

FINAL PLAN OF REMEDIAL ACTION



Former Georgetown Substation Site

*200 Block of North Race Street
Georgetown, Delaware*

*July 15, 2009
DNREC Project No. DE-1286*

This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) requirements to address environmental contamination at the Former Georgetown Substation Site (Site).

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on June 17, 2009 and opened a 20-day public comment period. The Proposed Plan is attached. There were no comments or questions from the public. Therefore, the Proposed Plan is adopted as the Final Plan.

Final Plan will consist of the following requirements:

- Removal of the arsenic contaminated soil with the goal of making the site suitable for residential use.

Approval:

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


Kathleen Stiller, Program Manager II
Site Investigation and Restoration Branch



PROPOSED PLAN OF REMEDIAL ACTION

Former Georgetown Substation Site
Georgetown, Delaware
DNREC Project No. DE-1286



June 2009

Delaware Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation & Restoration Branch
391 Lukens Drive
New Castle, Delaware 19720

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PROPOSED PLAN OF REMEDIAL ACTION

Former Georgetown Substation Site
Georgetown, Delaware
DNREC Project No. DE-1286



Approval:

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

	Approved by:
<hr/>	
James D. Werner, Director Division of Air & Waste Management	
	Date
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What is the Former Georgetown Substation Site? The property is a fenced vacant grass lot on the west side of North Race Street, south of New Street. The property is owned by Delmarva Power. The site was formerly an electrical substation. See Figure 1 for the site location. Figure 2 shows photos of the property.

Tax Parcel Numbers: 135-14.20-127.00

Address: 200 Block of North Race Street

Nearest major intersection: The property is on the west side of North Race Street, 130 feet south of New Street.

Area: 0.38 acres

Surrounding Property: Surrounding land use is a combination of commercial and residential.

Zoning: The property use is "Utility" and the zoning is listed by Sussex County as "Town Codes".

Site Utilities: Public utilities serve the site area.

Surface water: The nearest surface water body is the Georgetown-Vaughan Ditch approximately 2,500 feet to the west.

Topography: The site is a flat grassy field and is maintained regularly.

Groundwater: The Columbia Aquifer underlies the site. Shallow groundwater flows generally to the northwest.

What happened at the Former Georgetown Substation Site?

From approximately 1910 until 1919, a small power generating plant operated on the property. Subsequently, the Site was used as an electrical substation with transformers. The Site has been vacant for several decades.

What is the environmental problem at the Former Georgetown Substation

Site? The Site soils contain arsenic above Delaware background levels likely due to the historical fill material. Site soils also contain minor amounts of Polychlorinated Biphenyls (PCBs) adjacent to some of the former transformer pads. Transformers are the likely source of PCBs. In addition, Polynuclear Aromatic Hydrocarbons (PAHs) are found within the area of arsenic contamination.

In May 2004, Delmarva Power conducted a Remedial Investigation/ Focused Feasibility Study (RI/FFS) that included sampling of soil and groundwater at the property. The RI/FFS identified an area of arsenic contaminated soil, and limited impacts from PCBs and PAHs. The maximum PCB concentration was 4.8 parts per million (ppm). The RI/FFS determined that groundwater contained background levels of iron and manganese. The default remedy proposed in the RI/FFS for the site was excavation and offsite disposal of the arsenic-contaminated soil above 11 ppm, which is the Delaware Default Background concentration.

Groundwater has not been impacted. However, lead was detected in one out of three unfiltered groundwater samples over the DNREC groundwater standard although it was not detected in the filter groundwater samples or in Site soils over the DNREC soil standard. It was determined that the unfiltered result was an artifact of the sediment in the groundwater and did not pose a groundwater risk.

What does the owner want to do at the Former Georgetown Substation Site?

Delmarva Power has no redevelopment plans at this time but wants to complete site remediation to DNREC unrestricted use standards so that the property will be suitable for a wide range of uses, including residential and commercial.

What clean-up actions have been taken at the Former Georgetown Substation Site?

No interim actions have been conducted. All electrical equipment was previously removed from the site.

What additional clean-up actions are needed at the Former Georgetown Substation Site?

The proposed remedy is to excavate the arsenic contaminated soil and dispose of the soil offsite. Soil sampling will be conducted prior to excavation to help better define the area of soil to be removed. Other minor contaminants including PCBs within the excavation zone will be removed at the same time as the arsenic. Figure 3 illustrates the general area of the proposed soil excavation.

What are the long term plans for the Site after the cleanup? Subsequent to implementing the remedy, no additional actions, restrictive covenant or maintenance will be required.

DNREC plans to issue a Certificate of Completion of Remedy for the site after the completion of clean-up.

