



PROPOSED PLAN OF REMEDIAL ACTION

Former Free-Flow Packaging Site
Newark, Delaware
DNREC Project No. DE-1597



December 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

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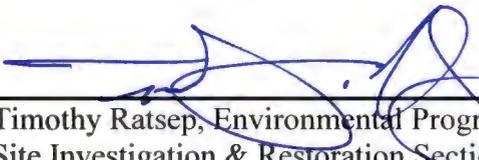
Former Free-Flow Packaging Site
Newark, Delaware
DNREC Project No. DE-1597



Approval:

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

Approved by:



Timothy Ratsep, Environmental Program Administrator
Site Investigation & Restoration Section

December 21, 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 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 Free-Flow Packaging Site?

The Former Free-Flow Packaging Site is located at 111 Alan Drive near Newark, Delaware. The Site consists of one tax parcel (New Castle County Tax Parcel No. 09.017-00.032) which is approximately 2.92 acres in size within an industrial park. The Site is mostly covered with an office/warehouse building and paved parking area that is bounded by a railroad to the south and Harmony Road to the east. The Site location is indicated in Figure 1 (Site Location Map), and general Site features are shown in Figure 2 (Site Sample Location Map). The nearest intersection to the Site is Alan Drive and Harmony Road. The Site is zoned industrial and is supplied with public water.

What happened at the Former Free-Flow Packaging Site?

The Site was developed in 1972 and used for the manufacture, packaging, storage, and shipping of polystyrene packing pellets. A building addition was constructed in 1988. There were three (3) 8,000-gallon heating oil underground storage tanks (USTs) that were previously present on the western side of the building, near the former boiler room. In 1988, two (2) of those USTs were removed and one (1) UST was abandoned in place and the heating system fuel source was switched to natural gas.

What is the environmental problem at the Former Free-Flow Packaging Site?

Investigation reports prepared prior to this BFI report include a Phase I ESA (October 2014) and a Phase II ESA report (October 30, 2014), both prepared by Duffield Associates.

The Phase I ESA report did not identify any particular areas of concern associated either with the former manufacturing operation or the rail spur that is present along a short portion of the southeastern side of the building. The Phase I ESA report did identify concerns regarding the closure of the heating oil storage tanks which lead to a Phase II ESA. The DNREC Tank Management Section had documentation that two (2) USTs were removed and one (1) was closed in place. However, no closure report was found by DNREC that documented observations and laboratory results. During the Phase II ESA, nine (9) borings were advanced,

and soil samples were collected from five (5) of the borings in the apparent former heating oil tank area. The results indicated that diesel-range organic compounds were present in the subsurface soils. The borings also appeared to find the abandoned-in-place tank.

The Site was certified as a brownfield in January 2015. A brownfield investigation (BFI) was performed by Duffield Associates in April 2015 in general accordance with the March 20, 2015 "Sampling and Analysis Plan". During the BFI, the seventeen (17) soil borings were advanced throughout the Property by direct-push (Geoprobe®) technology. A total of 17 surface samples and 17 subsurface samples were collected from the soil borings. In addition, three 2-inch diameter permanent monitoring wells were installed to approximately 15 feet below ground surface (bgs) using hollow-stem auger drilling methods. The wells were installed to sample the uppermost water-bearing zone.

Only manganese, arsenic and cobalt exceeded their respective DNREC-SIRS screening level concentrations in groundwater. There were no exceedances of the screening level concentrations for any analyte in either the shallow or deep soil samples.

The preliminary risk assessment indicated that the use of groundwater as tap water would not be acceptable. No such exposure currently exists since the Property is serviced by a publically available water supply system.

What clean-up actions have been taken at the Former Free-Flow Packaging Site?

Three (3) 8,000-gallon heating oil USTs which contained Number 2 heating oil were previously present on the western side of the building, near the former boiler room. In 1988, two (2) of those USTs were removed and one (1) UST was abandoned in place.

Two (2) aboveground storage tanks (ASTs) were present on the northern side of the Property and contained the blowing agents for the manufacture of polystyrene pellets, isopentane and isobutane. Those tanks were removed from the Property in early 2014.

What does the owner want to do at the Former Free-Flow Packaging Site?

The owner of the Site wants to redevelop the Property. This includes refurbishing the building to provide climate controlled warehousing.

What additional clean-up actions are needed at the Former Free-Flow Packaging 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. A proposed Environmental Covenant must be submitted to DNREC for approval within 60 days of the issuance of the Final Plan of Remedial Action.

2. 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 New Castle County Recorder of Deeds within 60 days of the issuance of the Final Plan of Remedial Action. The Environmental Covenant must include the following activity and/or use 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 Division of Water.

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

The owner of the Site wants to redevelop the Property. This includes refurbishing the building to provide climate controlled warehousing.

