

# **BROWNFIELD CLEANUP PROGRAM DECISION DOCUMENT**

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## **1800 Southern Boulevard Site 1800 Southern Boulevard, Bronx, New York Site No. C203046 August 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 1800 Southern Boulevard 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 1800 Southern Boulevard site (the Site) is located in an urban portion of Bronx County, New York City, New York 10460 and is identified as Block 2984, Lots 1 and 7 on the New York City Tax Map. A Site location map (Figure 1) shows the Site location. The site is a triangular shaped parcel of land approximately 0.27-acres in size situated at the southern tip of a city block where Boston Road and Southern Boulevard cross, with Southern Boulevard to the west and Boston Road to the east and south. Currently, the site is occupied by a vacated former Amoco gas station and a fenced lot. The gas station has been vacant since 2003. The fenced area was a car wash that has been vacant since 1993. All of the facilities associated with the car wash have been demolished and this portion of the Site is currently a fenced, vacant open lot largely covered with exposed soil or overgrown with vegetation. Historic storage, transfer, and usage of petroleum products have resulted in impacts to soil, groundwater and soil vapor.

Completed investigations include:

- Delta Environmental Consultants, Inc. Underground Storage Tank Excavation Assessment Report, September 11, 2003
- Delta Environmental Consultants, Inc. Subsurface Hydrocarbon Assessment Report, September 17, 2003
- Roux Associated, Inc. Remedial Investigation Report, August 2008

## **Nature and Extent of Contamination**

The Remedial Investigation Report (RIR) describes the investigation activities completed, presents analytical data, and discusses the nature and extent of contamination. The RIR identifies the following Site conditions:

- On-site and off-site soil samples were collected and sampled for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, PCBs, and pesticides. Contaminants found to exceed the Unrestricted Use Soil Cleanup Objectives include petroleum-related VOCs (acetone, benzene, n-butylbenzene, ethylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, toluene, m&p xylenes, and o-xylene), one SVOC (naphthalene), and six metals (chromium, copper, lead, mercury, nickel, and zinc). Figure 2 presents the soil sampling results.
- On-site groundwater samples were collected and analyzed for VOCs, SVOCs, metals, PCBs, and pesticides. Contaminants found to exceed applicable standards include nine VOCs (acetone, benzene, ethylbenzene, MTBE, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, toluene, m & p xylenes, and o-xylene), one SVOC (naphthalene), and eight metals (arsenic, beryllium, chromium, copper, lead, manganese, nickel, and sodium). Figure 3 presents the groundwater sampling results.
- On-site soil vapor samples and air samples were collected and analyzed for VOCs. Contaminants found include gasoline related VOCs at concentrations above concentrations in ambient air.

In summary, site soil and groundwater are contaminated with petroleum-related VOCs in excess of the NYCRR Sub-part 375 Unrestricted Use SCOs and ambient water quality standards and guidance values (AWQSGVs). Metals linked with gasoline and/or urban fill have also been detected in soil in excess of the NYCRR Sub-part 375 Unrestricted Use SCOs. Petroleum disposal is likely attributable to a combination of leaks over time associated with one or more of the former underground storage tanks (USTs) that were removed from the Site as part of the 2003 UST removal, leaks over time from underground piping associated with the USTs, or surface spills over time associated with fuel transfer or vehicular maintenance activities.

## **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 2 Residential Use remedy for this BCP site. The components of the remedy set forth in the Remedial Action Work Plan and shown on the attached Figure 4 are as follows:

- Excavation of soil/fill in the upper 15 feet of the Site, plus limited excavation of soils exceeding the protection of groundwater Soil Cleanup Objectives (SCOs) to 20 feet in the area surrounding boring SB-106;
- Groundwater remediation during construction activities consisting of excavation dewatering, pre-treatment and offsite disposal;

- Site Monitoring of airborne VOCs and particulates in accordance with a NYSDEC approved Community Air Monitoring Plan (CAMP) for all intrusive and soil handling activities;
- Implementation of proper dust and odor suppression techniques for all intrusive and soil handling activities;
- Import of materials to be used for backfill and cover in compliance with (1) the Sub-part 375-6 (d); and (2) all Federal, State and local rules and regulations for handling and transport of material;
- Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- Collection and analysis of post-excavation end-point soil samples to evaluate the performance of the remedy with respect to attainment of Track 2 restricted residential SCOs;
- Appropriate offsite disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- Post-remediation groundwater monitoring for a minimum of two years; and
- Post-remediation evaluation of potential soil vapor intrusion concerns.
- If post-excavation soil sampling demonstrates that the Remedial Action Objectives have not been met, the Department may require limited treatment using In-situ Chemical Oxidation (ISCO).
- If post-excavation soil sampling demonstrates that the Remedial Action Objectives have not been met, the Department may require recording of an Environmental Easement, including Institutional Controls, to prevent future exposure to any residual contamination remaining at the Site.
- If post-excavation soil sampling demonstrates that the Remedial Action Objectives have not been met, the Department may require publication of a Site Management Plan for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations.

