PROPOSED PLAN OF REMEDIAL ACTION

Purina Tower B, Operable Unit 1 Site
Wilmington, Delaware
DNREC Project No. DE-1264 OU-1

June 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, and 3
- Glossary of Terms

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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

5/30/2013
Date

Purina Tower B OU-1 Site

PROPOSED PLAN
Questions & Answers

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 Purina Tower B Operable Unit 1 Site?

At the time of the Brownfield Investigation in 2010, the Site consisted of five tax parcels located at 1409 Eastlawn Avenue, 3410 Bellevue Avenue; 3113 and 3400 Edgemoor Avenue; and 3101 Edgemoor Avenue/1501 E. 35th Street in Wilmington, Delaware (Figure 1). The five tax parcel numbers are 26-030.00-060, 26-030.00-061, 06-152.00-001, 26-030.00-062, and 26-031.00-001, respectively (Figure 2). With the exception of parcel number 26-030.00-060, the remaining parcels were previous Delaware Department of Natural Resources and Environmental Control (DNREC) Sites known as the Purina Tower "A" and "B" Sites (DE-1263 and DE-1264, respectively).

Since the investigation, some of tax parcels have been reassigned DNREC identification numbers based on their current owner and prior use. Parcels 26-030.00-060, and 26-030.00-061, currently owned by the Brandywine School District, are now identified as DNREC site DE-1263. Parcels 06-152.00-001, 26-030.00-062, and 26-031.00-001, also owned by the Brandywine School District, are now identified as DNREC site DE-1264 Operable Unit-1 (OU-1) (Figure 3). One of the properties (1501 E. 35th Street) was divided into two parcels (26-031.00-002 and 06-152.00-010) and is owned by other entities. These properties will be addressed separately as DE-1264 Operable Unit-2 (OU-2) (Figure 3).

This proposed plan addresses the tax parcels located at 3101, 3113, and 3400 Edgemoor Avenue, collectively identified as DE-1264 – Purina Tower B Operable Unit 1. The respective tax parcel numbers are 26-031.00-001, 06-152.00-001, and 26-030.00-062 (Figure 3). The nearest intersection to the Site is Eastlawn Avenue and Edgemoor Avenue. The property contains one one mixed use office/vehicle maintenance facility and is surfaced with pavement or stone for vehicle parking. The Site is currently zoned 26M-1 Light Manufacturing.

What happened at the Purina Tower B Operable Unit 1 Site?

This Site was formerly the location of the Ralston Purina Company, which manufactured animal food on-site and was also used as an office and bus maintenance yard. The Site contained above ground and underground storage tanks which included No. 2 and No. 6 fuel oil, diesel fuel, and gasoline tanks. Dispensing pumps were also located on-site. A July 7, 1988 #6 fuel oil spill

impacted an estimated 30 cubic yards of soil with hydrocarbons. The release came from a 15,000-gallon underground storage tank (UST) at the Purina facility. Following a 1988 fire to buildings adjacent to the Purina Tower, a Secretary's Order was issued which ordered the cleanup of all Asbestos Containing Material (ACM) on-site. The cleanup included bus decontamination, wetting and removal of transite debris and transite contaminated soil, encapsulation of ACM on ASTs, and encapsulation of ACM on portions of the building that were damaged by the fire.

What is the environmental problem at the Purina Tower B Operable Unit 1 Site?

The Purina Tower B OU-1 Site consists of three of the combined five parcels (26-030.00-062, 26-031.00-001 and 06-152.00-001) that were investigated during the 2010 Brandywine School District Transportation Property Brownfield Investigation.

The Brownfield Investigation (BFI) found that surface soil contains metals, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs); and subsurface soil contains metals and PAHs over DNREC soil standards for commercial use of the property. Aluminum, iron, manganese, 1,1-dichloroethene, tetrachloroethene (PCE), and dieldrin were detected above the DNREC criteria in the groundwater. Based on the data, groundwater impacts appear to be migrating from an offsite source. A Human Health Risk Assessment found that there is a potential risk to outdoor workers and construction workers exposed to surface soil, subsurface soil, and groundwater beneath the Site. A vapor intrusion risk assessment for the Purina Tower B OU-1 Site indicated that the risk for vapor intrusion from the contaminants detected in soil and groundwater is within DNREC's acceptable range.

What clean-up actions have been taken at the Purina Tower B Operable Unit 1 Site?