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

The complete file on the Site including the Brownfield 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:

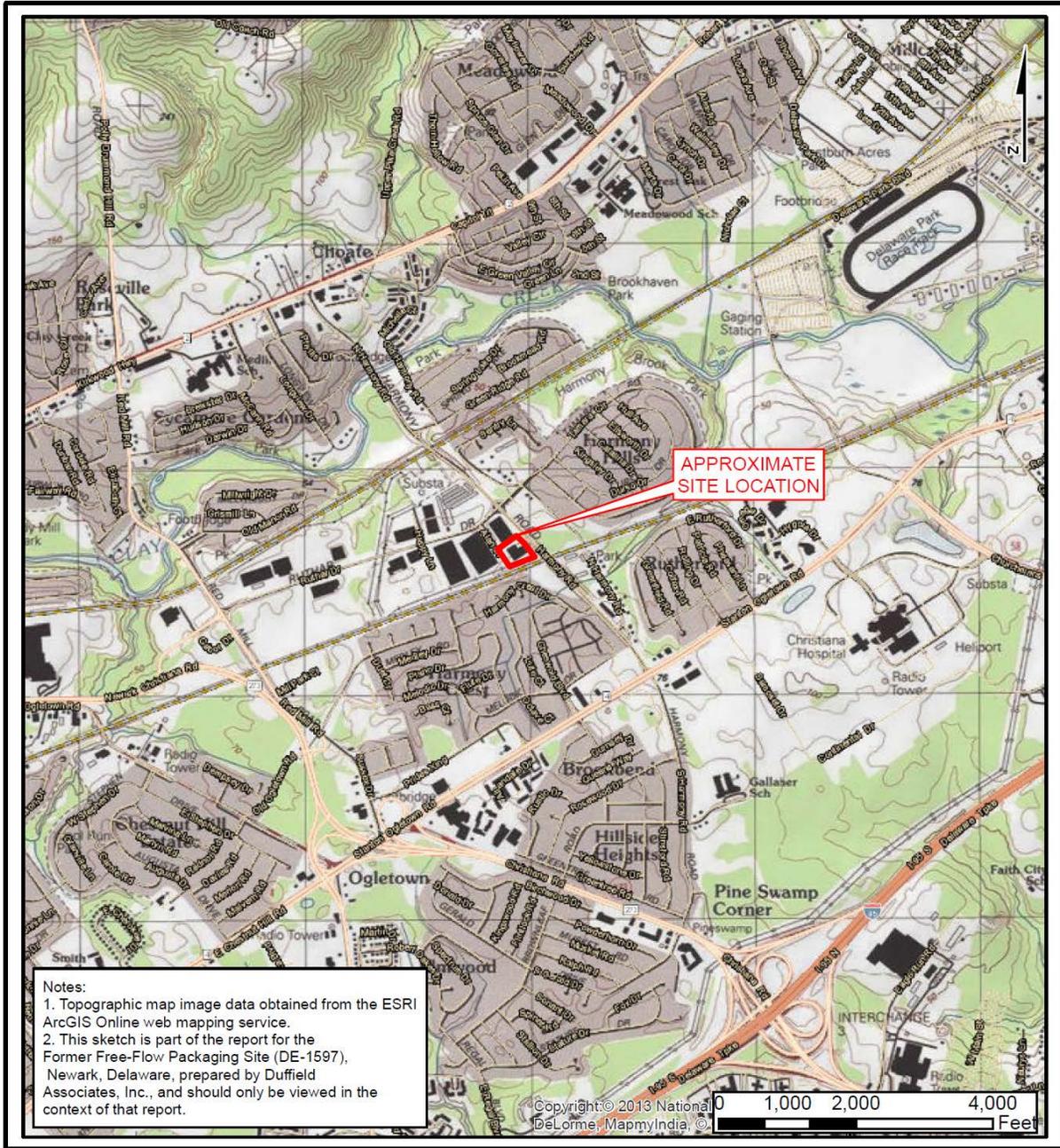
<http://www.nav.dnrec.delaware.gov/DEN3/>

The 20-day public comment period begins on December 27, 2015 and ends at close of business (4:30 pm) on January 19, 2015. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Robert C. Asreen, Jr., Project Officer or Robert Newsome, Public Information Officer.

