

FORMER STEWART STAMPING SITE 630 CENTRAL PARK AVENUE YONKERS, NEW YORK 10704

Site Management Plan

NYSDEC VCP Site Number: V00691-3 NYSDEC VCA Index Number: W3-1005-04-06

Submitted to: New York State Department of Environmental Conservation Region 3, New Paltz, New York

> Prepared for: Stewart EFI New York, LLC Thomaston, Connecticut

Prepared by: **TRC Engineers, Inc.** 1430 Broadway, 10th Floor New York, New York TRC Project No. 181590

Revisions to Final Approved Site Management Plan:

Revision #	Submitted	Summary of Revision	DEC Approval
	Date		Date

October 21, 2011



CERTIFICATION

I, David S. Glass, certify that I am currently a New York State registered professional engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plans and any DER-approved modifications.

David S. Glass, P.E.



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1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program for the Former Stewart Stamping Site (hereinafter referred to as the "Site") under the New York State (NYS) Voluntary Cleanup Program (VCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was investigated, and engineering and institutional controls have been implemented in accordance with Voluntary Cleanup Agreement (VCA) Index No. W3-1005-04-06, VCP Site No. V00691-3, which was executed on July 16, 2004 and last amended on September 3, 2010.

1.1.1 General

Stewart EFI New York, LLC (Stewart EFI) entered into a VCA with the NYSDEC to remediate an approximately 4-acre property located in Yonkers, Westchester County, New York. This VCA required the Volunteer, Stewart EFI, to investigate and implement activities designed to address contaminated media at the Site. A figure showing the Site location and boundaries of this approximately 4-acre Site is provided in Figures 1 and 2. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the deed restriction (refer to Appendix B).

After completion of the work described in the NYSDEC-approved Vapor Intrusion Mitigation Work Plan dated June 18, 2010 and Remedial Investigation and Remedial Alternative Analysis Report dated August 2011, some contamination was left in the subsurface at this Site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the deed restriction is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State (refer to Appendix C for prior reports).

This SMP was prepared by TRC Engineers, Inc. (TRC), on behalf of Stewart EFI, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the deed restriction for the Site.



1.1.2 Purpose

The Site contains contamination left after completion of the remedial activities. Engineering Controls have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. A deed restriction placed upon the property, and recorded with the Westchester County Clerk, will require compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the deed restriction for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the deed restriction and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of the sub-slab depressurization system (SSDS); (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of SSDS operations.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; and (3) an Operation and Maintenance Plan for the installed SSDS.

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to the NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the deed restriction. Failure to properly implement the SMP is a violation of the deed restriction, which is grounds for revocation of the "Release and Covenant not to Sue/No Further Action Letter";
- Failure to comply with this SMP is also a violation of ECL, 6 New York Codes, Rules and Regulations (NYCRR) Part 375 and the VCA Index No. W3-1005-04-06, VCP Site No. V00691-3, for the Site, and thereby subject to applicable penalties.



1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the deed restriction for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Site is located in the City of Yonkers in Westchester County, New York and is identified as Section 6, Block 6342, Lot 5; Block 6343, Lots 1, 25, 27, 47, 49, and 51; and Block 6344, Lots 1 and 2 on the City of Yonkers Tax Map. The Site is an approximately 4-acre area bounded by Whittier Avenue and low-rise residential and commercial structures to the north, Kettell Avenue, Huber Place, and low-rise residential and commercial structures to the south, residential structures followed by Trenchard Street to the east, and Central Park Avenue to the west (see Figure 2). The boundaries of the Site are more fully described in Appendix B.

The legal descriptions for the VCP Site, associated addresses and land uses are summarized below.

Section	Block	Lot	Address	City of Yonkers Zoning Designation	6 NYCRR 375- 1.8(g)(2) Restricted Use		
	6342	5	10 Kettell Avenue	BA - General Business and Apartment Houses, High Density	Residential Use		
6	6343	6343	(2.12	1	630 Central Park Avenue	I - Industry, Residence Excluded	Industrial Use
				25 and 27	34 Whittier Avenue	I - Industry, Residence Excluded	Industrial Use
			47 and 49	27 Kettell Avenue	I - Industry, Residence Excluded	Industrial Use	
			51	21 Kettell Avenue	M - Apartment Houses, Medium Density	Residential Use	
	6344	1 and 2	640 and 642 Central Park Avenue	BR - Restricted Business, Residences Excluded	Commercial Use		

 Table 1

 Site Legal Descriptions, Addresses, and Land Uses

The Site is improved with:

- An approximately 200,000-square foot two-story Industrial Building and associated approximately 14,000-square foot industrial parking lot;
- One approximately 7,000-square foot commercial parking lot;



- One approximately 15,000-square foot commercial parking lot (zoned for commercial/residential use); and,
- An approximately 7,500-square foot property with an approximately 1,800-square foot two-story residential structure and approximately 750-square foot one-story garage.

