



PROPOSED PLAN OF REMEDIAL ACTION
1000 East 12th Street- Habitat for Humanity
Wilmington, Delaware
DNREC Project No. DE-1404



December 2011

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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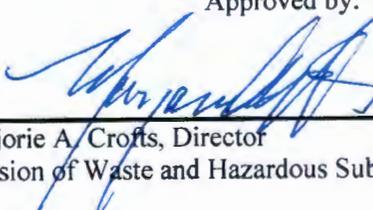
PROPOSED PLAN OF REMEDIAL ACTION

1000 East 12th Street- Habitat for Humanity
Wilmington, Delaware
DNREC Project No. DE-1404



Approval:

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

Approved by:

Marjorie A. Crofts, Director Division of Waste and Hazardous Substances
12.8.11
Date

1000 East 12th Street- Habitat for Humanity



What is the 1000 East 12th Street- Habitat for Humanity Site?

The site is a Delaware-certified Brownfield (DE-1404) located at 1000 East 12th Street in Wilmington, Delaware (Figure 1). The vacant property is owned by Habitat for Humanity and is currently covered with buildings, vegetation and weathered asphalt (Figure 2). Habitat for Humanity plans to redevelop the Site into affordable housing with landscape and hardscape areas.

Tax Parcel Number: 2603640037, 2603640037, 2603640038, 2603640039, 2603640050, 2603640051, 2603640052, 2603640053, 2603640054

Address: 1000 East 12th Street, Wilmington

Nearest major intersection: Thatcher and East 12th Street

Area: 0.9-acres

Surrounding Property: Surrounding land use is mixed commercial and residential

Zoning: 26W-4 Waterfront Residential/Commercial

Site Utilities: Water, gas and sewer utilities are available through the City of Wilmington

Surface water: The closest surface water body is the Brandywine Creek, approximately 230 feet west of the Site

Topography: The Site slopes northwest

Groundwater: The groundwater appears to flow to the west towards the Brandywine Creek

What happened at 1000 East 12th Street?

The operational history of the Site includes residential, a plumbing warehouse/office, auto parts recycler/wholesaler, a dairy, a pet crematorium, and a vacant property.

What is the environmental problem at 1000 East 12th Street?

The Site has been impacted by historical fill and the historical uses of the property. Soil sampling results showed elevated concentrations of several polycyclic aromatic hydrocarbons (PAHs) and metals. Groundwater sampling results showed elevated concentrations of metals. However, the Site is within the existing City of Wilmington Groundwater Management Zone (GMZ), which prohibits the use of groundwater.

Results of the surface soil sampling showed elevated concentrations of benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, dibenz(a,h)pyrene, arsenic, antimony, and lead for the unrestricted use scenario. The results of the subsurface sampling showed elevated concentrations of benzo(a)pyrene and arsenic for the unrestricted use scenario. Additionally, the concentrations of the 5 PAHs for both surface and subsurface samples for GP15 exceeded the restricted use URS criteria. The Site does not pose an unacceptable risk under the construction worker risk scenario.

In groundwater, iron and manganese were detected above the EPA secondary drinking water standards (MCLs). Additionally, arsenic was detected in one monitoring well.

What does the owner want to do at 1000 East 12th Street?

The redevelopment plans for the property include the construction of affordable housing with landscape and hardscape areas.

What clean-up actions are needed at 1000 East 12th Street?

DNREC's clean-up plans include removal of all ASTs and USTs; abate the asbestos containing material (ACM) from the building prior to demolition; additional soil delineation under the buildings after the demolition and within the hotspot areas; soil removal of hot spot areas as necessary; and the installation of a cap/cover system made up of hardscaping or a minimum of two feet of DNREC-approved fill over marker fabric.

DNREC proposes the following clean-up actions at the site:

