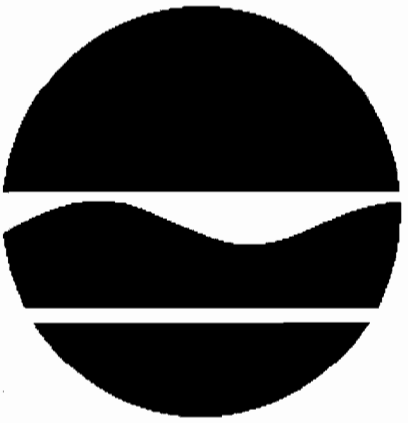
DECISION DOCUMENT

Stewart EFI-NY LLC
Voluntary Cleanup Program
Yonkers, Westchester County
Site No. V00691
October 2011



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Stewart EFI-NY LLC
Voluntary Cleanup Program
Yonkers, Westchester County
Site No. V00691
October 2011

Statement of Purpose and Basis

This document presents the remedy for the Stewart EFI-NY LLC site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Stewart EFI-NY LLC site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

10/26/11
Date

Michael Ryan, Director
Remedial Bureau C

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Stewart EFI-NY LLC
Yonkers, Westchester County
Site No. V00691
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SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2. Contaminants include hazardous wastes and/or petroleum.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The Voluntary Cleanup Program (VCP) is a voluntary program. The goal of the VCP is to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfields." This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Yonkers Public Library - Grinton I. Will Branch
Attn: Mr. Sandy Amoyau
1500 Central Park Avenue
Yonkers, NY 10701

Phone: 914-337-5973

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is approximately 3.5 acres. The main site parcel (630 Central Park Avenue) contains the former manufacturing facility and is located at the southeast corner of the intersection of Whittier and Central Park Avenues, east of the NYS Thruway in Yonkers, Westchester County, NY. Other properties that comprise the site include 34 Whittier Avenue, 10, 21 and 27 Kettell Avenue, and 640-642 Central Park Avenue. The site abuts single-family residences on the south, east and north, and the NYS Thruway corridor to the west, across Central Park Avenue.

Site Features: The site slopes from the southwest to northeast. The main site parcel contains an approximately 200,000-square foot, two-story former manufacturing facility and a small parking lot. 21 Kettell Avenue contains a vacant residential structure that the former owner used for records storage. The remaining parcels are paved and were previously used for parking.

Current Zoning/Use(s): The site currently is vacant. A prospective buyer plans to manufacture and assemble kitchen cabinetry for the NYC market. The zoning varies by parcel from residential (10 and 21 Kettell Avenue) to commercial (640-642 Central Park Avenue) to industrial (630 Central Park Avenue, 34 Whittier Avenue and 27 Kettell Avenue). The industrial parcels contain the former manufacturing facility.

Historic Uses: Since 1942, the site was a machine tool and die facility that manufactured metal parts for the automotive and electronics components industries via several high-speed stamping processes. There were several finishing processes including plating, polishing, and heat treatment, as well as degreasing operations performed at the facility. Prior to that, the building was reportedly used as a warehouse for the Wannamaker Department Stores. The warehouse was constructed in circa 1930 on previously undeveloped land.

The plating room at the facility was reportedly used for metal parts finishing throughout most of the facility's operational history and was a potential source area for release of plating chemistry. Historic degreasing operations were also a concern; two vapor degreasers were used (one for at least 20 years) to clean the parts. Methylene chloride and trichloroethylene were used to clean parts at the facility.

Prior to entering the VCP, based on a Phase I Environmental Site Assessment and a subsequent Phase II Site Investigation (SI) performed in 2002, six underground storage tanks (USTs) were noted as closed in place at the facility in 1996. Two 8,000 gallon USTs were used for water storage. The remaining four tanks contained No. 4 fuel oil (two 3,000 gallon USTs and two 5,000 gallon USTs). These tanks were reportedly tested and found to be tight, filled with a concrete slurry mix and closed in place. No subsurface testing was performed at the time to verify conditions as part of the UST closure. However, based on the facility's manufacturing history, the owner applied to the Voluntary Cleanup Program to investigate and remediate site-related contamination if found.

Site Geology and Hydrogeology: The site is comprised of unconsolidated glacial till consisting of a mixture of clay, silt, sand, gravel, and boulders (industrial parcels). Soil encountered during soil boring advancement on the adjacent residential and commercial lots was found to consist primarily of brown, black and gray sand, silt and clay with gravel, concrete, red brick, ash, wood fragments and weathered bedrock. Bedrock was encountered at depths 6 to 18 feet below ground surface (bgs).

