

FINAL PLAN OF REMEDIAL ACTION



M&N PROPERTY SITE

516 South Market Street
Wilmington, Delaware

August 19, 2011
DNREC Project No. DE-1496

This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) determination that: the contamination that is present in the soil and groundwater at the Site appears to be associated with historical fill that was deposited prior to the more recent commercial uses of the site, and pose no risk for commercial reuse of the property.

DNREC issued public notice of the Proposed Plan for the Site on July 13, 2011 and opened a 20-day public comment period, which ended on August 2, 2011. The Proposed Plan requires:

- Recording of an environmental covenant consistent with Delaware's Uniform Environmental Covenants Act (Title 7, Del.C. Chapter 79, Subtitle II) (UECA) on the property deed. The covenant will 1) prohibit installation of groundwater wells for drinking water purposes because the site is within the City of Wilmington's Groundwater Management Zone, 2) prohibit the excavation or disturbance of soil at the site without prior approval by DNREC, and 3) limit the site development to light industrial/ commercial usage.
- Development and implementation of a DNREC-approved Long-Term Stewardship (LTS) Plan.
- Development and implementation of a Contaminated Materials Management Plan (CMMP) to ensure that contaminated materials encountered during intrusive site activities are handled properly.

The Proposed Plan also includes the location of additional information found on the DNREC web page and in the DNREC office at Lukens Drive in New Castle.

There were no comments or questions from the public regarding the Proposed Plan. Therefore, the Proposed Plan was adopted as the Final Plan (see attached).

Approval:

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

Todd Keyser, Acting Program Manager II
Division of Waste & Hazardous Substances



PROPOSED PLAN OF REMEDIAL ACTION

M&N Property Site
Wilmington, Delaware
DNREC Project No. DE-1496



July 2011

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

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PROPOSED PLAN OF REMEDIAL ACTION

M&N Property Site
Wilmington, Delaware
DNREC Project No. DE-1496



Approval:

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

Approved by:

Marjorie A. Crofts, Director Division of Waste & Hazardous Substances
7.7.11
Date



What is the M&N Property Site? The 1.24 acre site contains a single building and is located on South Market Street in Wilmington. The site was most recently used for vehicle storage. The Riverfront Development Corporation (RDC) is planning to demolish the building and re-develop the property for light industrial/commercial use.

Tax Parcel Numbers: Tax Parcel 2605000064
Address: 516 S. Market St., Wilmington, DE 19801
Nearest major intersection: The site is one-quarter mile north of the location where South Market Street and South Walnut Street merge.
Area: 1.24 acres
Surrounding Property: Surrounding land use is commercial.
Zoning: 26W4 Waterfront Res/Comm
Site Utilities: Municipal water and sewer; also electric, gas, communications.
Surface water: The Christina River is located approximately one quarter-mile to the west of the site.
Topography: Relatively flat.
Groundwater: Marsh deposits underlie the site; the overlying fill contains shallow groundwater, which flows to the west towards the Christina River. Groundwater is not used for drinking purposes in the vicinity of the site.

What happened at the M&N Property Site? The site was reported to have been used historically as a skate board park, an auto sales yard, and as a wire shelving supply house. The contamination that is present in the soil and groundwater appears to be associated with historical fill that was deposited prior to the commercial uses described above.

What is the environmental problem at the M&N Property Site? Subsurface soil (2 feet below ground surface to the water table) contains arsenic, lead, and polynuclear aromatic hydrocarbons (PAHs). Surface soil (0-2 feet below ground surface) is generally free of contaminants. Shallow groundwater contains dissolved iron, manganese, arsenic, aluminum, and antimony.

A Brownfield Investigation of soil and groundwater was performed at the site in the fall of 2010. The results showed that soil samples collected from depths of approximately 7 feet or greater in select locations exhibited the highest levels of arsenic, lead, and semi-volatile organics (specifically, polynuclear aromatic hydrocarbons). Soils collected at the ground surface contained only minor concentrations of these compounds, if they were detected at all. Shallow groundwater contained arsenic above the EPA maximum contaminant level (MCL) for drinking water. Iron, manganese, aluminum, and antimony were also detected in groundwater above Delaware's Uniform Risk-Based Standards (URS). Human Health Risk Assessment results indicated that the use of the site as a commercial property is acceptable. The risk assessment failed for the residential child scenario.