1. Additional soil delineation of the hot spot areas with elevated concentrations of PAHs and metals and at previously inaccessible areas after building demolition. As necessary, soil removal of hot spot areas.
2. Abatement of all ACM prior to building demolition.
3. Removal of all ASTs and USTs in accordance with the Regulations Governing Underground Storage Tank Systems.
4. Installation of a cap/cover system consisting of a minimum of two feet of DNREC-approved fill over marker fabric or hardscaping; and clean utility corridors.
5. All construction and redevelopment work will be performed in accordance with a DNREC-approved Contaminated Material Management Plan (CMMP), and the Site Specific Health and Safety Plan (HASP).
6. Establish and implement a Long Term Stewardship (LTS) Plan within ninety (90) days following completion of the remedial action. The LTS Plan will include annual inspections of the cap and will address any additional remedial actions that may become necessary based on the results of the inspections.
7. Record an environmental covenant consistent with Delaware's Uniform Environmental Covenants Act, UECA (Title 7, Del. Code Chapter 79, Subtitle II). The environmental covenant will prohibit land disturbing activities without DNREC's prior written approval except in landscaping areas, and prohibit the installation of wells and use of any groundwater at the Site. The Site is located within the City of Wilmington's Groundwater Management Zone, which prevents the use of groundwater without DNREC's written approval.

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

The site will be redeveloped into affordable housing. After redevelopment, a Long Term Stewardship (LTS) plan will be submitted for DNREC approval, which will require periodic inspection of the cap to document the condition of the cap.

DNREC plans to issue a Certification of Completion of Remedy for the Site after the completion of the remedial action of the property, and the implementation of the environmental covenant at the site. The LTS plan will be implemented following construction of the cap.

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

The complete file on the site including the Brownfield Investigation is available at the DNREC office, 391 Lukens Drive in New Castle. Most documents are also found on:

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

The 20-day public comment period begins on December 14, 2011 and ends at close of business (4:30 pm) on January 6, 2012. Please send written comments to the DNREC office or call Robert Newsome, Public Information Officer, or Morgan Price, Project Manager, at 302-395-2600.

MMP:vdh; MMP11045.doc; DE 1404 II B 8

Figure 1: Site Location Map

Figure 2: Site Map

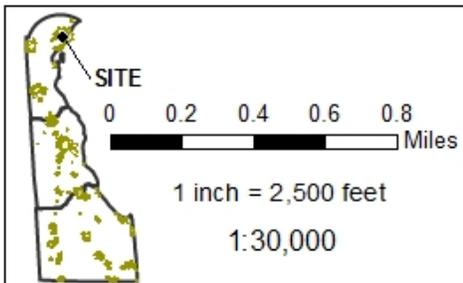
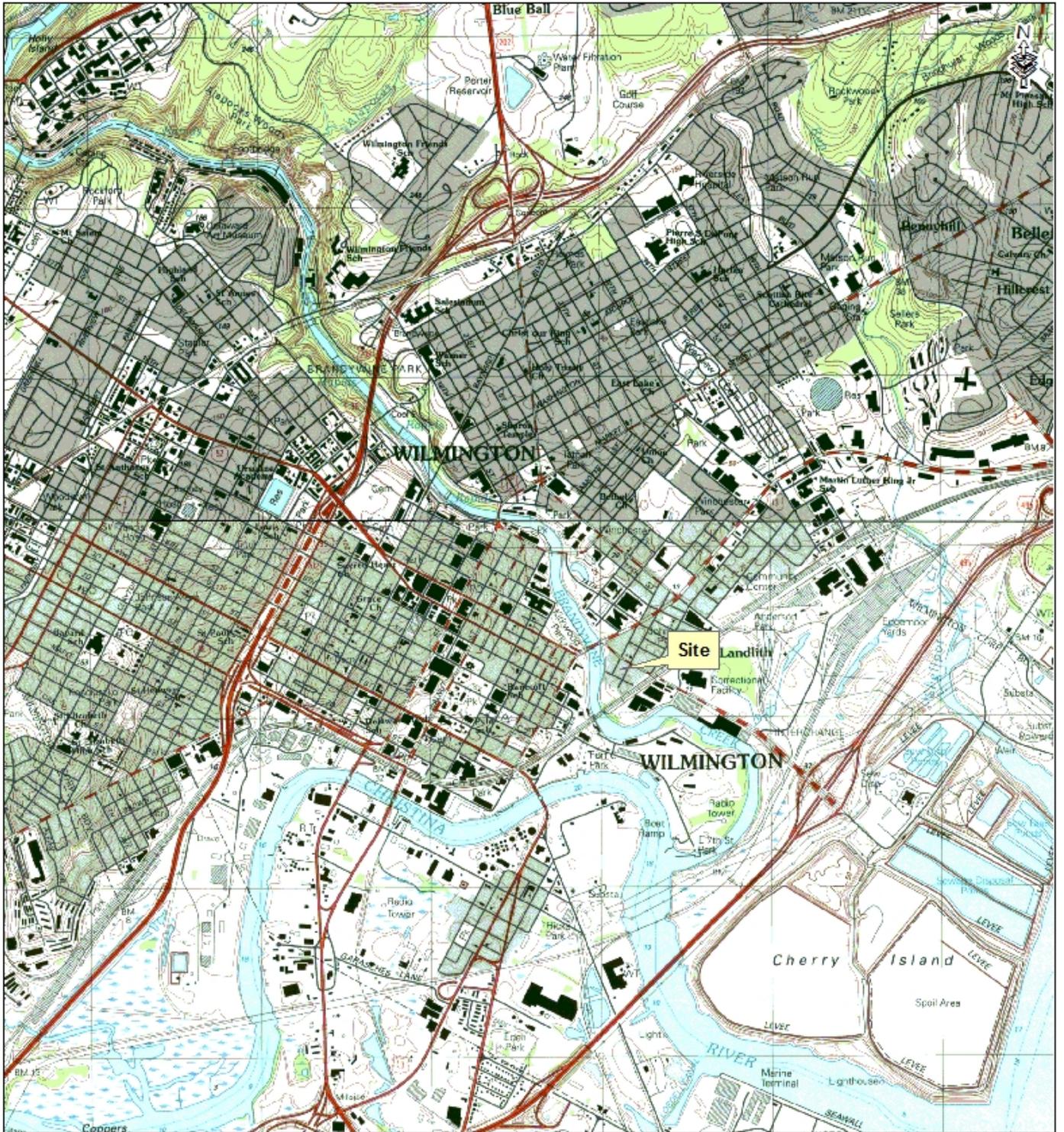


