BROWNFIELD CLEANUP PROGRAM
DECISION DOCUMENT

New Housing New York Legacy Project Site
Bronx, the Bronx, New York
Site No. C203043
June 2009

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 New Housing New York Legacy Project 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 Site is located in the County of Bronx, the Bronx, New York and is identified as Block 2359 part of Lot 1 and part of Lot 3 on the Bronx County Tax Map. The Site is situated on an approximately 1.4-acre area bounded by East 156th Street to the north, an athletic field to the south, New York City Housing Authority Bronxchester Houses and South Bronx High School (School # 473/ 547) to the east, and Brook Avenue to the west.

Nature and Extent of Contamination

Contamination was identified by the Remedial Investigation of this Site, which represents a non-significant threat to public health and the environment, requiring a remedial program for the Site to address the contamination identified below. An off-Site exposure assessment was not conducted as part of the Remedial Investigation.

Nature of Contamination:

The primary contaminants of concerns at the Site include VOCs, SVOCs, Metals, and PCBs.

VOCs- VOCs were detected in both soil and groundwater samples. However, the concentrations of VOCs in soil samples didn't exceeded the 6 NYCRR Part 375 Unrestricted Use SCOs (UUSCOs) with the exception of acetone. Petroleum-related VOCs were detected in groundwater samples at concentrations exceeding NYSDEC TOGS groundwater standards (TOGS) in the vicinity of the former gasoline service station.

SVOCs- SVOCs were detected in both soil and groundwater samples exceeding UUSCOs and TOGS. Two shallow "hot spots" were identified in surface soil samples. Several SVOCs were also detected above TOGS in groundwater samples collected from temporary wells, however only one SVOC exceedance was detected in the permanent monitoring wells.

Metals- Metals were detected in both soil and groundwater samples exceeding their respective standards, criteria or guidance values.

PCBs- One PCB aroclor was detected in one groundwater sample above TOGS in a temporary well, but was not detected in the monitoring permanent wells.

Extent of Contamination:

Source areas/Waste disposal-

- **Suspect Underground Storage Tanks (USTs)**

The Site Characterization conducted in 2006 by URS Corporation included a historical database review of the Site and a geophysical survey of the former gasoline station portion of the Site. According to the 1935 Sanborn Map, three gasoline tanks were located on the former gasoline station portion of the Site. The geophysical survey revealed several anomalies that may be representative of buried underground storage tanks, indicating that the tanks noted on the 1935 Sanborn Map may still be present at the Site.

- **Suspect Hydraulic Lifts**

The PCB Aroclor 1260 was detected in the soil and groundwater in the former gasoline station portion of the Site. One of the detections of Aroclor 1260 in the groundwater was above NYSDEC TOGS groundwater standards. Although no source was identified, there appear to be remnants of a hydraulic lift associated with the former gas station operations, which could potentially be the source of the PCBs detected.

Surface soil -

In all areas of the Site that were tested, the soil displayed characteristics of historic fill. Elevated levels of several SVOCs and metals were detected throughout the Site at depths of 0 to 2 inches; including lead at a concentration of 6,290 ppm in one sample (the sample collected from the same location from 0 to 2 feet below grade had a lead concentration of 112 ppm). There were no VOC exceedances of UUSCOs in surface soil samples.

Groundwater-

Groundwater samples were collected from soil borings during the 2006 Site Characterization and from five groundwater monitoring wells during the 2009 Remedial Investigation. VOCs, SVOCs, metals, and Aroclor 1260 were detected in the groundwater samples above TOGS. The petroleum-related VOCs were only detected above NYSDEC TOGS in the groundwater samples collected from the former gasoline service station portion of the Site. In addition, Aroclor 1260 was only detected above TOGS in one groundwater sample collected from a soil boring on the former gasoline station portion of the Site.

The remedy will address surface and subsurface soil contamination as well as the resulting groundwater impacts.