A Site Location Map is presented in Figure 1. The VCP Site boundaries and uses are shown in Figure 2. Surrounding properties have been developed primarily for residential and commercial uses. The Site is almost completely covered by impervious structures and pavement and is located in an urbanized area.

1.2.2 Site History

The Site was first developed with the initial portion of the existing Industrial Building reportedly constructed circa 1930 as a warehouse for Wanamaker Department Stores. The initial portion of the Industrial Building was added onto in 1953, 1958, 1974, and 1984. The Site was utilized for metals parts manufacturing by Stewart Stamping, from 1942 until 2008, when manufacturing operations ceased.

The Industrial Building previously housed high-speed stamping metal parts manufacturing processes for automotive and electronics components industries. Finishing processes including plating, polishing, and heat treatment, were also conducted in the Industrial Building. In addition, there are seven closed-in-place underground storage tanks (USTs) beneath the footprint of the Industrial Building that were historically used to store cutting oils for the metals parts manufacturing processes, and fuel oil for heating the building. There are also two active aboveground storage tanks (ASTs) in a containment room on the west side of the Industrial Building that are currently used to store fuel for building heating. The locations of the USTs and ASTs are shown on Figure 7.

The manufacturing operations were a source of regulated air emissions, regulated wastewater discharges, and hazardous waste generation. The materials used in the manufacturing operations included solvents [methylene chloride, 1,1,1-trichloroethane (TCA), trichloroethene (TCE), and tetrachloroethene (PCE)], arsenic, copper, lead, nickel, silver, tin, zinc, coiled steel, steel alloy, plating chemistry, lubricants, and hydraulic oil.

Manufacturing operations ceased in 2008 and the Site is currently unoccupied. The manufacturing equipment has been removed from the Industrial Building and the two-story residential structure and three parking lots are currently unoccupied/not in use.



1.2.3 Geologic Conditions

The geology of Westchester County consists primarily of unconsolidated glacial till deposits overlying crystalline bedrock. Based on the findings of previous investigations and available literature, the subsurface geology in the area of the Site likely includes Manhattan Schist, Fordham Gneiss, and Inwood Marble. Manhattan Schist and Fordham Gneiss are generally found throughout Westchester County in irregular bands and the Inwood Marble occurs as north to south trending bands defining river channels such as the Bronx, Croton, and Saw Mill Rivers. Weathered bedrock has been encountered in soil borings advanced at the Site at depths from 6 to 18 feet below ground surface (bgs). A bedrock surface elevation contour map is presented as Figure 3. Bedrock surface elevation contours indicate that bedrock surface elevation generally decreases to the north. Geologic cross sections are presented as Figure 4 and 5. According to prior reports, the hydraulic conductivity of the bedrock aquifer is very low, and bedrock fractures are poorly transmissive and poorly interconnected.

Prior investigations on the Site found that the unconsolidated glacial till deposits at the Site consist of a mixture of clay, silt, sand, gravel, and boulders. Soil encountered during soil boring advancement in the Industrial Building was found to consist of sand with silt, and gravel. Soil encountered during soil boring advancement on the 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.

The Site is located approximately 0.75 miles west of the Bronx River. According to information obtained from prior reports and the Preliminary Supplemental Investigation and Final Supplemental Investigation performed by TRC between April and June 2011, groundwater occurs in shallow bedrock at depths ranging from 12 to 28 feet bgs (or below top of floor slab). Based on topography in the area, nearby surface water bodies, and information obtained from prior reports, 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 Preliminary Supplemental Investigation groundwater flow direction was found to be towards the east with north and south components, generally consistent with bedrock surface topography (refer to Figures 3 and 8).

1.3 SUMMARY OF PREVIOUS INVESTIGATION FINDINGS

Presented below are brief summaries of the results of the prior investigations performed at the Site. A summary of sampling results are provided in Figures 6 through 8. Soil sampling



locations and summaries of exceedances of 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs) and 6 NYCRR Part 375 Use-Specific SCOs are shown on Figures 12 and 13, respectively. See attached Tables 11 through 15 for a summary of the soil sampling data, Tables 16 through 20 for groundwater sampling data, Table 21 for air sampling data and Table 22 for Tank Number 2 oil sampling data. The prior reports are provided in Appendix C.

