

# **BROWNFIELD CLEANUP PROGRAM DECISION DOCUMENT**

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## **Haverstraw Harbors Site Village of Haverstraw, Rockland County, New York Site No. C344060 April 2008**

### **Statement of Purpose and Basis**

This Brownfield Cleanup Program (BCP) Decision Document presents the remedy identified by the Department of Environmental Conservation (Department) for the Haverstraw Harbors site. The remedial program was chosen in accordance with Article 27 Title 14 of the New York State Environmental Conservation Law and the 6 NYCRR375 regulations relative to the BCP.

### **Description of the Site**

The Haverstraw Harbors site is located in a suburban portion of Rockland County. The site is comprised of three Hudson River front properties located on Dr. George W. Girling Drive: the 1.2 acre former Rockland Fuel Oil Company parcel; an approximately 0.4 acre portion of the 8.4 acre Keahon property; and former Department of Public Works (DPW) property. Much of the northern quarter of the site is covered with an asphalt parking lot. A portion of the site has been landscaped and a condominium sales office has been constructed.

Historically, the eastern portion of the site was occupied by a major oil storage facility (MOSF) that included fourteen above ground storage tanks, and a sewage treatment plant was located on the western portion of the site.

Currently, the DPW utilizes a portion of the site for vehicle maintenance and a portion of the site is currently used as a parking lot. Development plans call for demolition of the sales office and DPW garage, and construction of condominiums and associated amenities.

The Volunteer applied to the Voluntary Cleanup Program in March of 2003 and initiated a site investigation which subsequently transitioned into the Brownfield Cleanup Program (BCP) in March of 2005. The site location is shown on the attached Figure 1; the limits of contamination are shown on Figure 2.

### **Nature and Extent of Contamination**

Contamination was identified by the Remedial Investigation of this site, which does not represent a significant threat to public health and the environment, requires a remedial program to address the contamination identified below. The off-site exposure assessment identified no off-site exposures.

Nature of contamination: Contaminants at the site that have been detected in soil and groundwater above standards, criteria and guidance values (SCGs) include volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), associated with petroleum storage and usage at the site. Areas of the site contain floating petroleum product which are associated with grossly contaminated soils.

Extent of contamination: Subsurface soils at the site are contaminated with VOCs and SVOCs as a result of historic site usage. The vertical extent of contamination is limited by a clay layer approximately 10 feet below surface grade (bsg). The investigation shows that contamination related to the former MOSF may extend off-site. This contamination will be addressed as part of the closure of the MOSF.

Pursuant to 6 NYCRR Part 375, protection of groundwater soil cleanup objectives were not determined applicable at this site due to the planned removal of all on-site source areas, and the placement of an environmental easement containing groundwater use restrictions. Source areas and groundwater contamination related to the operation of the former MOSF (i.e. petroleum products) will be addressed where they are found to extend beyond the site boundary, as a requirement of the remedy per the Applicant's agreement as a condition of their acceptance to the BCP.

### **Description of the Remedy**

Based on the results of the Alternatives Analysis and the criteria identified for evaluation of alternatives, the NYSDEC has selected a Track 4 remedy for this BCP site. The components of the remedy set forth in the Remedial Work Plan and shown on the attached Figure #2, are as follows:

1. Excavate all areas of grossly contaminated soils. When the excavation bottom and sidewalls show no petroleum impact based on field observations (i.e., no visible or olfactory contamination, PID readings below 10 ppm), documentation sampling will be performed in accordance with DER guidance. Excavation must continue until the commercial SCOs are achieved. All soils will be properly disposed of off-site, and disposal will be tracked and documented for inclusion in the Final Engineering Report (FER).
2. Construct and maintain a cover system over the site. The cover system will consist of an impermeable surface (such as a concrete slab, asphalt paving, etc.) or at least two feet of clean soil, as defined by DER guidance, underlain by a demarcation layer, such as a geotextile.
3. All future structures will be designed with a vapor barrier and subslab depressurization system. This mitigation system will address potential exposure by preventing any contaminated soil vapor from entering the on-site buildings. It will consist of a series of pipes laid under the building foundation to collect subsurface vapors, which will then be actively vented to the outside air.