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

The complete file on the site including the Remedial Investigation/ Focused Feasibility Study (RI/FFS) is available at the DNREC office, 391 Lukens Drive in New Castle. Most documents are also found on:

<http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/>

The 20-day public comment period begins on June 17, 2009 and ends at close of business (4:30 pm) on July 8, 2009. Please send written comments to the DNREC office or call Rick Galloway, Project Manager, at: 302-395-2600.

Figure 1: Location Map

Figure 2: Site Photos

Figure 3: Site Plan

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.

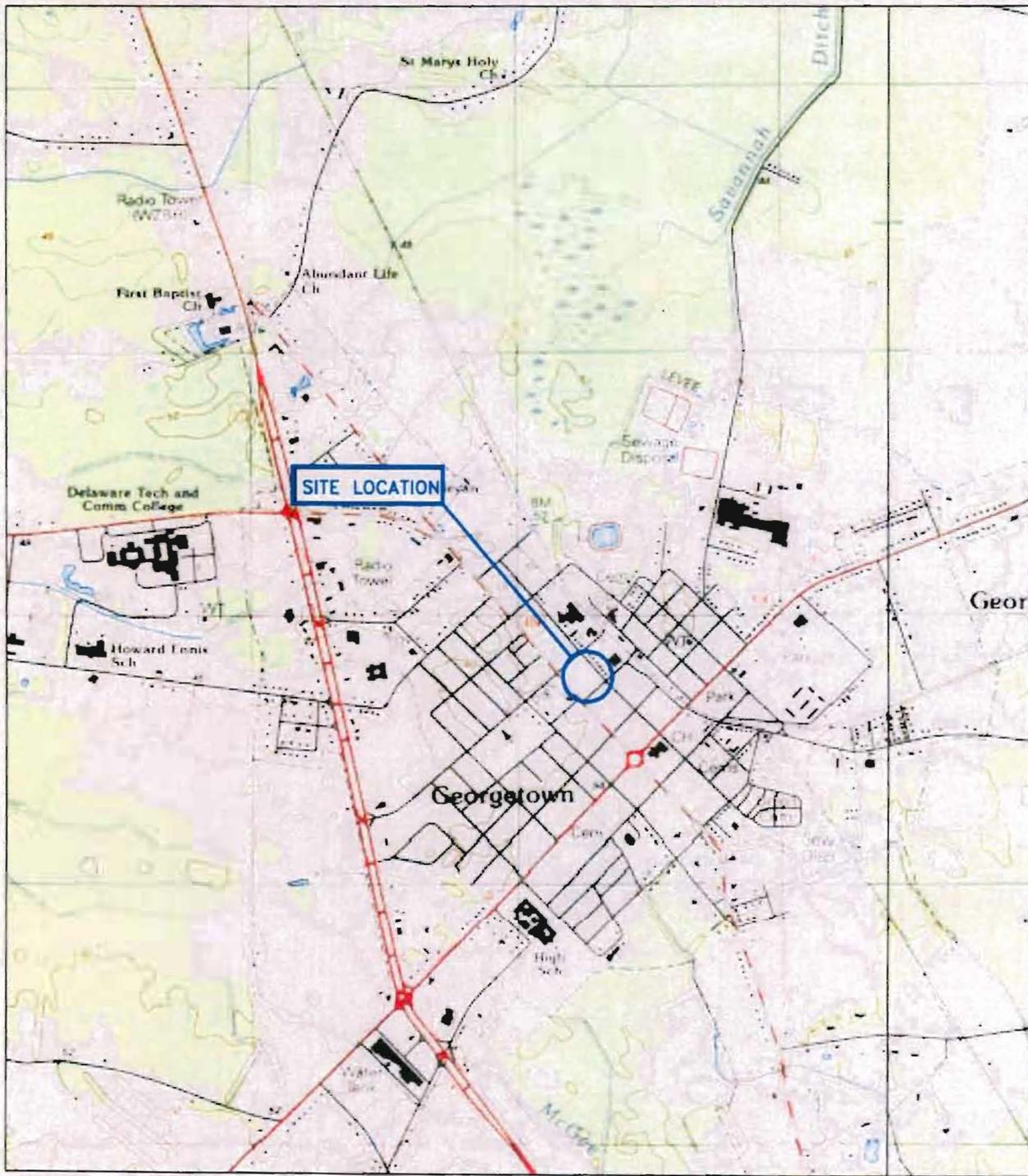
After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. 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.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/sitefiles.asp>.

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.