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 Cleanup for this BCP site. The components of the remedy set forth in the Remedial Work Plan and shown on the attached Figure1 are as follows:

1. Excavation of all soil/fill materials exceeding the Site-specific Track 4 Site Specific Soil Action Levels (SSSALs) established for the Site (see figure 1, attached). The Site-specific Track 4 SSSALs are 590 ppm for lead, 10 ppm for total VOCs, and 100 ppm for total SVOCs.
2. Collection of waste characterization samples as needed to profile the soil/fill that is to be excavated for disposal purposes.
3. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil/fill during any intrusive Site work.

4. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of the Site-specific Track 4 SSSALs.
5. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal.
6. Removal of all USTs and hydraulic lifts and any associated grossly contaminated soil, if encountered on-Site, in accordance with applicable regulations.
7. In-Situ chemical oxidation (ISCO) treatment of shallow groundwater and soil/fill in the smear zone in the northern portion of the Site (see figure 2, attached).
8. A soil cover would be constructed over all vegetated areas to prevent exposure to contaminated soils. The two-foot thick cover would consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the residual soil. The top six inches of soil would be of sufficient quality to support vegetation. Clean soil would constitute soil that meets the soil cleanup objectives outlined in 6 NYCRR Part 375-6.7(d). Non-vegetated areas (buildings, roadways, parking lots, etc.) would be covered by a paving system or concrete at least 6 inches thick.
9. A vapor barrier and an active Sub-Slab Depressurization System will be incorporated into all buildings' foundations.
10. Collection and analysis of post-remedial groundwater samples to evaluate the performance of the remedy.
11. Imposition of an institutional control in the form of an environmental easement that would require (a) limiting the use and development of the property to restricted residential use, which would also permit commercial or industrial uses; (b) compliance with the approved Site Management Plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.
12. Development of a Site Management Plan which would include the following institutional and engineering controls: (a) management of the final cover system to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. Excavated soil would be tested, properly handled to protect the health and safety of workers and the nearby community, and would be properly managed in a manner acceptable to the Department; (b) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (c) monitoring of groundwater; (d) provisions for the continued proper operation and maintenance of the components of the remedy.
13. The property owner would provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal would: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that 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 the site management plan unless otherwise approved by the Department.

