Comply with the Long Term Stewardship Plan;
    - Prohibit the installation of groundwater wells for drinking water purposes without the prior written approval of DNREC; and
    - Comply with the Contaminated Materials Management Plan (CMMP).
5. Develop a DNREC approved CMMP to allow construction workers to safely handle any potential contaminated soil and groundwater at the Site in the NAPL area.
6. Develop and implement a DNREC-approved Long-Term Stewardship (LTS) Plan. The LTS Plan will detail: 1) the groundwater monitoring network and schedule to be followed in order to monitor the NAPL attenuation, and 2) Installation of one or more monitoring wells to evaluate the NAPL, and 3) the inspection schedule to be followed in order to ensure the long-term integrity of the remedy.

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

The environmental covenant and LTS will specify the cleanup actions described above.

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

The complete file on the Site including the Remedial Investigation Report 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.dnrec.delaware.gov/whs/awm/SIRB/Pages/SIRBPlans.aspx

The 20-day public comment period begins on October 7, 2012 and ends at close of business (4:30 pm) on October 29, 2012. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Rick Galloway, Project Manager, or Robert Newsome, Public Information Officer.

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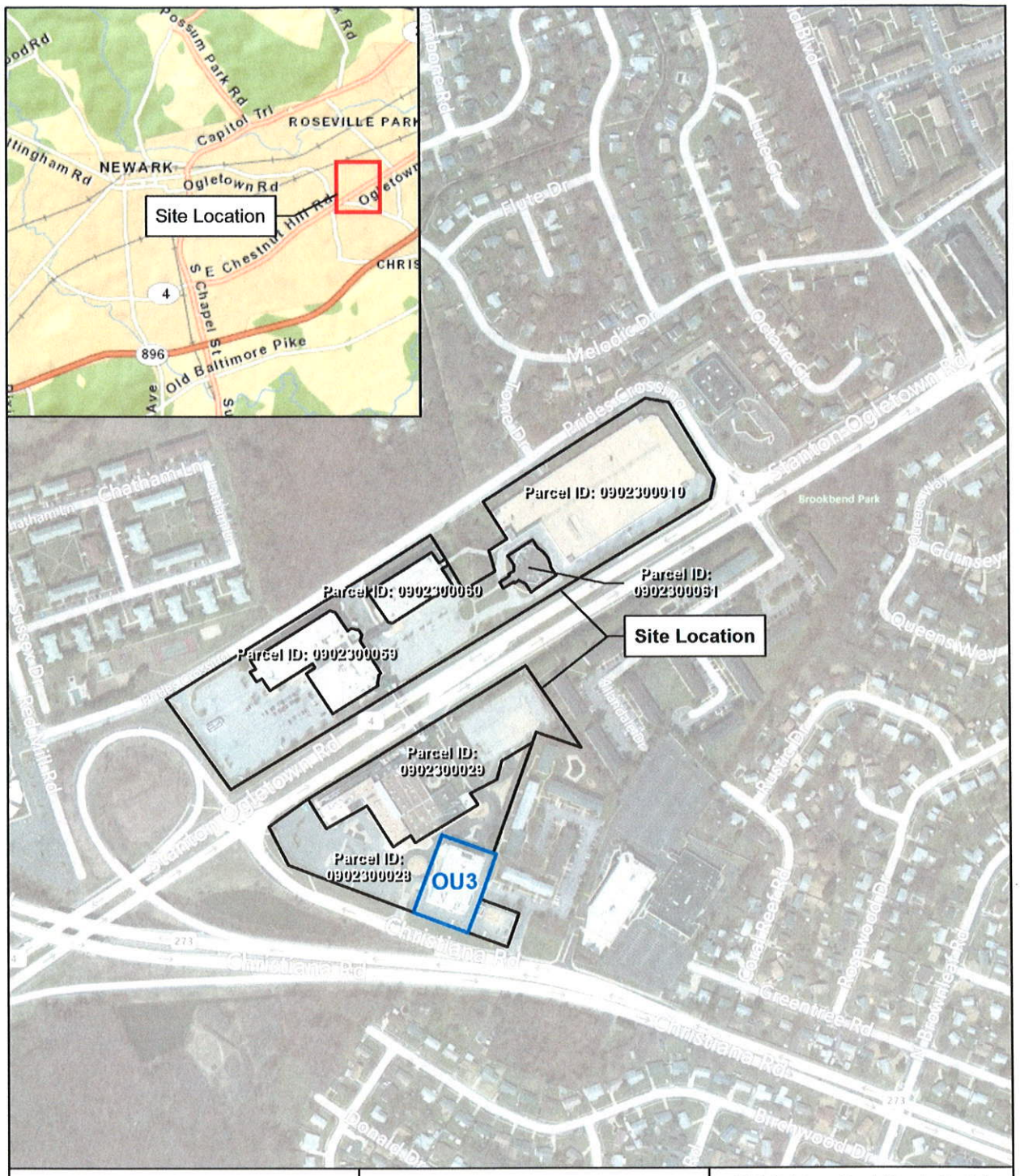
Figures



Legend

- OU3
- Tax Parcel

Data Sources:
Imagery: ESRI Bing Hybrid Service

Coordinate System:
NAD 1983 State Plane Delaware FIPS 0700
Projection: Transverse Mercator
Linear Unit: Foot US

GCS North American 1983
Datum: D North American 1983

N

0 225 450
Feet

4051 Ogletown Road (Crozier Center)
Newark, Delaware

Figure 1
Site Location Map

Created:7/10/2012
Revised:
Author: zieglera

File: Y:\Crozier_IronHill\mxd\SiteLoc.mxd, 7/10/2012 5:05:34 PM, zieglera

Legend

- Approximate Area of Hydrocarbon Plume
- OU3
- Tax Parcel

Data Sources:
Imagery: ESRI Bing Hybrid Service

Coordinate System:
NAD 1983 State Plane Delaware FIPS 0700
Projection: Transverse Mercator
Linear Unit: Foot US

GCS North American 1983
Datum: D North American 1983

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0 20 40
Feet

4051 Ogletown Road (Crozier Center)
Newark, Delaware

Figure 2
Hydrocarbon Plume Map

Created:7/10/2012
Revised:
Author: zieglera

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Glossary of Terms

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.
Contaminated Materials Management Plan	A written plan specifying how potentially contaminated material at a Site will be sampled, evaluated, staged, transported and disposed of properly.
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Groundwater Management Zone	A geographical area where DNREC restricts drilling for ground water because it is contaminated
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.
Risk	Likelihood or probability of injury, disease, or death.
SIRS	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