What does the owner want to do at the M&N Property Site? The site is planned for re-development by RDC to better serve the local community. Specific re-development plans have not been completed, but Light Industrial/Commercial usage is expected.

What clean-up actions have been taken at the M&N Property Site? Interim actions or emergency soil removal was not necessary based on analytical results obtained from samples collected at the site.

What additional clean-up actions are needed at the M&N Property Site? DNREC's clean-up plans include restricting the use of the property to commercial use, prohibiting the use of groundwater for drinking purposes, and prohibiting land disturbing activities (i.e. soil excavation) without prior approval from the DNREC.

The following cleanup actions are proposed for the M&N Property site:

- Recording of an environmental covenant consistent with Delaware's Uniform Environmental Covenants Act (Title 7, Del.C. Chapter 79, Subtitle II) (UECA) on the property deed. The covenant will 1) prohibit installation of groundwater wells for drinking water purposes because the site is within the City of Wilmington's Groundwater Management Zone, 2) prohibit the excavation or disturbance of soil at the site without prior approval by DNREC, and 3) limit the site development to light industrial/commercial usage.
- Development and implementation of a DNREC-approved Long-Term Stewardship (LTS) Plan.
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What are the long term plans for the Site after the cleanup? The institutional controls that will be placed on the property will specify the future land use and intrusive action restrictions described above. A DNREC approved Long-Term Stewardship Plan will document the requirements and will also include the CMMP.

DNREC plans to issue a Certificate of Completion of Remedy for the site after the completion of clean-up, the redevelopment of the property, and the implementation of the uniform environmental covenants at the site.

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 located at 391 Lukens Drive in New Castle. Most documents can also be found at:

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

The 20-day public comment period begins on July 13, 2011 and ends at close of business (4:30 pm) on August 2, 2011. Please send written comments to the DNREC office or call John G. Cargill, Project Manager, at 302-395-2600.

Figure 1: Site Location/Topographic Map

Figure 2: Site Base Map with Sample Locations

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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.