Declaration

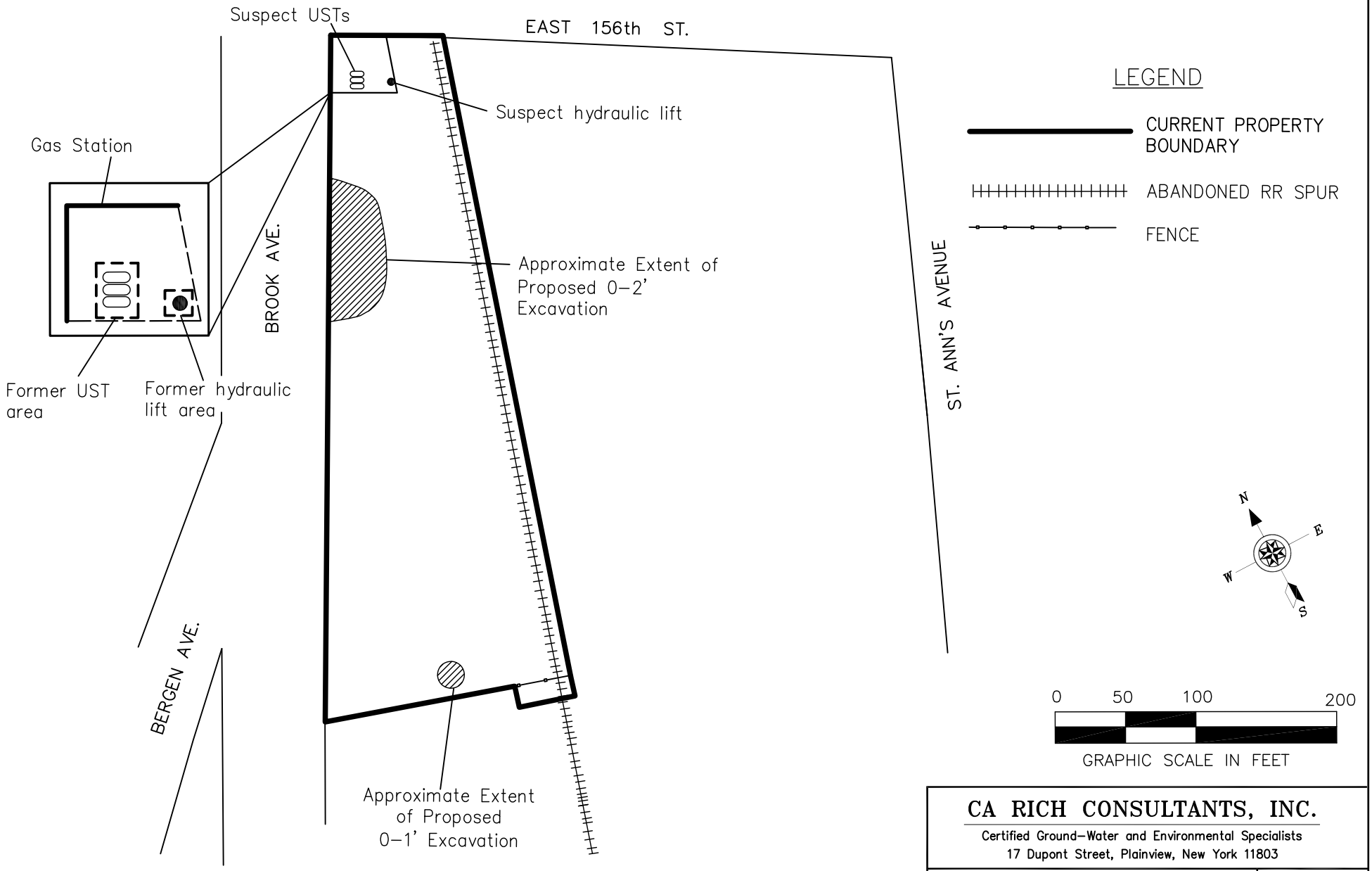
The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action and will allow for the identified use of the site. This remedy utilizes permanent solutions and alternative 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.

7/1/09

Date

Robert Cozzy, Acting Director
Remedial Bureau B
Division of Environmental Remediation

Figure 1



NOTES:

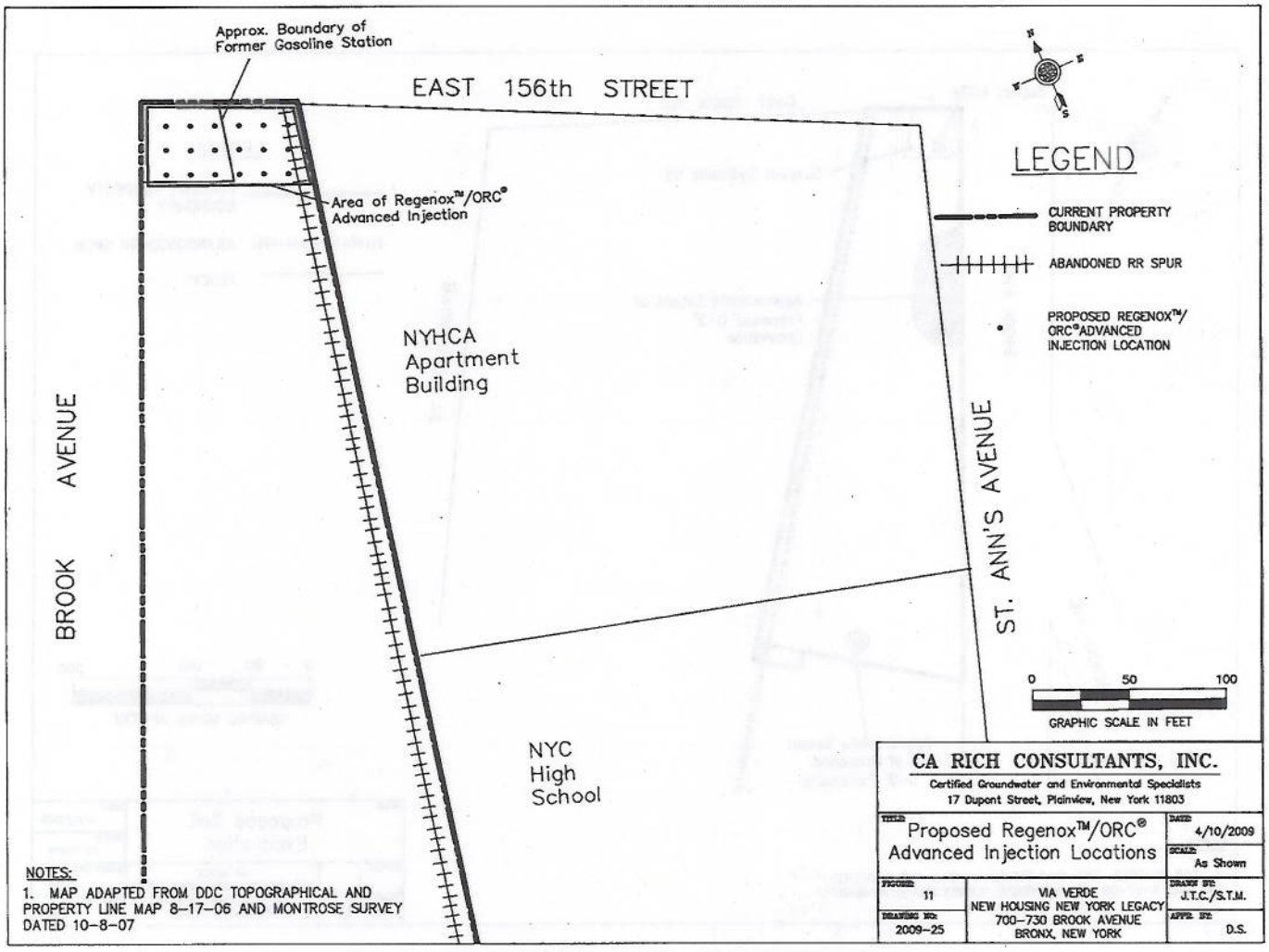
1. MAP ADAPTED FROM DDC TOPOGRAPHICAL AND PROPERTY LINE MAP 8–17–06 AND MONTROSE SURVEY DATED 10–8–07

CA RICH CONSULTANTS, INC.

Certified Ground–Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE: Proposed Soil Excavation		DATE: 4/16/2009
		SCALE: As Shown
FIGURE: 10	VIA VERDE NEW HOUSING NEW YORK LEGACY 700–730 BROOK AVENUE BRONX, NEW YORK	DRAWN BY: J.T.C.
DRAWING NO: 2009–23		APPR. BY: D.S.

Figure 2


Approx. Boundary of Former Gasoline Station
EAST 156th STREET
Area of Regenox™/ORC® Advanced Injection
NYHCA Apartment Building
NYC High School
BROOK AVENUE
ST. ANN'S AVENUE
LEGEND
CURRENT PROPERTY BOUNDARY
ABANDONED RR SPUR
PROPOSED REGENOX™/ ORC® ADVANCED INJECTION LOCATION
0 50 100
GRAPHIC SCALE IN FEET
NOTES:
1. MAP ADAPTED FROM DDC TOPOGRAPHICAL AND PROPERTY LINE MAP 8-17-06 AND MONTROSE SURVEY DATED 10-8-07
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17 Dupont Street, Plainview, New York 11803
Proposed Regenox™/ORC® Advanced Injection Locations
4/10/2009
As Shown
11
2009-25
VIA VERDE
NEW HOUSING NEW YORK LEGACY
700-730 BROOK AVENUE
BRONX, NEW YORK
J.T.C./S.T.M.
D.S.