The site is located approximately 0.75 miles west of the Bronx River. No overburden groundwater was found. Groundwater was noted in shallow bedrock at depths ranging from 12 to 28 feet bgs, or below top of floor slab. Based on topography in the area and nearby surface water bodies, the predominant direction of local groundwater flow is expected to be eastward towards the Bronx River. Estimated groundwater levels and/or flow directions may vary due to seasonal fluctuations in precipitation, local usage demands, geology, and underground structures. During the investigation, the groundwater flow direction was found to be towards the east with north and south components, generally consistent with bedrock surface topography.

A site location map is attached as Figure 1, and Figure 2 shows the parcels comprising the site.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, at a minimum, an alternative that restricts the use of the site to industrial, commercial, or residential use as described in DER-10, Technical Guidance for Site Investigation and Remediation was evaluated consistent with the parcel-specific uses and local zoning. The site is comprised of nine parcels: five parcels are restricted to industrial, two are restricted to commercial use and two others are restricted to residential use, as outlined in the Site Management Plan (SMP) and the recorded deed restriction.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The voluntary cleanup agreement is with a Volunteer. If the Volunteer elects not to complete the remedial program under the VCP, the Department will make a determination if the site poses a significant threat to human health and the environment. If the site is determined to pose a significant threat, the Department will approach the potentially responsible parties (PRPs) to implement the remedy. PRPs are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

In October 2003, Stewart EFI New York, LLC (SEFI) of Thomaston, New York, submitted an application to participate in the Voluntary Cleanup Program (VCP). In July 2004, SEFI entered into a Voluntary Cleanup Agreement (VCA) with the NYSDEC as a volunteer to implement a remedial program to investigate and remediate environmental contamination present at the site. The VCA was amended on November 12, 2009 and September 21, 2010 to add adjacent parcels owned by SEFI that were not part of the original VCA. As a Volunteer, the VCA obligates SEFI to address on-site contamination related to the site.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.4.

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has

developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Information

The analytical data collected on this site includes data for:

- air
- groundwater
- soil
- soil vapor
- indoor air

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

arsenic
cadmium
chromium
nickel
zinc
methylene chloride
tetrachloroethylene (PCE)
trichloroethene (TCE)
1,1,1-trichloroethane (1,1,1 TCA)
benz(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
dibenz[a,h]anthracene

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM has been completed at this site based on conditions observed during the RI.

On-site Sub-slab Depressurization System (SSDS)

A sub-slab depressurization system (SSDS) was installed during in 2010 to address indoor air and sub-slab vapor impacts from volatile organic compounds (i.e., PCE, TCE and 1,1,1 TCA).

Post-installation indoor air monitoring data indicated the building mitigation was effective as outlined in the RI Report.

6.3: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

Direct contact with contaminants in the soil is unlikely because the majority of the site is covered with buildings and pavement. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Sub-slab depressurization systems (systems that ventilate/remove the air beneath the buildings) have been installed in the on-site building to prevent the indoor air quality from being affected by the contamination in the soil vapor beneath the building. Sampling indicates soil vapor intrusion is not a concern in off-site buildings.

6.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: Based on the investigation work performed at the site over the past several years (2003-2011), some metals (i.e., zinc, cadmium, chromium and arsenic) were considered to be the primary site-related contaminants of concern (COCs) in site bedrock groundwater. Groundwater was never encountered in the overburden. Monitoring well MW-2, located outside of the plating room exhibited zinc concentrations exceeding the groundwater standard of 2,000 ug/L, as follows: 38,800 micrograms per liter (ug/L) in 2003 and 35,700 ug/L in 2006. Arsenic was detected in MW-2 in 2003 and 2006 at concentrations of 64.4 and 146 ug/L, respectively, compared to the groundwater standard of 25 ug/L. Cadmium was detected in MW-2 in 2006 at a concentration of 15.4 ug/l compared to a standard of 5 ug/L. Chromium was detected in the downgradient well (MW-3) in 2003 at concentration of 108 ug/L compared to a standard of 50 ug/L. The plant ceased operations in late 2008 and recent (2011) groundwater samples only detected zinc in MW-2 at concentrations slightly greater than the standard at 2,920 ug/L (unfiltered) and 2,210 ug/L (filtered).

