

FINAL PLAN OF REMEDIAL ACTION



733 South Market Street Site

*733 South Market Street
Wilmington, Delaware*

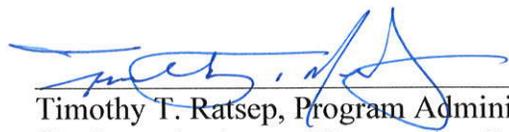
*May 10, 2012
DNREC Project No. DE-1502*

This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) intention to address environmental contamination at the 733 South Market Street Site.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on March 18, 2012 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



REVISED PROPOSED PLAN OF REMEDIAL ACTION

733 S. Market Street Site
Wilmington, Delaware
DNREC Project No. DE-1502



March 2012

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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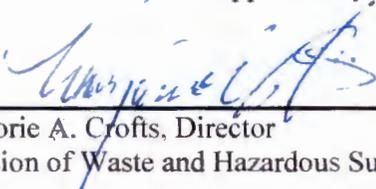
REVISED PROPOSED PLAN OF REMEDIAL ACTION

733 S. Market Street Site
Wilmington, Delaware
DNREC Project No. DE-1502



Approval:

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

Approved by:

Marjorie A. Crofts, Director Division of Waste and Hazardous Substances
3.14.12
Date



What is the 733 S. Market Street Site?

The 733 South Market Street Site is located south of the intersection of South Market Street and James Court in Wilmington (Figure 1). The Site is currently used as a tire and wheel business. The Site is bordered in all directions by industrial properties such as a tire distributor, aluminum and glass shop, machine shop, iron storage yard, and auto services. The property owner plans to construct a 2,500 sq. ft. addition onto the existing building in order to expand his business. The Site was certified as a Brownfield on February 9, 2011. A Final Plan of Remedial Action was issued for this Site on June 7, 2011. This was based on a presumptive remedy that the Site would need remediation to meet restricted (commercial) use criteria. However, results of the Brownfield Investigation performed on the property showed that environmental impacts to Site soil were not found on the Site in excess of restricted use criteria. Because of these findings, the Proposed Plan is being re-advertised to state that no soil remedy (a cap or one foot of clean fill) is required for commercial use of this property.

Tax Parcel Numbers: 2605700004 and tax parcel 1000100001
Address: 733 S. Market Street
Nearest major intersection: James Court
Area: 0.95 acres
Surrounding Property: commercial/industrial
Zoning: New Castle County HI-UDC-Heavy Industrial & City of Wilmington 26W4 Waterfront Res/Comm
Site Utilities: Sewer service is provided by New Castle County. Water is provided by the City of Wilmington. Delmarva Power provides electric and natural gas
Surface water: Christina River
Topography: Topographic maps produced by the United States Geological Survey (USGS) suggest that groundwater in the water table aquifer would appear to mimic surface water runoff and flow west from the property toward the Christina River.
Groundwater: Based on monitoring wells installed during the Christina River Bridge SSA, groundwater is likely to be about 5 feet to 6 feet bgs and is assumed to flow westerly towards the Christina River.

What happened at the 733 S. Market Street Site?

The Site has been previously maintained as a tire sales and services company, an auto parts store, and a truck rental company. Two underground storage tanks (USTs) were removed from the property in the mid 90's. Due to the past industry of the Wilmington

Riverfront, the soil/fill that was placed over the marshland and surrounding area is believed to be a source of potential contamination for this property.

Two underground storage tanks (one 2,000 gallon gasoline tank and one 1,000 gallon heating oil tank) were removed in the mid-1990. Sampling and over excavation was performed around the former 2,000 gallon UST and DNREC issued a No Further Action for the 2,000 gallon UST on July 17, 1996.

On August 16, 1996, Duffield Associates prepared a Proposed Scope of Exploration Report for DNREC-UST Branch which proposed to recover and dispose of free product associated with the 1,000 heating oil tank.

On October 14, 1996 Duffield Associates prepared a Hydrogeologic Report and Proposed Corrective Action Work Plan which proposed construction of a Product Collection System and summarized the subsurface evaluation performed at the property on September 13, 1996. The subsurface evaluation found free product on groundwater in all six test pits.

On May 20, 1997 Duffield Associates prepared a Product Collection Summary Report which summarized the installation of the product collection sumps and a subsurface investigation which included test pit excavation and sampling. The analytical results indicated that the estimated concentrations of petroleum hydrocarbons ranged from approximately 80 mg/kg to 350 mg/kg.

Product recovery began in November 5, 1996 and pads were changed monthly until March 1997 when collection of product declined. Product Collection System Progress Reports dated October 21, 1997, March 3, 1998 and June 9, 1998 were prepared by Duffield for DNREC on a quarterly basis. These reports estimated the total volume of petroleum removed to be 56.2 gallons.

This property is on an area that has been historically filled. Soil sampling for DelDOT's Christina River Bridge project was performed on this property on August 14, 2008. One shallow and one deep sample was collected and screened by DNREC. Screening results indicated that arsenic and lead were detected in the deep sample from 4-5.2 feet at concentrations exceeding restricted use.

What is the environmental problem at the 733 S. Market Street Site?

A large amount of environmental data exists from previous DNREC Delaware Brownfield Program investigations in the immediate vicinity of this Site that show soil impacts from PAH's, lead and arsenic.

