

# THIRD AMENDED FINAL PLAN OF REMEDIAL ACTION



## JACKSON PIT SITE

*Tax Parcel# 3-34.6.00-504.02  
Lewes, Delaware*

*April 2015  
DNREC Project No. DE-0149*

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 Jackson Pit Site.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on March 29, 2015 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

*April 27, 2015*  
\_\_\_\_\_  
Date



# **THIRD AMENDED PROPOSED PLAN OF REMEDIAL ACTION**

Jackson Pit Site  
Lewes, Delaware  
DNREC Project No. DE-0149



March 2015

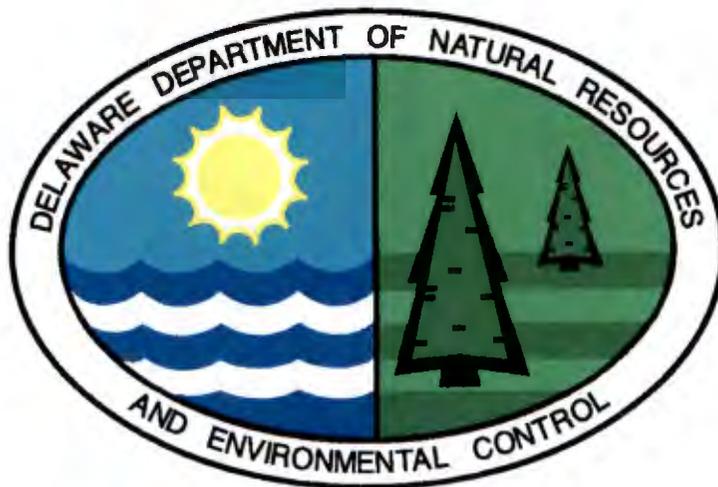
Delaware Department of Natural Resources and Environmental Control  
Division of Waste and Hazardous Substances  
Site Investigation & Restoration Section  
391 Lukens Drive  
New Castle, Delaware 19720

## CONTENTS

- Figures: 1 & 2
- Glossary of Terms

# THIRD AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Jackson Pit Site  
Lewes, Delaware  
DNREC Project No. DE-0149



**Approval:**

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

Approved by:

Timothy Ratsep, Environmental Program Administrator  
Site Investigation & Restoration Section

March 26, 2015  
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 advertising the Proposed Plan 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.

When new substantive information regarding the release of contamination is identified at a Site after the Proposed Plan has been issued and/or a change in the original remedial action(s) is warranted, a new Proposed Plan must be issued to once again solicit public comment. DNREC uses a comprehensive assessment, which includes the additional data, to develop the new proposal for remedial action at the Site.

## **What is the Jackson Pit Site?**

The Jackson Pit Site (“Site”) is an undeveloped, vacant lot, located southwest of the Town of Lewes, Delaware. The Site is comprised of one (1) tax parcel, #3-34.6.00-504.02, and is approximately 18.3 acres in size. It can be accessed via Mackenzie Way along Plantation Road. The Site is mainly bordered by residential development, except for wooded and crop land to the southwest. The location of the Site is depicted on Figure 1.

## **What happened at the Jackson Pit Site?**

Prior to the 1960s, the Site was reportedly used as a borrow pit from which native material was excavated. Afterwards, until the early 1980s, the pit was used as a dump for municipal or household waste. In the 1990s, the DNREC Solid and Hazardous Waste Branch permitted the disposal of tree stumps, lumber, and masonry materials on the Site. Subsequently, the Site was graded with sand and gravel. For many years, access to the Site was not restricted, so it was subject to illegal dumping.

## **What is the environmental problem at the Jackson Pit Site?**

Multiple environmental investigations were conducted on the Site between 1986 and 2014. The most comprehensive evaluation, the Brownfield Investigation (BFI), was initiated in 2010 on behalf of a previous property owner, and concluded in 2014 on behalf of the current property owner, CB Lewes, LLC. The results of the BFI indicated that long-term exposure to the subsurface soil (greater than 2 feet below ground surface) in the vicinity of soil sample location GP-07, could potentially pose an unacceptable risk to future site residents due to the concentration of semi-volatile organic compounds (SVOCs), specifically polycyclic aromatic hydrocarbons (PAHs), detected in the sample (Figure 2). It was also concluded that long-term exposure to the maximum concentrations of the metals, arsenic, cobalt, iron, and manganese, detected in groundwater samples collected on the Site could potentially pose an unacceptable

risk to construction workers and future site residents. Another result of the Site's past use as a dump is that the buried biodegradable debris has been naturally decomposing below the ground surface, generating methane. While methane is a non-toxic gas, provided there is a viable pathway to a virtually enclosed structure, the potential exists for methane to create a fire or explosion hazard if it is able to accumulate to certain levels and is then ignited. Methane can also displace oxygen in an enclosed area. Removal of this buried debris from the Site will eliminate the potential threat of methane accumulation in structures on or near the Site.

### **What does the owner of the Jackson Pit Site want to do with the property?**

The Site is a certified Brownfield Site and the property owner, CB Lewes, LLC, wants to redevelop the Site for residential use with an apartment and townhome community.