No volatile organic compounds (VOCs) or semi-VOCs (SVOCs) were detected in site groundwater in 2003, but in the 2006 investigation phase, a few VOCs (trichloroethene (TCE) and chloroform) were detected above standards in MW-3. TCE was detected at 54 ug/l

compared to the standard of 5 ug/L, and chloroform was detected at 230 ug/L compared to a standard of 7 ug/L. TCE is considered a site-related COC. However, VOCs were not detected in any wells in the most recent groundwater sampling in 2011. In fact, in 2011, there were no VOCs, SVOCs, PCBs, pesticides or metals detected at concentrations exceeding groundwater standards, with the exception of zinc as discussed above, and naturally occurring metals (e.g., iron, magnesium, manganese and sodium) which were noted throughout the various investigation phases.

Throughout the investigation phases, a few VOCs (e.g., acetone, 2-butanone, methylene chloride) and several metals (e.g., chromium, arsenic, lead, mercury, nickel, silver, cadmium and zinc) were noted in one or more site soil borings slightly above their respective Part 375 unrestricted use Soil Cleanup Objectives (SCOs). The only chlorinated solvent noted in site soils was methylene chloride, which was found in one boring outside the plating area and near a former degreasing area. It was found at an estimated concentration of 110 parts per million (ppm) in site soils compared to the unrestricted use SCO of 50 ppm. No other chlorinated solvents that were used at the site were noted in site soils above unrestricted use SCOs.

The SVOCs were detected in one boring immediately adjacent to a former underground oil tank that was closed in place under the facility slab. A few of the SVOCs from that boring exceeded the industrial use SCOs (i.e., benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene and dibenz(a,h)anthracene), while a few other SVOCs (i.e., benzo[k]fluoranthene, chrysene, indeno[1,2,3-cd]pyrene exceeded the unrestricted use SCOs. However, the portion of the site containing the former manufacturing facility is zoned for industrial use as noted in the recorded deed restriction.

Some metals (i.e., arsenic, lead, nickel and zinc) exceeded unrestricted use SCOs in various soil borings under the former manufacturing facility. Arsenic slightly exceeded the industrial use SCO of 16 ppm in three soil borings under and nearby the former plating area, with concentrations ranging from18.9 to 22.9 ppm.

Chlorinated solvents (PCE, TCE, 1,1,1-TCA) and some metals were detected in sludge in a sump in the plating room. The sludge was removed from the sump and properly disposed off-site.

Significant Threat: The site does not present a significant threat since the sub-slab depressurization system has been installed.

Special Resources Impacted/Threatened: None identified at this time.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further Action with implementation of institutional and engineering controls (ICs/ECs) as the proposed remedy for the site. The IC/ECs include continued operation of the sub-slab depressurization system (SSDS), maintenance of the existing site cover and implementation of a deed restriction, all of which have already been implemented. The Department believes that this remedy is protective of human health and the environment.

The elements of the IRM (i.e., the SSDS) and the additional institutional and engineering controls, which have already been implemented, are listed below.

1. Maintenance of the site cover. A site cover currently exists and will be maintained to allow for the parcel-specific uses noted below as a component of any site redevelopment. The cover consists of either structures such as buildings, pavement, sidewalks comprising the site

development or existing soil cover meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for the parcel-specific use allowed by the deed restriction.

The parcel-specific uses are as follows:
Industrial Use (2.9 acres) - Section 6, Block 6343, Lots 1, 25, 27, 47 and 49
Industrial or Commercial Use (0.19 acres) – Section 6, Block 6344, Lots 1 and 2
Industrial, Commercial or Residential Use (0.47 acres) – Section 6, Block 6342, Lot 5 and Section 6, Block 6343, Lot 51.

2. Imposition of an institutional control in the form of a deed restriction for the controlled property that:
a. requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
b. allows the use and development of the controlled property for industrial, commercial or residential uses as defined by Part 375-1.8(g) and as noted above, though land use is subject to local zoning laws;
c. restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
d. prohibits agriculture or vegetable gardens on portions of the controlled property, consistent with the parcel-specific uses noted above; and
e. requires compliance with the Department-approved Site Management Plan.