4. Since the remedy allows contamination above unrestricted levels to remain at the site, a Site Management Plan (SMP) will be developed and implemented. The SMP will include the institutional controls and engineering controls to: (a) address remaining contaminated soils that may be excavated from the site during future redevelopment. An excavation plan that will require soil characterization and, where applicable, disposal/reuse in accordance with NYSDEC regulations; (b) provide for the operation and maintenance of the components of the remedy; (d) monitor the groundwater; and (e) identify any use restrictions on site development or groundwater use.
5. The SMP will require the property owner to provide a periodic Institutional Control/Engineering Control (IC/EC) certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department, which would certify that the institutional controls and engineering controls put in place, are unchanged from the previous certification and nothing has occurred that would impair the ability of the control to protect public health or the environment or constitute a violation or failure to comply with any operation and maintenance or soil management plan.
6. Imposition of an institutional control in form of an environmental easement that would: (a) require compliance with the approved SMP; (b) limit the use and development of the property to restricted residential use; (c) restrict use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the Rockland County Department of Health; and (d) require the property owner to complete and submit to the NYSDEC a periodic IC/EC certification.
7. As agreed to by the Applicant as a condition of originally entering the VCP and subsequently the BCP, the volunteer is responsible for the proper closure of the former Major Oil Storage Facility (MOSF). Proper closure of the MOSF includes remediation of all contamination related to the MOSF both on and off the site as defined in the BCA.

### **Declaration**

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action and will allow for the identified use of the site. This remedy utilizes permanent solutions and alternative treatment to the maximum extent practicable, and satisfies the preference for remedies that reduce remove or otherwise treat or contain sources of contamination and protection of groundwater.