Underground storage tank removal and asbestos containing material removal were previously performed at the Site, as described above.

What does the owner want to do at the Purina Tower B Operable Unit 1 Site?

Future redevelopment plans include the demolition of the current administrative building and maintenance garage on parcels 26-031.00-001 and 06-152.00-001. The foundations of the buildings will be left in place. Additionally, the plan calls for the consolidation and expansion of the staff parking and bus parking areas and the creation of a bus operator training area. The long-term redevelopment plan also involves the construction of a "cold" storage warehouse building on the Site to store surplus materials such as school furniture.

What additional clean-up actions are needed at the Purina Tower B Operable Unit 1 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. Maintain the existing asphalt, concrete and/or crushed stone caps that exist on the Site to eliminate direct contact with contaminants in surface soils.
2. Comply with DNREC's City of Wilmington Groundwater Exclusion Zone (GEZ) – Amended 2011 and applicable City of Wilmington and New Castle County ordinances for groundwater usage.
3. Prior to demolition or renovation of the administrative building or maintenance garage, a properly trained and licensed asbestos contractor must remove any remaining asbestos containing materials.
4. Develop a site specific Health and Safety Plan (HASP) and Contaminated Materials Management Plan (CMMP) to allow construction workers to safely handle any potential contaminated soil and groundwater at the Site during construction activities.
5. Develop and implement a DNREC-approved Long-Term Stewardship (LTS) Plan. The LTS Plan will detail the inspection and reporting schedule to be followed in order to ensure the long-term integrity of the remedy.
6. 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 public or domestic water supply wells will be permitted in Holocene, Columbia, or Wilmington Complex Aquifers or in unconfined portions of the Potomac Aquifer. Wells in confined portions of the Potomac aquifer(s) may be permitted under certain conditions. Non-potable, industrial use wells, monitoring wells and contaminant recovery wells may be permitted following joint review and approval of DNREC-SIRS and DNREC Division of Water;

    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. Compliance with Contaminated Materials Management Plan. Perform all work required by the Contaminated Materials Management Plan ("CMMP Plan"), as issued, approved, modified or amended by DNREC;

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

In the long term, the Site use will be restricted to non-residential (commercial/industrial) purposes as recorded in the environmental covenant. The CMMP will also be completed and available to ensure that any future development is conducted in a safe manner.

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

The complete file on the Site, including the Brownfield Investigation Report, is 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 June 2, 2013 and ends at close of business (4:30 pm) on June 22, 2013. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to John Cargill, Project Officer or Robert Newsome, Public Information Officer.

Figure 1: Site Location/Topographic Map
Figure 2: Tax Parcel Map – 2010
Figure 3: Tax Parcel Map – 2013