Figure 1
1000 E. 12th STREET (DE-1404)
SITE LOCATION MAP

KA D11059

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November 2011

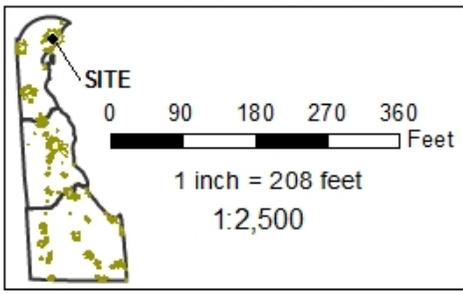


Figure 2
1000 E. 12th STREET (DE-1404)
SITE MAP - 2007 AERIAL

KA D11060

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Glossary of Terms Used in this Proposed Plan

Brownfield	Property that is vacant or underutilized because of the perception or presence of an environmental problem.
Certified Brownfield	A brownfield that DNREC has determined is eligible for partial funding through the Delaware Brownfields Program.
Contaminant of Concern (COC)	These are potentially harmful substances at concentrations above acceptable levels (eg metals and PAH).
Certificate 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.
*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 proposal for cleaning up a hazardous site after it has been reviewed by the public and finalized.
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.
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
Proposed Plan of Remedial Action	A plan for cleaning up a hazardous site submitted by DNREC and subject to public comments.
Risk	Likelihood or probability of injury, disease, or death.
Risk Assessment Guidance for Superfund (RAGS)	An EPA guidance document for superfund sites
Site Specific Assessment (SSA) and Site Inspection (SI)	Environmental studies of a site including sampling of soils, groundwater, surface water, sediment and/or wastes on the property.

What is a *Proposed Plan*?

A Proposed Plan of Remedial Action (Proposed Plan) is a summary of how DNREC plans to clean up a contaminated site. A Final Plan of Remedial Action (Final Plan) is the adoption of the Proposed Plan, after all comments made by the public within the comment period of twenty days have been considered and addressed by DNREC.

The Delaware State Legislature passed the Hazardous Substance Cleanup Act (HSCA) in 1990. The Legislature made sure that members of the public would be informed about environmental problems in their own neighborhoods and have a chance to express their opinion concerning the clean up of those environmental problems before DNREC takes action.

After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. All of the documents and reports created by DNREC or consultants during the course of the investigation of the site are available to the public at the offices of DNREC-SIRB or at DNREC's website:

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

DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of the News Journal and/or the Delaware State News. The public comment period begins on the day (Wednesday), or the day after (Sunday) the newspaper publishes the legal notice for the Proposed Plan.

DNREC frequently holds public meetings during the comment period. Those meetings are usually held near the site in the evening. Citizens can request a public meeting if DNREC did not already schedule one.

Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.