### **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 protect groundwater.

Date

August 17, 2009

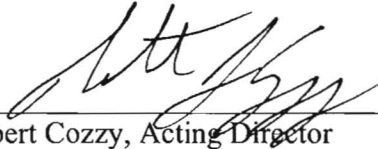
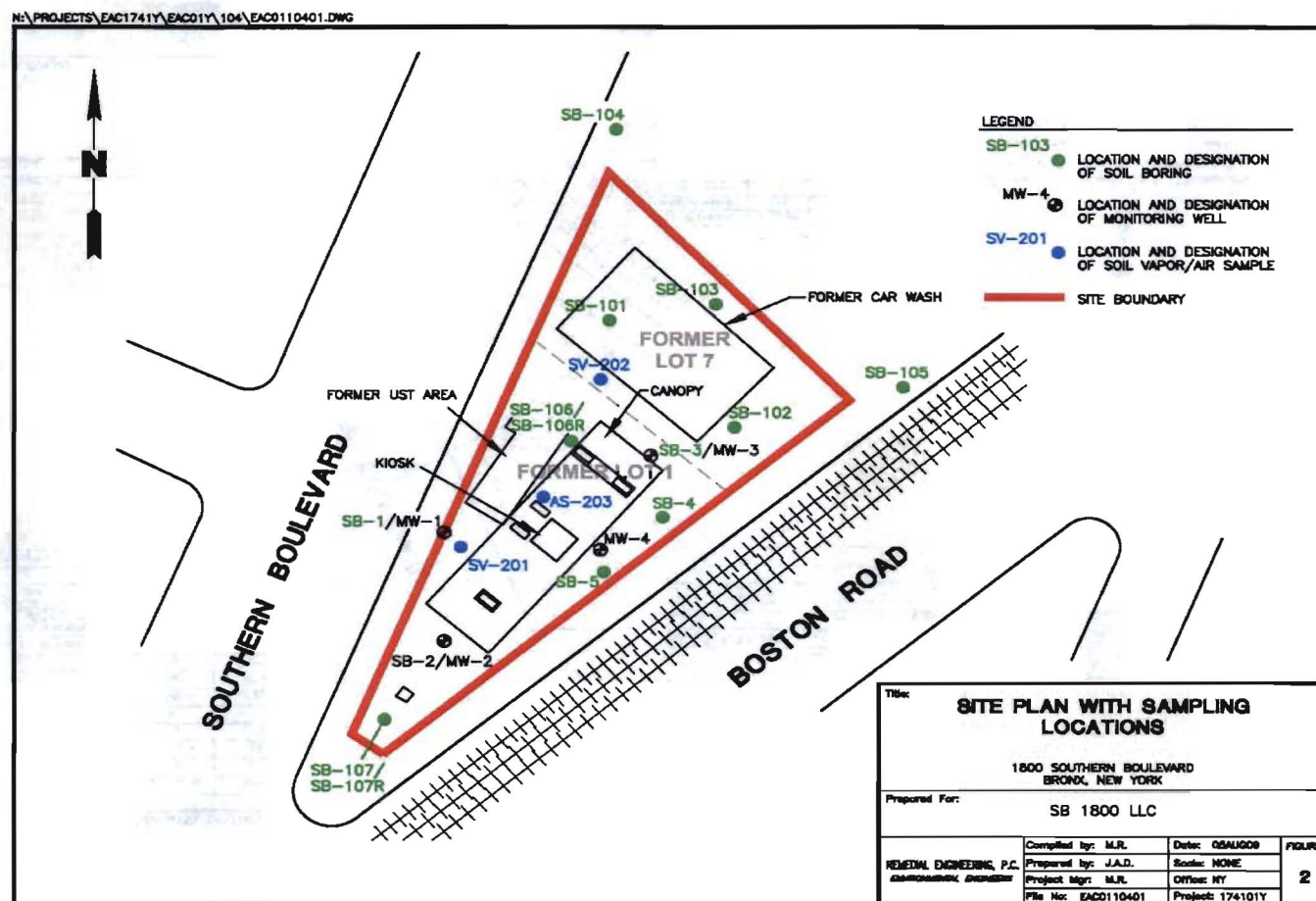
  