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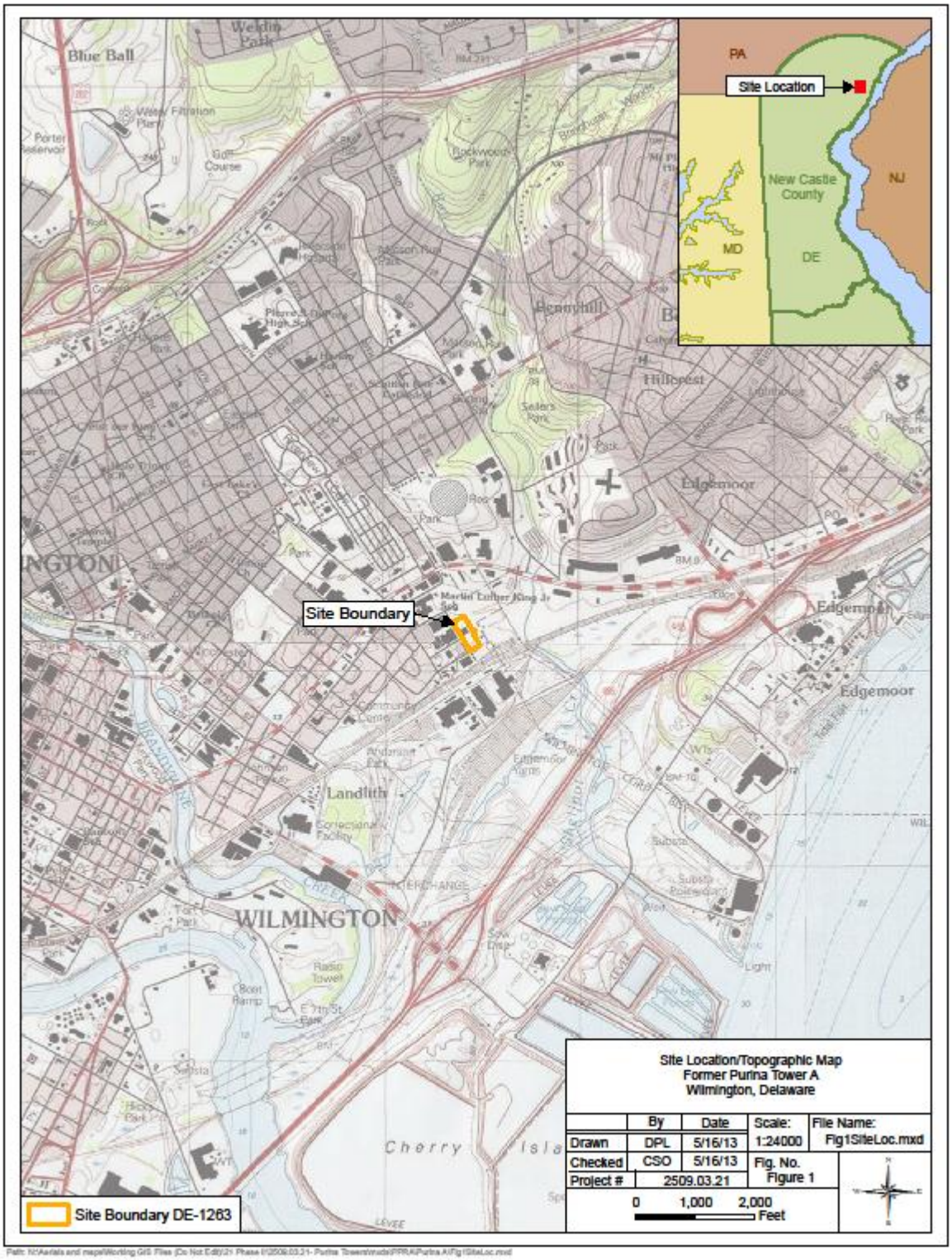
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Site Location
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MD
DE
Site Boundary
Site Boundary DE-1263
WILMINGTON
Landlith
Edgemoor
Hillcrest
Cherry Island
Site Location/Topographic Map
Former Purina Tower A
Wilmington, Delaware
By
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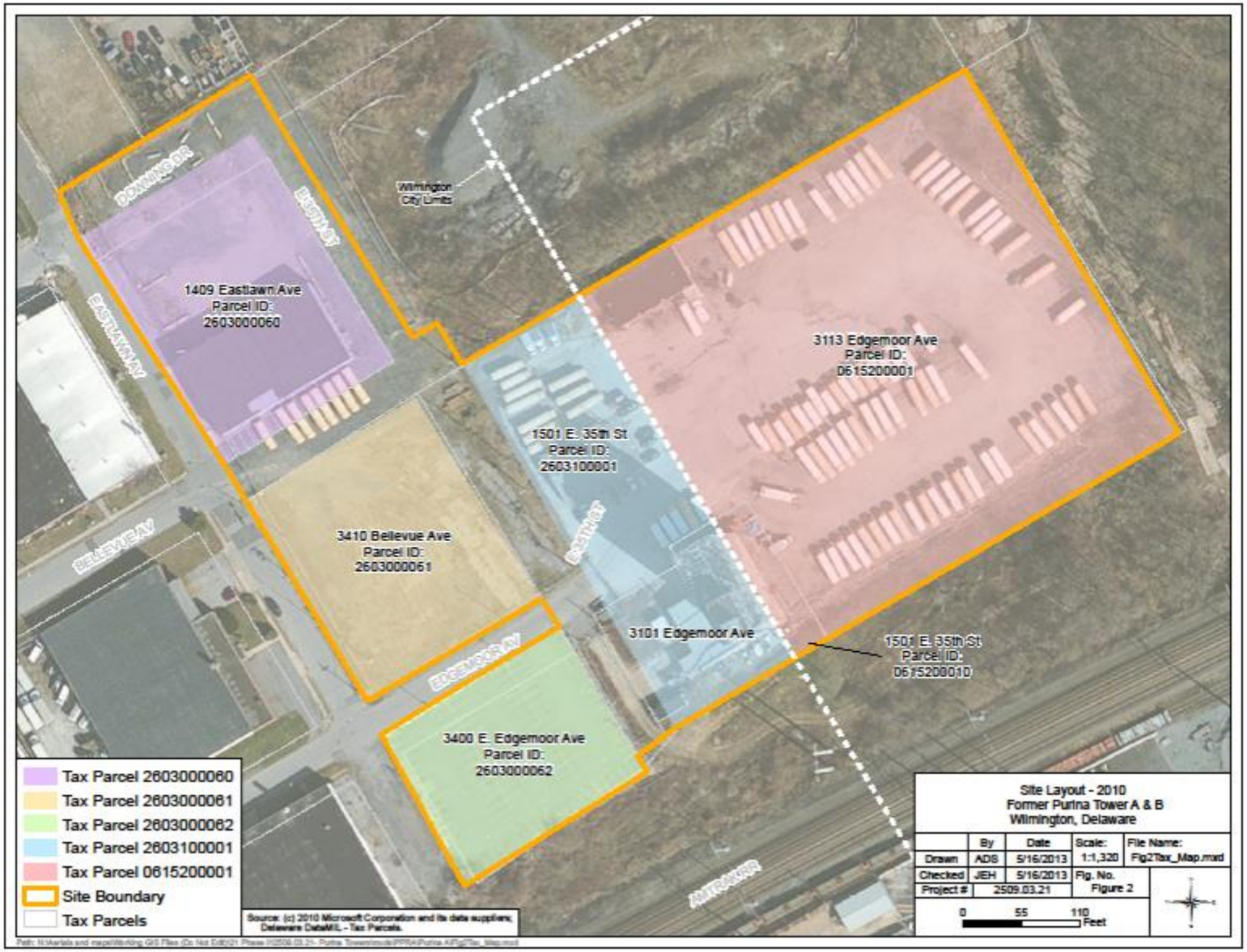
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EASTLAWN AV
Wilmington City Limits
1409 Eastlawn Ave
Parcel ID:
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3113 Edgemoor Ave
Parcel ID:
0615200001
1501 E. 35th St
Parcel ID:
2603100001
BELLEVUE AV
3410 Bellevue Ave
Parcel ID:
2603000061
EDGEMOOR AV
3101 Edgemoor Ave
1501 E. 35th St
Parcel ID:
0615200010
3400 E. Edgemoor Ave
Parcel ID:
2603000062
AMTRAK NEC
Tax Parcel 2603000060
Tax Parcel 2603000061
Tax Parcel 2603000062
Tax Parcel 2603100001
Tax Parcel 0615200001
Site Boundary
Tax Parcels