### **What clean-up actions are needed at the Jackson Pit 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. A Remedial Action Work Plan must be submitted to DNREC for approval within 90 days of the issuance of the Final Plan of Remedial Action.
2. A Contaminated Materials Management Plan (CMMP) must be submitted to DNREC within 90 days of the issuance of the Final Plan of Remedial Action and implemented upon its approval by DNREC. The CMMP will provide guidance to construction workers for the safe handling of any potentially-contaminated groundwater at the Site.
3. 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 Recorder of Deeds for Sussex County within 90 days of the issuance of the Final Plan of Remedial Action. The Environmental Covenant must include the following activity restrictions:
  - 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-SIRS and DNREC's Division of Water.
  - b. Compliance with the 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.
4. Subsurface soil in the vicinity of GP-07 must be excavated and properly disposed of at an off-site location. If it is required that off-site material be imported to backfill this excavation, it must meet residential use quality requirements. The excavation of soil must be performed pursuant to the requirements and schedule indicated in the DNREC-approved Remedial Action Work Plan.
5. Buried organic debris and biodegradable waste, e.g. tree stumps, paper products, must be excavated from the Site. If it is required that off-site material be imported to backfill any excavations, it must meet residential use quality requirements. This excavation must be

performed pursuant to the requirements and schedule indicated in the DNREC-approved Remedial Action Work Plan.

6. A Remedial Action Completion Report must be submitted to DNREC within 90 days of the completion of the remedial actions required in this Proposed Plan.
7. A request for a Certification of Completion of Remedy (COCR) must be submitted to DNREC within 90 days of approval of the Remedial Action Completion Report.

### **How can I find additional information on the Proposed Plan for the Jackson Pit Site?**

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/>

### **How can I comment on the Proposed Plan for the Jackson Pit Site?**

The 20-day public comment period begins on March 29, 2015 and ends at close of business (4:30 pm) on April 20, 2015. 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 Map