Figure 1: Site Location Map

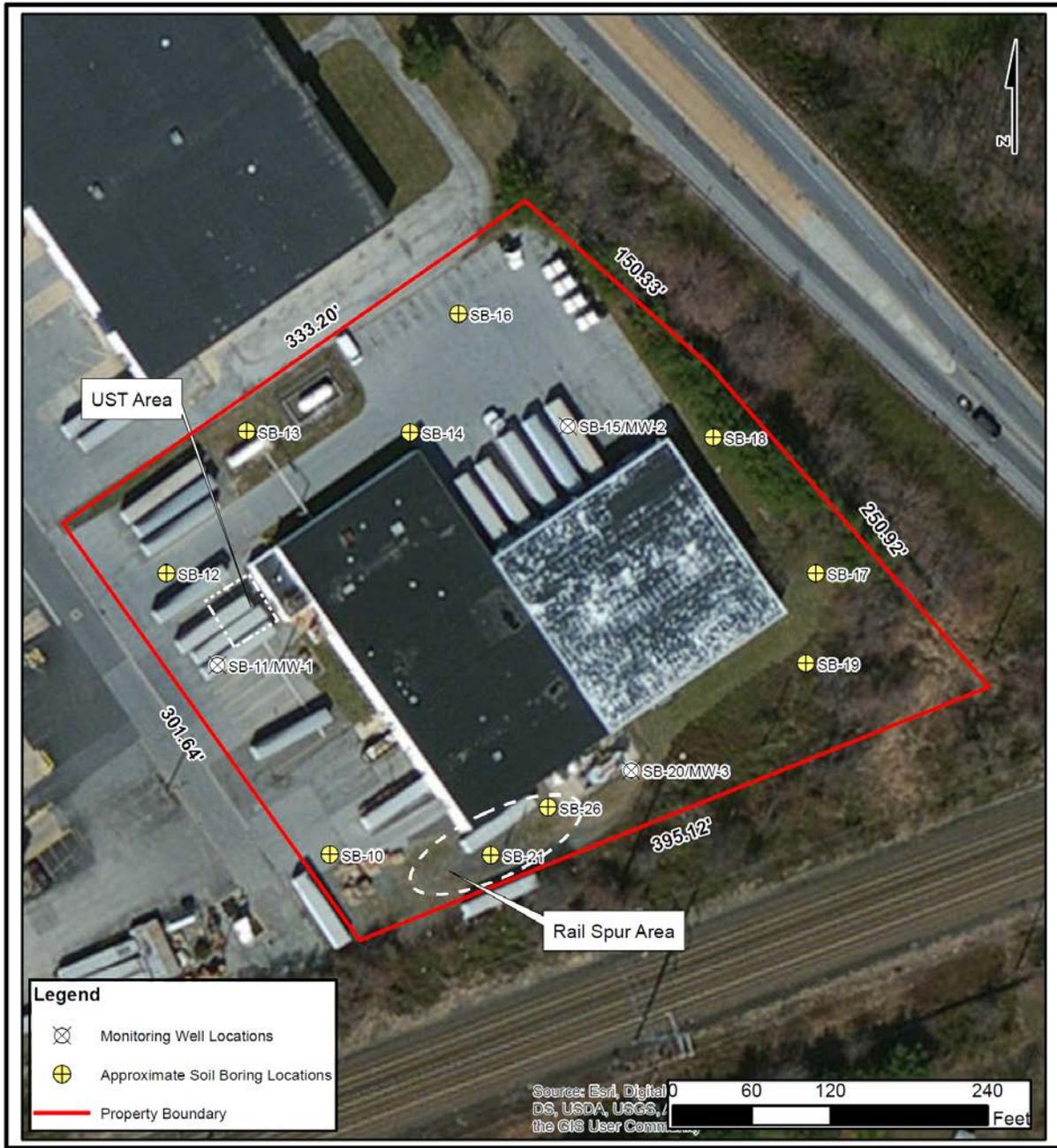
Figure 2: Sample Location Map

RCA:tlw; RCA15128.doc; DE 1597 II B 8



DATE: 08/2015	SITE LOCATION MAP Former Free-Flow Packaging Site (DE-1597) NEWARK-NEW CASTLE COUNTY~DELAWARE	DESIGNED BY: WAJ	 5400 LIMESTONE ROAD WILMINGTON, DE 19808-1232 TEL. (302)239-6634 FAX (302)239-8485 OFFICES IN PENNSYLVANIA, SOUTHERN DELAWARE, MARYLAND AND NEW JERSEY EMAIL: DUFFIELD@DUFFNET.COM
SCALE: 1:24,000		DRAWN BY: KAF	
PROJECT NO. 10437.EE		FILE: 10437EE_SiteLocation.mxd	
SHEET: FIGURE 1			

Figure 1: Site Location Map



DATE: 08/2015	SITE FEATURES SKETCH Former Free-Flow Packaging Site (DE-1597) NEWARK-NEW CASTLE COUNTY-DELAWARE	DESIGNED BY: WAJ	 DUFFIELD ASSOCIATES Soil, Water & the Environment 5400 LIMESTONE ROAD WILMINGTON, DE 19808-1232 TEL. (302)239-6634 FAX (302)239-8485 OFFICES IN PENNSYLVANIA, SOUTHERN DELAWARE, MARYLAND AND NEW JERSEY EMAIL: DUFFIELD@DUFFNET.COM
SCALE: AS SHOWN		DRAWN BY: KAF	
PROJECT NO. 10437.EE		FILE: 10437EE_SampleLocations.mxd	
SHEET: FIGURE 2			

Figure 2: Sample Location Map

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.
Certified Brownfield	A Brownfield that DNREC has determined is eligible for partial funding through the Delaware Brownfields Program
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.
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
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.
Preliminary Risk Assessment	A quantitative evaluation of only the most obvious and likely risks at a site
Risk	Likelihood or probability of injury, disease, or death.
Risk Assessment Guidance for Superfund (RAGS)	An EPA guidance document for superfund sites
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