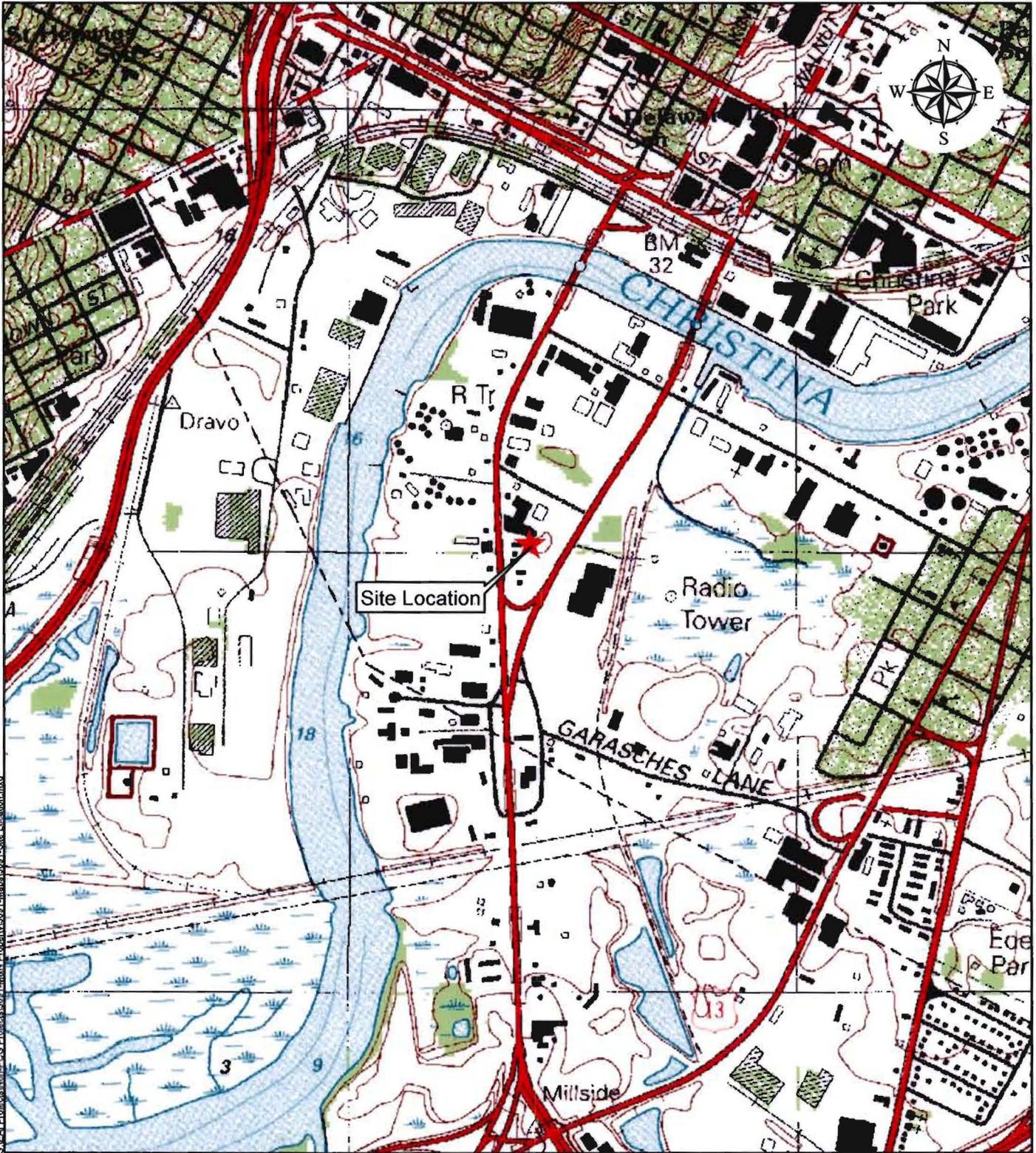
After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. 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.



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Legend

 Site Location



USGS Topographic Map
 Source: Wilmington South Quad



Environmental Alliance, Inc.
 5341 Limestone Road, Wilmington, DE 19808
 Phone: (302) 234-4400 - Fax: (302) 234-1535

M&N Property
 516 South Market Street
 Wilmington, DE 19801

Site Location / Topographic Map

DESIGNED BY: RK	DRAWN BY: SKJ	UPDATED BY: ---	FIGURE NO. 1
APPROVED BY:	PROJECT NO.: 3091	DATE: 09/28/2010	



<p>Legend</p> <ul style="list-style-type: none">  Monitoring Well  Soil Boring  Site Boundary 	<p>0 50 100 Feet</p> 	 <p>Environmental Alliance, Inc. 5341 Limestone Road, Wilmington, DE 19808 Phone: (302) 234-4400 - Fax: (302) 234-1535</p>	<p>M&N Property 516 South Market Street Wilmington, DE 19801</p>							
	<p><i>Source:</i> Aerial Photograph obtained from Delaware DataMil Tile # 121, 2007</p>		<p>Site Base Map with Sample Locations</p> <table border="1"> <tr> <td>DESIGNED BY: RK</td> <td>DRAWN BY: SKJ</td> <td>UPDATED BY: ---</td> <td>FIGURE NO.:</td> </tr> <tr> <td>APPROVED BY:</td> <td>PROJECT NO. 3091</td> <td>DATE: 11/04/2010</td> <td>2</td> </tr> </table>		DESIGNED BY: RK	DRAWN BY: SKJ	UPDATED BY: ---	FIGURE NO.:	APPROVED BY:	PROJECT NO. 3091
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