3. A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

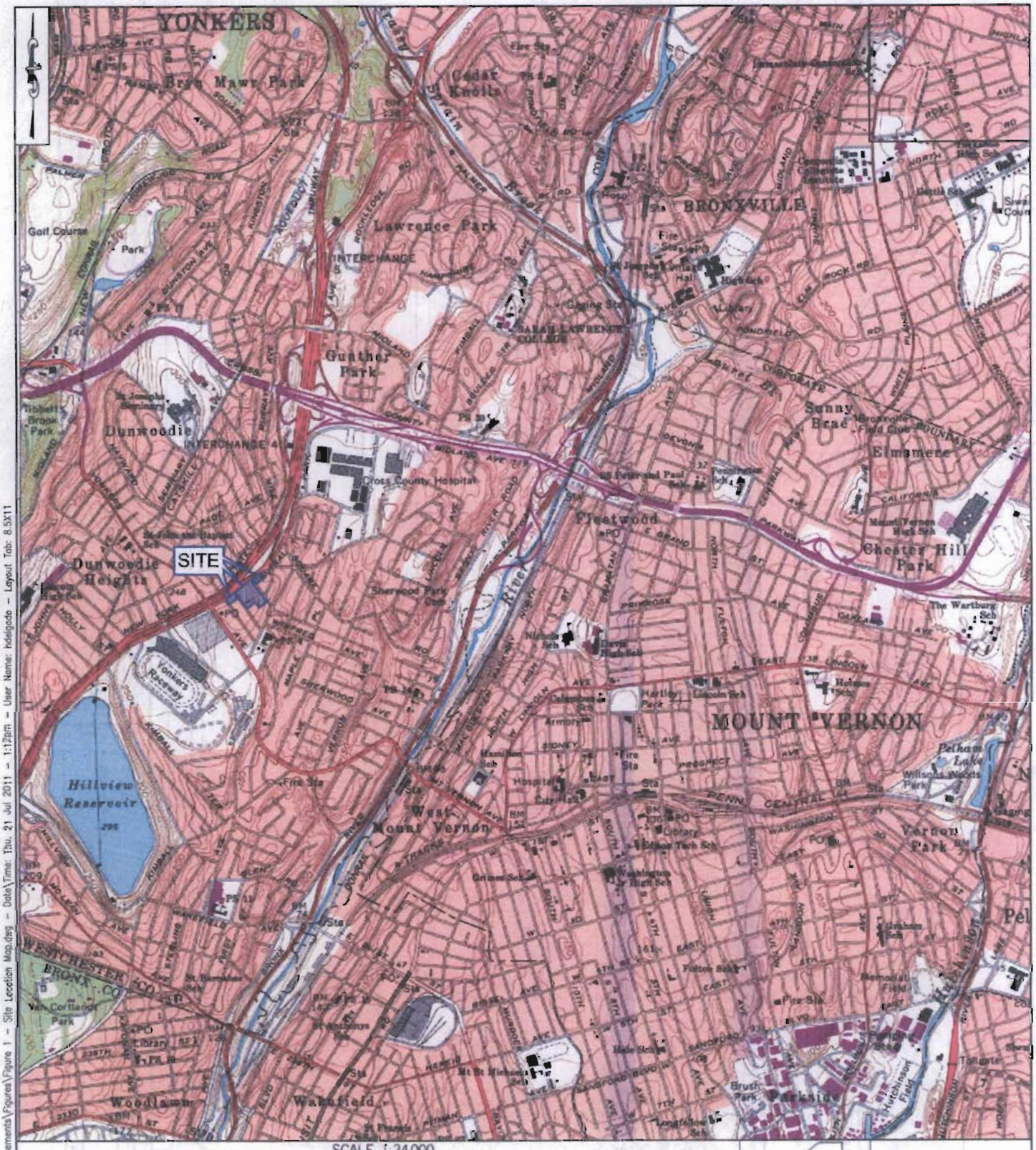
Institutional Controls: The Deed Restriction for the controlled property discussed previously; and
Engineering Controls: The continued operation of the SSDS discussed above and maintenance of the existing site cover, which consists of building slabs, concrete sidewalks, asphalt parking lots and soil.

This Institutional and Engineering Control Plan includes, but may not be limited to:
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the deed restriction;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls (i.e., the SSDS and site cover);
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to monitoring for vapor intrusion for any buildings developed on the site.

c. a Operation, Maintenance and Monitoring (OM&M) Plan to operate, monitor and maintain the mechanical components of the remedy selected for the site. The plan includes, but may not be limited to:

- routine OM&M activities;
- non-routine OM&M activities; and
- a schedule of monitoring and frequency of submittals to the Department.