0 2000'
 APPROXIMATE SCALE



REVISION DATE:
 04/07/09

DESIGNED BY:

DRAFTED BY:

CHECKED BY:

FIGURE 1
 SITE TOPOGRAPHIC MAP
 FORMER GEORGETOWN SUBSTATION
 N. RACE STREET
 GEORGETOWN, DELAWARE

Source: USGS Georgetown & Harbeson, DE Quadrangles

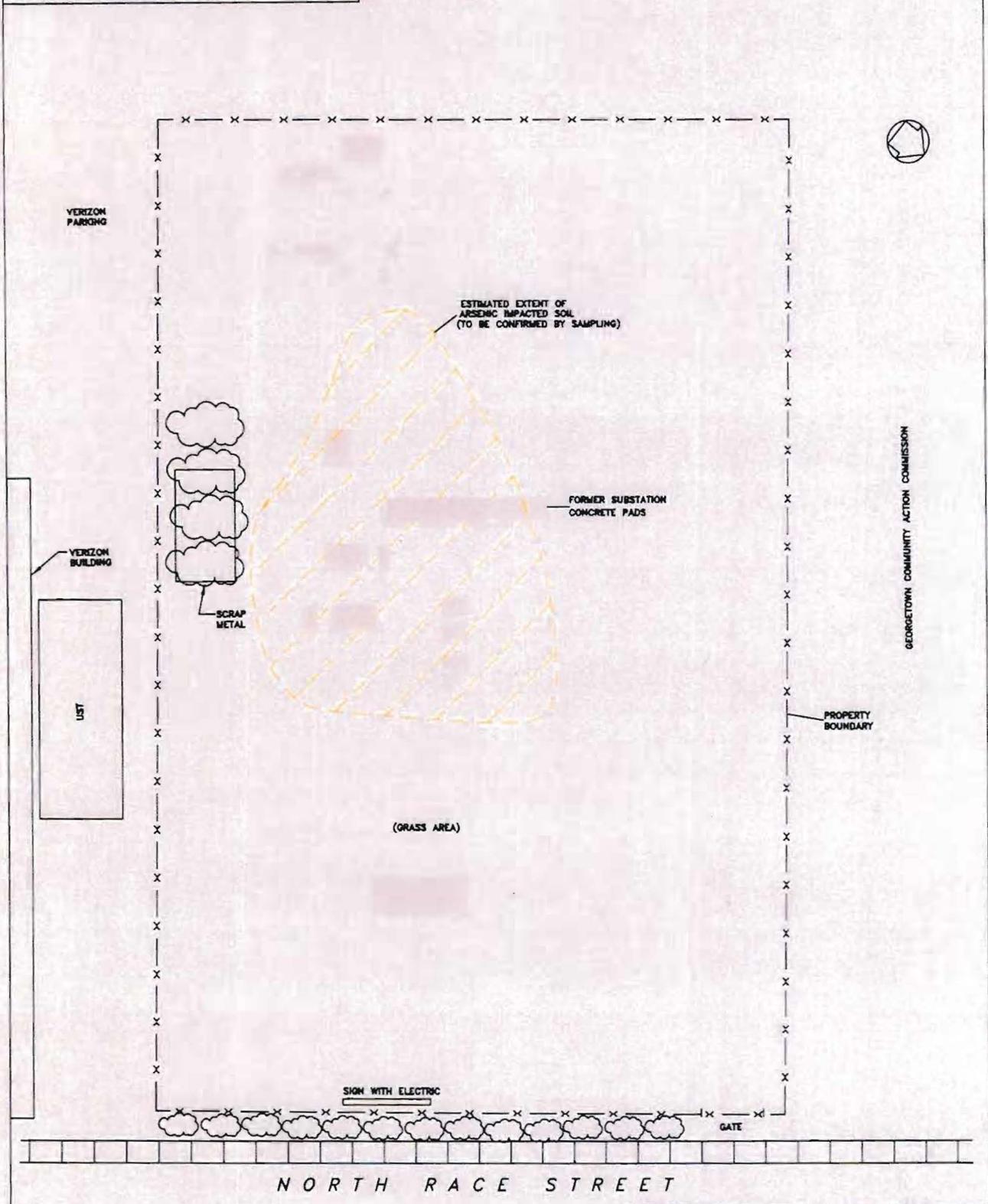


View of front of property .



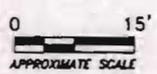
View of concrete pads inside fenced area.

Figure 2. Site Photos



KEY:

	SHRUBS/SMALL TREES
	FENCE
	FORMER SUBSTATION CONCRETE FOUNDATIONS
	POTENTIAL EXCAVATION LIMITS, BASED ON ARSENIC CLEANUP LEVEL OF 23 mg/kg



REVISION DATE:	03/29/09
DESIGNED BY:	RJK
DRAFTED BY:	SKJ
CHECKED BY:	

FIGURE 3
SITE PLAN
FORMER GEORGETOWN SUBSTATION
N. RACE STREET
GEORGETOWN, DELAWARE