Source: (c) 2010 Microsoft Corporation and its data suppliers; Delaware DataMIL - Tax Parcels.
Site Layout - 2010
Former Purina Tower A & B
Wilmington, Delaware
By
Date
Scale:
File Name:
Drawn
ADS
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Project #
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Figure 2
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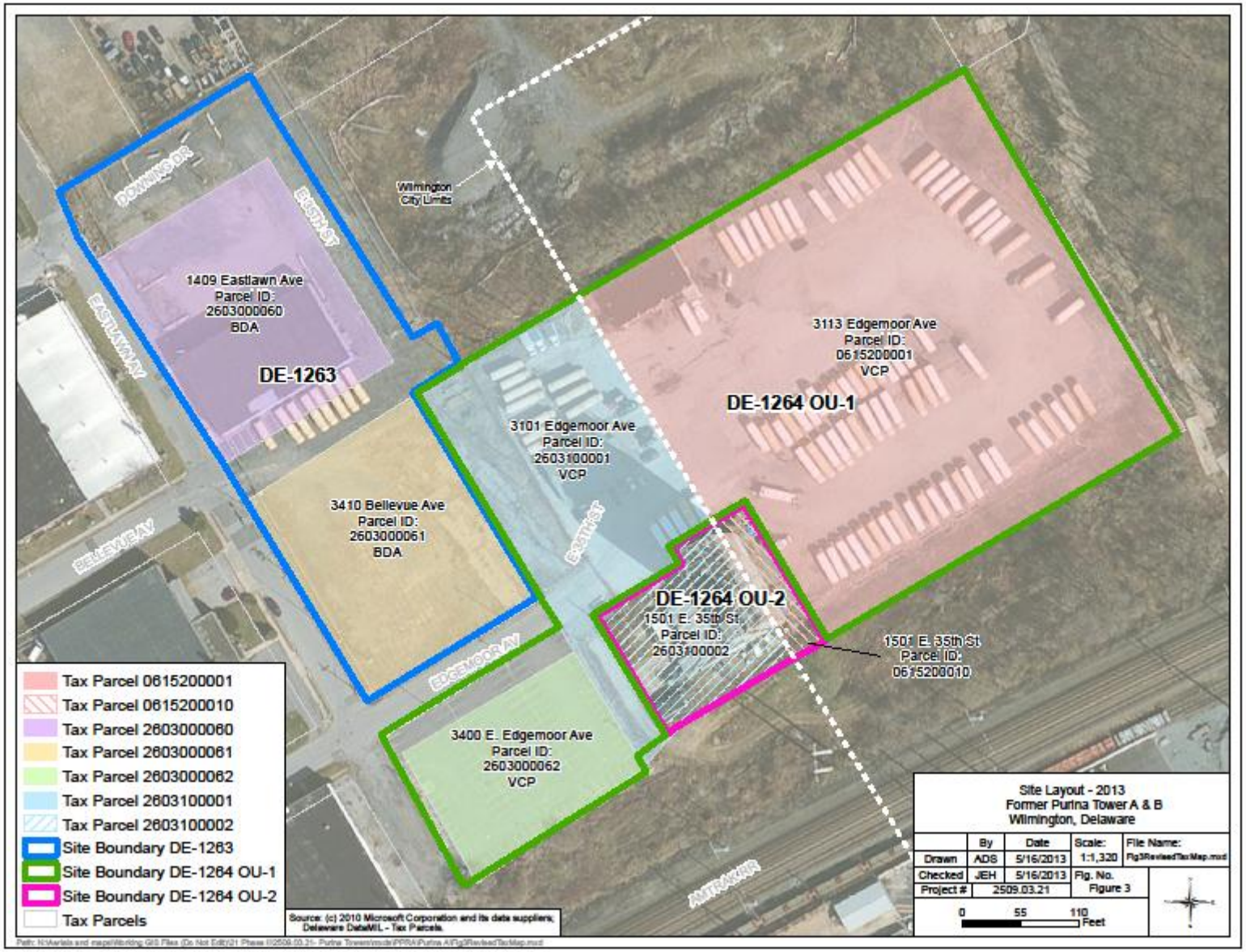
DOWNINGS DR
EASTLAWN AV
BELLEVUE AV
EDGEMOOR AV
ANTRAKAR
Wilmington City Limits
1409 Eastlawn Ave
Parcel ID:
2603000060
BDA
DE-1263
3410 Bellevue Ave
Parcel ID:
2603000061
BDA
3101 Edgemoor Ave
Parcel ID:
2603100001
VCP
3113 Edgemoor Ave
Parcel ID:
0615200001
VCP
DE-1264 OU-1
DE-1264 OU-2
1501 E. 35th St.
Parcel ID:
2603100002
1501 E. 35th St.
Parcel ID:
0615200010
3400 E. Edgemoor Ave
Parcel ID:
2603000062
VCP
Tax Parcel 0615200001
Tax Parcel 0615200010
Tax Parcel 2603000060
Tax Parcel 2603000061
Tax Parcel 2603000062
Tax Parcel 2603100001
Tax Parcel 2603100002
Site Boundary DE-1263
Site Boundary DE-1264 OU-1
Site Boundary DE-1264 OU-2
Tax Parcels
Source: (c) 2010 Microsoft Corporation and its data suppliers, Delaware DataMIL - Tax Parcels.
Site Layout - 2013
Former Purina Tower A & B
Wilmington, Delaware
By
Date
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5/16/2013
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5/16/2013
Fig. No.
Project #
2509.03.21
Figure 3
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Feet

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.
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.
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
Poly chlorinated biphenyls (PCBs)	A synthetic, carcinogenic chemical formerly used in a wide variety of industrial applications but banned from most uses by the US EPA in 1979.
Risk	Likelihood or probability of injury, disease, or death.
Restricted Use	Commercial or Industrial setting
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
Uniform Risk-Based Remediation Standards (URS)	A set of concentration criteria for various contaminants potentially present in site media that are developed for protection of human health and the environment