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1430 BROADWAY, 10TH FLOOR
NEW YORK, NEW YORK 10018
212-221-7822

DESIGNED BY: JM/WL	
DRAWN BY: HD	
CHECKED BY: DSG	
DATE: JULY 2011	
SCALE: AS SHOWN	
PROJECT NUMBER: 181590.0000.0000	

PROJECT NAME:
FORMER STEWART STAMPING SITE
VCP SITE NO. V00691-3, VCA INDEX NO. W3-1005-04-06
YONKERS, NEW YORK

DRAWING TITLE:
SITE LOCATION MAP

FIGURE
1

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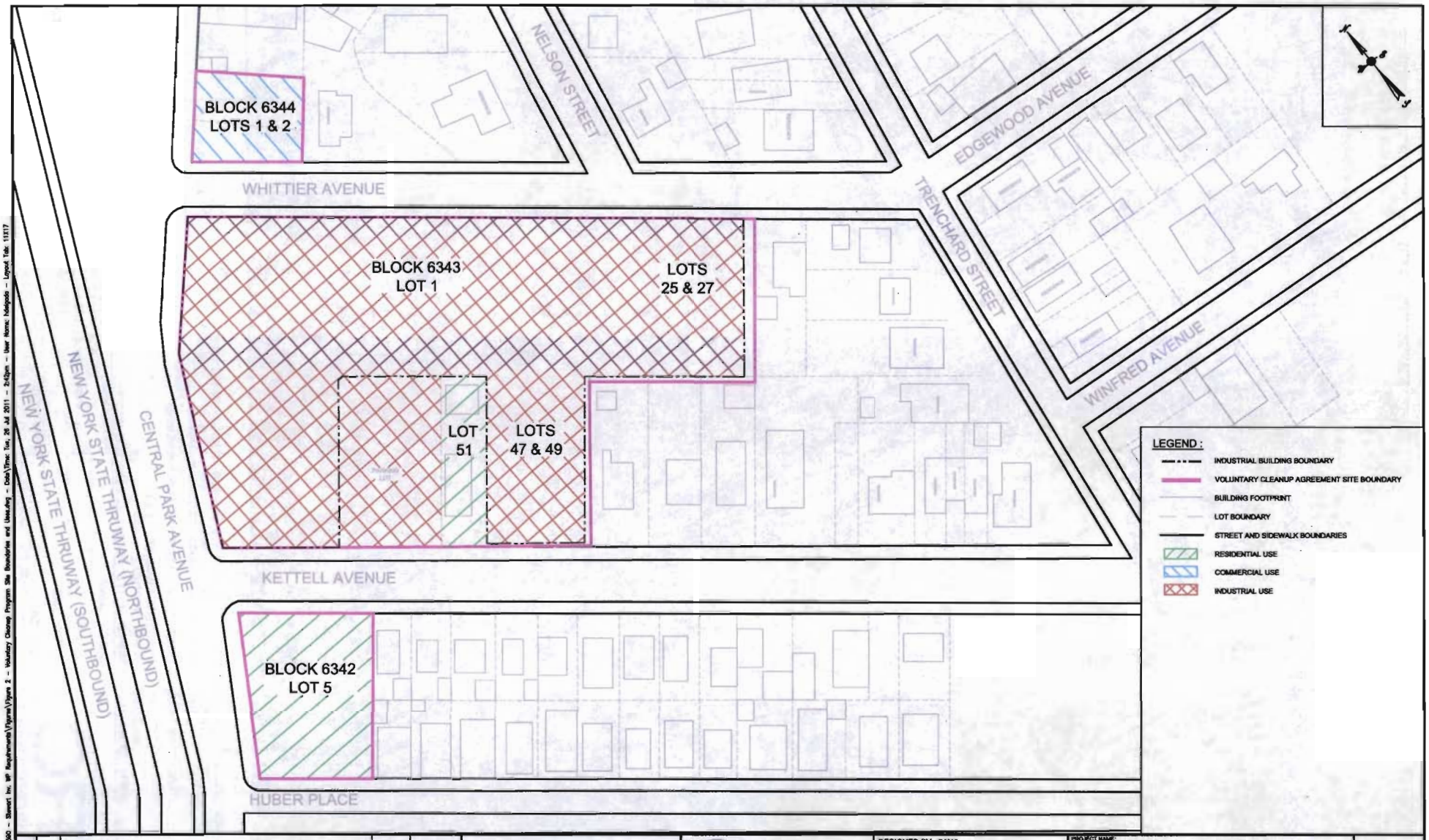

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PAPER SIZE: 11" x 17"

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PROJECT NAME:
FORMER STEWART STAMPING SITE
VCP SITE NO. V00691-3, VCA INDEX NO. W3-1005-04-06
YONKERS, NEW YORK

DRAWING TITLE:
VOLUNTARY CLEANUP PROGRAM SITE BOUNDARIES AND USES

FIGURE
2