Robert Cozy, Acting Director  
Remedial Bureau B  
Division of Environmental Remediation



Figure 1 Site Map



### Figure 2 – Soil Sampling Results

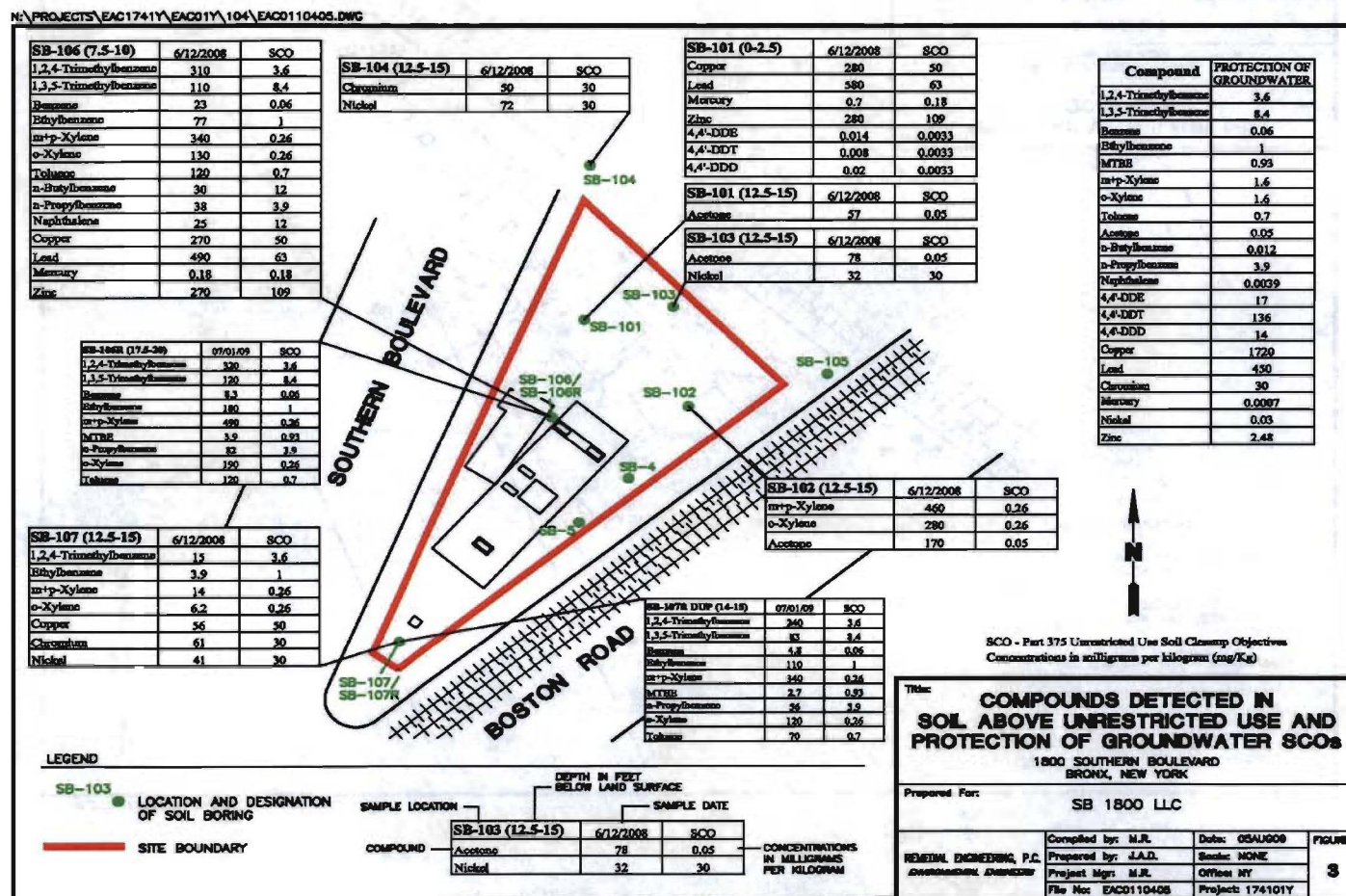


Figure 3 – Groundwater Sampling Results