Figure 2: Sample Location Map

LJH:tlw; LJH15014.doc; DE 0149 II B 8

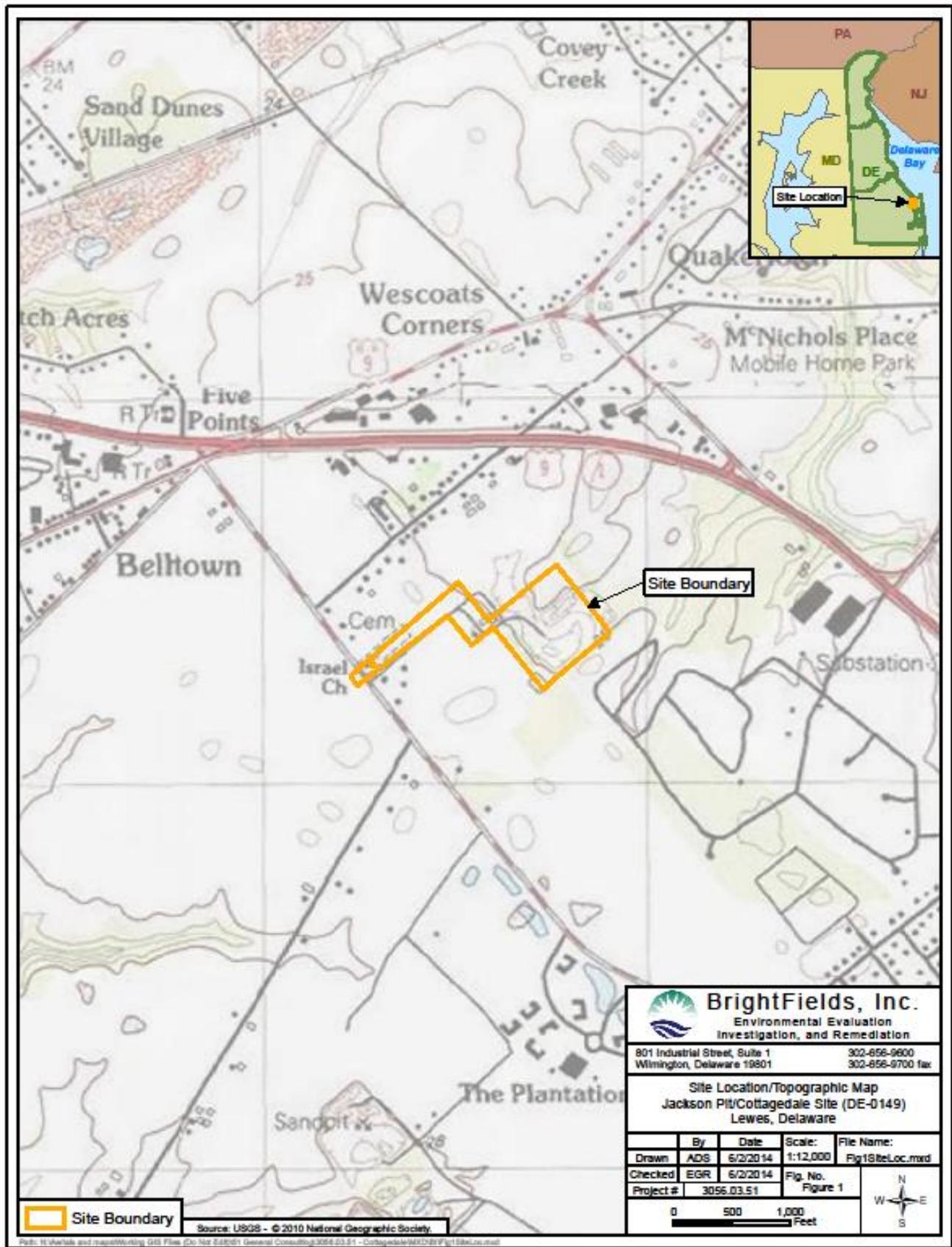


Figure 1

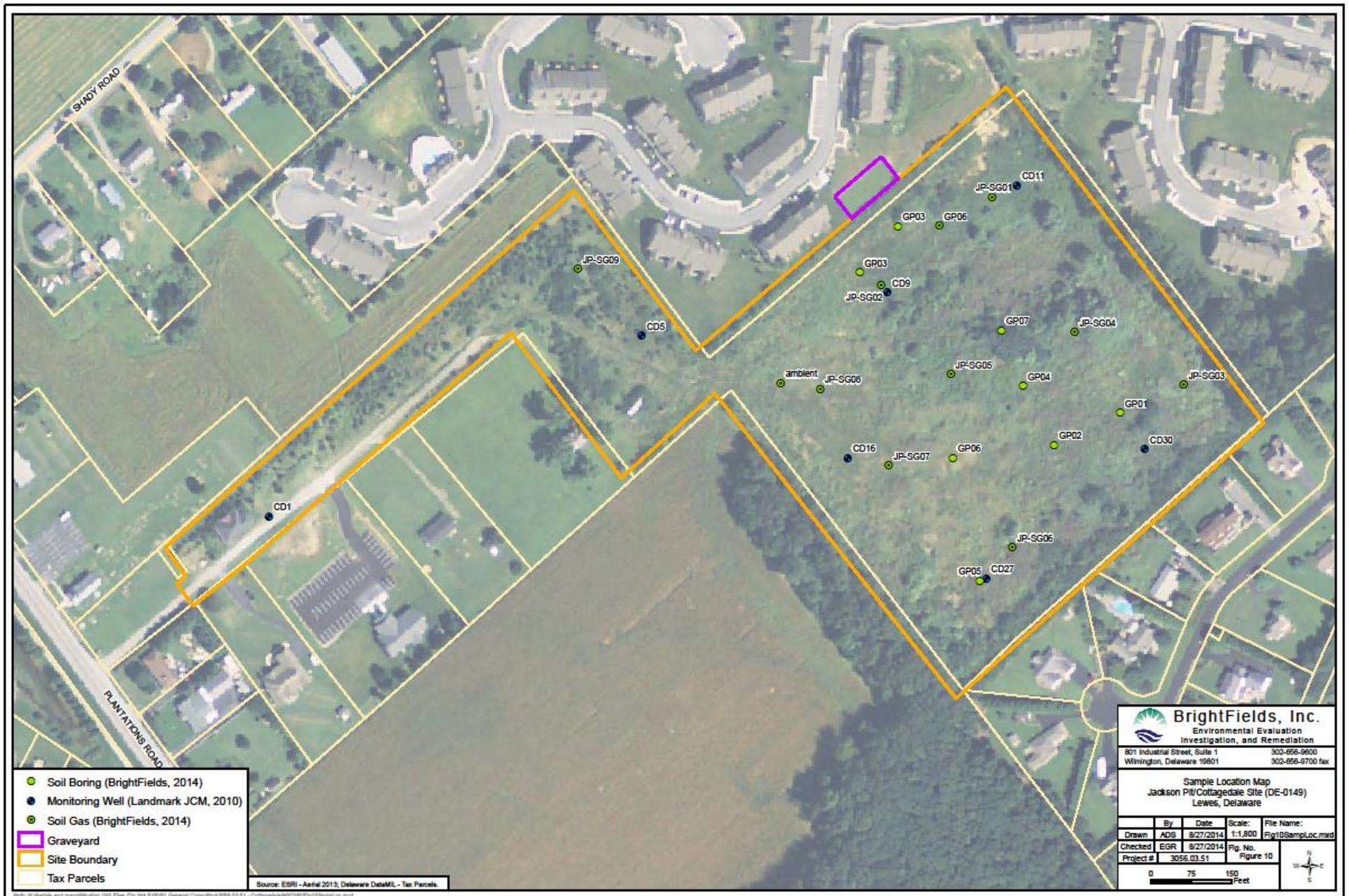


Figure 2

## Glossary of Terms Used in this Proposed Plan

<b>Brownfield</b>	A Site with an actual, threatened, or perceived release of a hazardous substance
<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>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 Site with an identified release or releases of a hazardous substance(s)
<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>Risk</b>	Likelihood or probability of injury, disease, or death.
<b>SIRS</b>	Site Investigation and Restoration Section of DNREC, which oversees the investigation and cleanup of sites that were contaminated as a result of past or current use.