A Brownfield Investigation was performed in March 2011. Based on the results of this investigation, no environmental impact to Site soil was found in excess of restricted use criteria. Groundwater analytical results showed that arsenic, iron and manganese are contaminants of concern in groundwater.

As summarized in the Brownfield Investigation Report for 733 S. Market Street (DE-1502), the following are the results of the Risk Evaluation:

Surface Soil – Exposure to Site surface soil does not pose an unacceptable cumulative carcinogenic or non-carcinogenic risk under restricted use scenarios.

Subsurface Soil - Exposure to Site subsurface soil does not pose an unacceptable cumulative carcinogenic or non-carcinogenic risk under restricted use scenarios.

Groundwater - Routinely ingesting groundwater at the 733 South Market Street Site may pose a carcinogenic and/or non-carcinogenic risk. The carcinogenic risk is attributable to the elevated arsenic concentrations in the groundwater. It is believed that the Site is not a source for the elevated concentrations of arsenic in the groundwater.

The Site is located within the Wilmington Groundwater Management Zone (GMZ) where the use of groundwater is controlled by DNREC and no new public or domestic water supply wells are permitted. The Site is served by municipal water. Therefore, no complete pathway exists for groundwater exposure.

Construction Worker - Based on the construction worker risk assessment, the surface and subsurface soil combined does not pose an unacceptable carcinogenic risk or non-carcinogenic risk. However, workers performing intrusive activities may encounter shallow contaminated groundwater. Therefore, they are required to, at a minimum, have a health and safety briefing prior to working on the Site. The health and safety briefing should be conducted by a 40-hour OSHA HAZWOPER-trained professional. This 40-hour trained person should also provide at least some oversight during intrusive activities (especially during activities such as dewatering).

What does the owner want to do at the 733 S. Market Street Site?

The property owner plans to construct a 2,500 sq. ft. addition onto the existing building in order to expand his business and provide for additional office, storage and work space.

Limited soil excavation is anticipated for redevelopment. Soil excavation for the construction of the new addition may consist of limited excavation for pole foundation footers, retaining wall, fence posts and landscaping. Portions of the walls, windows, and roof will need to be demolished in order to accommodate the building addition.

What clean-up actions have been taken at the former 733 S. Market Street Site?

Two (2) USTs were removed from the property in accordance with Tank Management Section (TMS) regulations. Over excavation was performed in the area of the 2,000 gallon gasoline UST and a recovery sump collection system was installed to recover product from the 1,000 gallon heating oil UST. No other clean-up actions have taken place at the 733 S. Market Street Site.

What additional clean-up actions are needed at the former 733 S. Market Street Site?

Results of the brownfield investigation performed on the property showed that environmental impacts to Site soil were not found on the Site in excess of restricted use criteria. The surface and subsurface soil risk assessment in the July 2011 Brownfield Investigation Report indicate that exposure to Site surface and subsurface soil does not pose an unacceptable carcinogenic or non-carcinogenic cumulative risk under restricted use scenarios. Because of these findings, the Proposed Plan is being re-advertised to state that no soil remedy (a cap or one foot of clean fill) is required for commercial use of this property. Because there is no risk pathway present in Site soil, vapor intrusion is not a concern for the Site and therefore a vapor barrier system or vent system is not necessary.

DNREC's clean-up plans will require that during redevelopment activities, any impacted soil encountered during construction of the new addition including but not limited to excavation for foundations, retaining wall and/or fence posts will be excavated and removed according to the Contaminated Materials and Management Work Plan (CMMWP). These measures will prevent human exposure to any potentially contaminated soil and groundwater at the Site.

The following remedy will need to be completed prior to the issuance of a Certificate of Completion of Remedy:

1. All construction and redevelopment work, including any soil excavation, will be performed in accordance with a DNREC-approved Contaminated Material and Water Management Work Plan, and the Site Specific Health and Safety Plan (HASP), which addresses the proper handling, removal and disposal of excavated contaminated material.
2. A Ground Management Zone (GMZ) is already in place for the City of Wilmington (July 2007). The Site is within the City of Wilmington boundary limits. The GMZ will prohibit the installation of any water wells on, or groundwater usage at the Site without prior written approval from DNREC. In addition, the City prohibits drinking water wells to be installed within the City limits.
3. Site owner will 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 limit current and future land use to non-residential uses, 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.

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

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 Brownfields Investigation, Conceptual Site Model and Sample and Analysis Plan 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 March 19, 2012 and ends at close of business (4:30 pm) on April 10, 2012. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle DE 19720 to Larry Jones, Project Manager or Robert Newsome, Public Information Officer.

LJJ:tlw; LJJ12006.doc; DE 1502 II B 8

Figure 1: Location Map

Figure 2: Site Photos



- Legend**
- Site Boundary
 - Parcels

Aerial Source: 2009, NAIP.



BrightFields, Inc.
Environmental Evaluation
Investigation, and Remediation

801 Industrial Street, Suite 1 Wilmington, Delaware 19801		302-656-9600 302-656-9700 fax		
<p>Site Location Map 733 South Market Street Wilmington, Delaware</p>				
	By	Date	Scale:	File Name:
Drawn	DPL	1/20/11	1:2400	Site_Loc.mxd
Checked	GHC	1/20/11	Fig. No.	
Project #	2690.02.21		Figure 1	
0 100 200			Feet	
				

Figure 2 - Site Photographs

733 South Market Street



The south side of the building.



Garage bay entries facing James Court.

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 (e.g. 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.