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Date

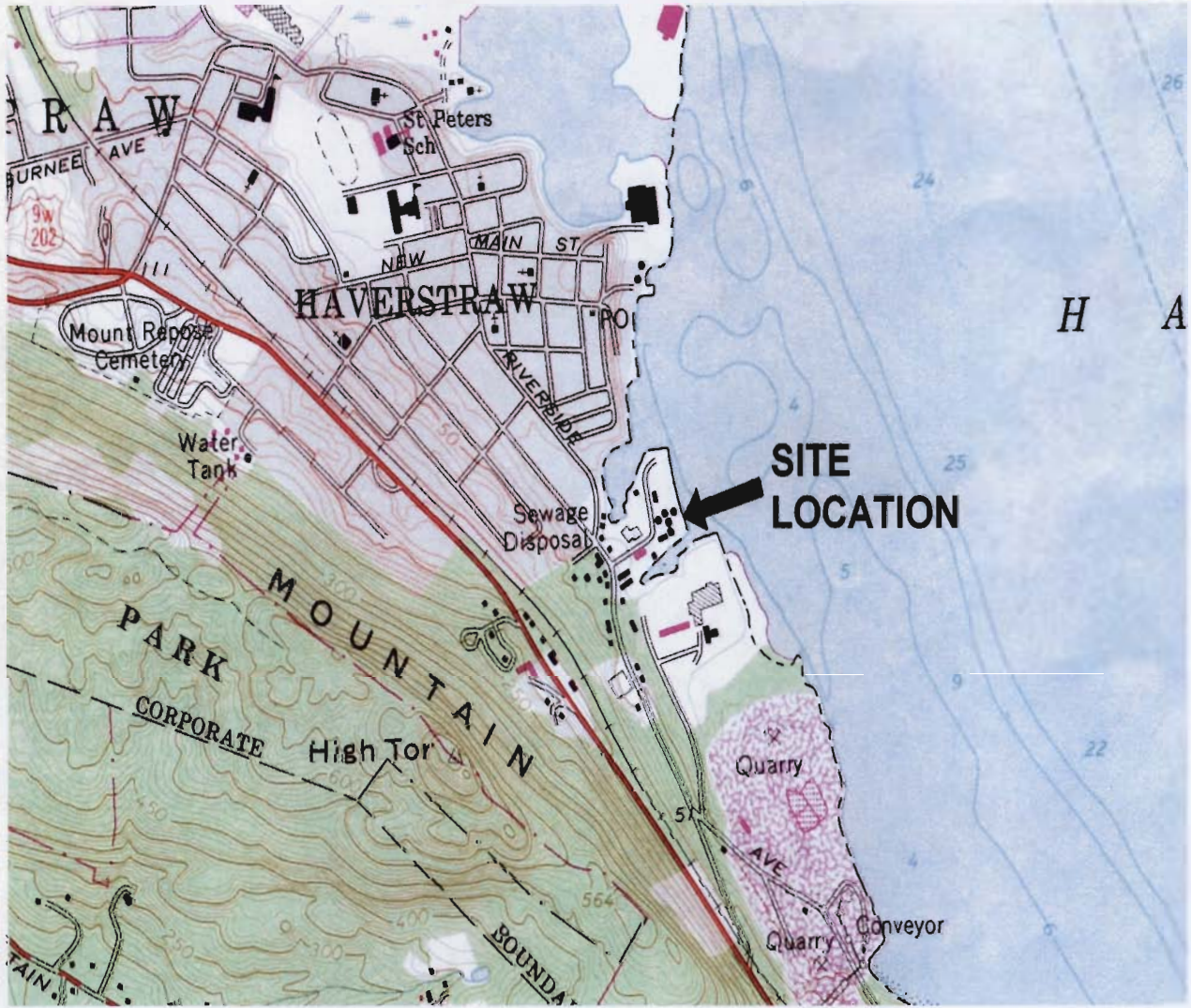
*April 22, 2008*

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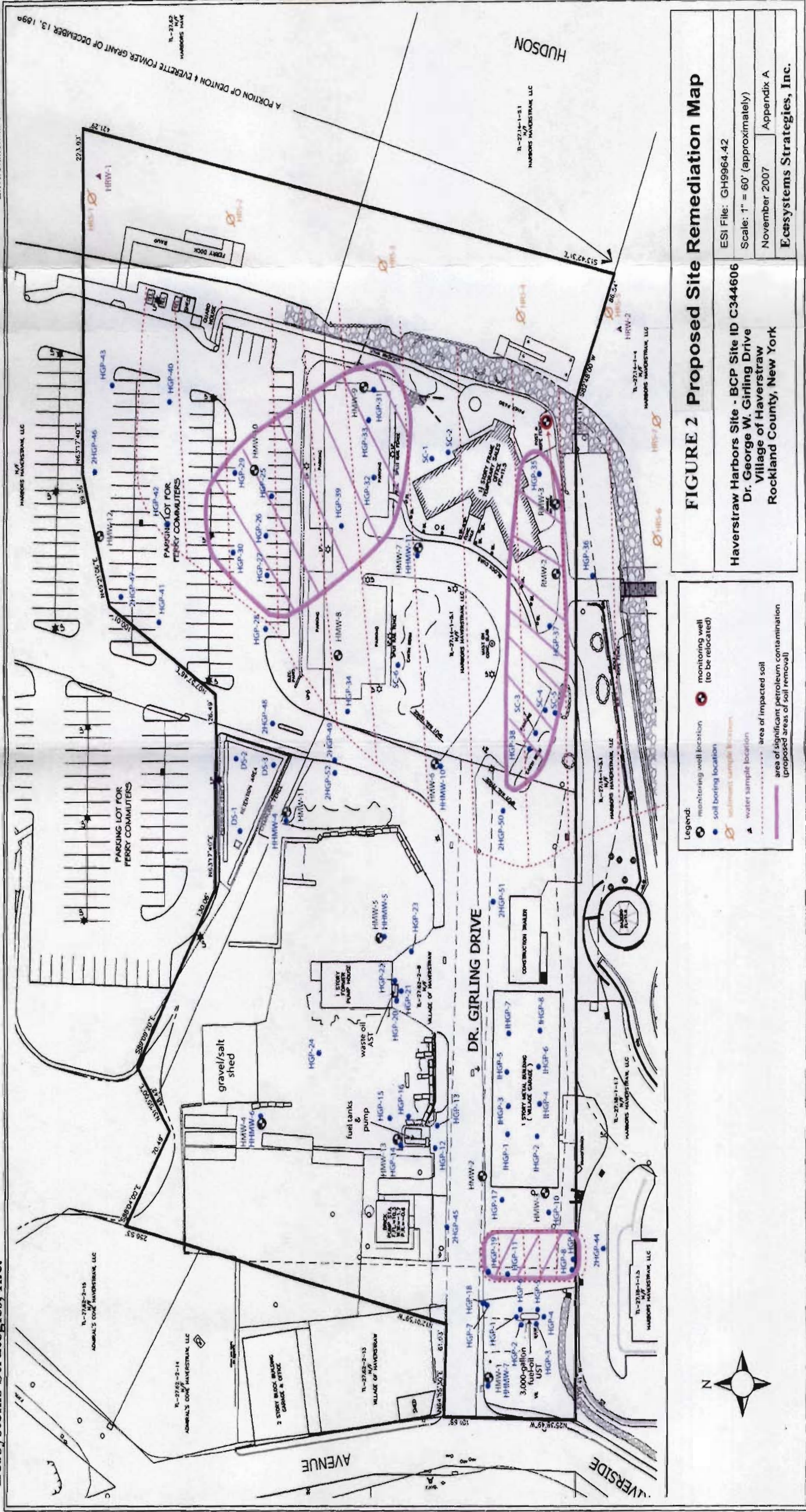
Director

Remedial Bureau C

Division of Environmental Remediation



**Figure 1 - Site Location**



**FIGURE 2 Proposed Site Remediation Map**

Haverstraw Harbors Site - BCP Site ID C344606  
 Dr. George W. Girling Drive  
 Village of Haverstraw  
 Rockland County, New York

ESI File: GH9964.42  
 Scale: 1" = 60' (approximately)  
 November 2007 Appendix A  
 Ecosystems Strategies, Inc.

**Legend:**

- monitoring well location (to be relocated)
- soil boring location
- sediment sample location
- ▲ water sample location
- area of impacted soil
- area of significant petroleum contamination (proposed area of soil removal)