1.3.1 Draft Phase I Environmental Site Assessment and Limited Compliance Review

In 2002, Environmental Resources Management (ERM) conducted a Phase I Environmental Site Assessment and Limited Compliance Review (Phase I ESA) of the Industrial Building and the associated parking lot for the Insilco Corporation, the owner of the Site at that time. The purpose of the Phase I ESA was to evaluate the potential for environmental impacts to the Site as a result of past, or then current, activities on the Site and surrounding properties and perform a limited environmental compliance review.

The ERM "Draft Phase I Environmental Site Assessment and Limited Compliance Review," dated September 2002, reports the following recognized environmental conditions and contaminants of concern in connection with the Industrial Building:

- Plating Chemical Spills (arsenic, nickel, copper, lead, zinc, and silver);
- Chlorinated Solvent Use (methylene chloride, TCE, PCE, and 1,1,1-TCA); and
- Underground Storage Tanks (fuel oil and cutting oil).

There are no other recognized environmental conditions identified in the report.

1.3.2 Phase II Site Investigation

In 2003, ERM conducted a Phase II Site Investigation for the Insilco Corporation. The Phase II Site Investigation included the following field activities in the Industrial Building and the associated parking lot:

- Advancement and sampling of four soil borings (twelve other attempts failed due to a "sub-floor");
- Analysis of five soil samples for volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), priority pollutant metals and cyanide;
- Installation of two bedrock monitoring wells; and,
- Collection and analysis of groundwater samples from three bedrock wells (two new monitoring wells and one existing process water well) for VOCs, PAHs, priority pollutant metals and cyanide.



Soil sampling laboratory analytical data showed no exceedances of 6 NYCRR Part 375 Protection of Public Health Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs.

Groundwater sampling laboratory analytical data showed no exceedances of New York State Class GA Groundwater Standards and Guidance Values (Class GA Values) for VOCs and semivolatile organic compounds (SVOCs). Arsenic was detected at a concentration of 64.4 micrograms per liter (μ g/L), above the Class GA Value of 25 μ g/L, in MW-02 and chromium was detected at a concentration of 108 μ g/L, above the Class GA Value of 50 μ g/L, in MW-03. In addition, zinc was detected at a concentration of 38,800 μ g/L in MW-02. The Class GA Value for zinc is 2,000 μ g/L. The Phase II Site Investigation analytical laboratory data was not validated.

1.3.3 Voluntary Investigation Report

In 2008, ERM prepared a "Voluntary Investigation Report" for Stewart EFI. The purpose of the report was to summarize the results of soil, groundwater and soil vapor sampling performed at the Site and on surrounding properties.

The Voluntary Investigation Report, dated September 2008, presents descriptions and the results of the following field activities:

- Advancement and sampling of nine soil borings;
- Analysis of ten soil samples for target compound list (TCL) VOCs;
- Analysis of four soil samples and one sludge sample for TCL VOCs, target analyte metals (TAL) metals, and cyanide;
- Installation of two bedrock monitoring wells;
- Collection and analysis of groundwater samples from five bedrock wells (two new monitoring wells, two existing monitoring wells and one existing process water well) for VOCs, PAHs, TAL metals and cyanide;
- Collection and analysis for VOCs of nine sub-slab soil vapor samples under the Industrial Building;
- Collection and analysis for VOCs of nine soil vapor samples around the perimeter of the Industrial Building;
- Collection and analysis for VOCs of seven indoor air and seven soil vapor samples in surrounding homes as part of a New York State Department of Health (NYSDOH) required off-site soil vapor intrusion study; and,



• Collection and analysis for VOCs of three outdoor air samples near surrounding homes as part of a NYSDOH required off-site soil vapor intrusion study.

Soil sampling laboratory analytical data showed no exceedances of Industrial Use SCOs. The VOCs methylene chloride, 2-butanone and acetone were detected in soil at concentrations slightly above the Protection of Groundwater SCOs. The metals cadmium, nickel, and silver were also detected in soil at concentrations slightly above the Protection of Groundwater SCOs. The metals cadmium, copper, lead, nickel, and silver were detected in soil at concentrations slightly above the Unrestricted Use SCOs.

Groundwater sampling laboratory analytical data showed no exceedances of Class GA Values for SVOCs or cyanide. Naturally occurring metals (iron, magnesium, manganese and sodium) were detected at concentrations above Class GA Values. Thallium was also detected at concentrations slightly above the Class GA Value in two monitoring wells, although this appears to be related to a background condition. Arsenic, cadmium and nickel were detected at concentrations slightly above Class GA Values. Zinc was detected in MW-02 at a concentration of 35,700 μ g/L above the Class GA Value of 2,000 μ g/L. The VOCs chloroform, at a concentration of 240 μ g/L, and TCE, at a concentration of 54 μ g/L, were detected at concentrations slightly above the Class GA Values of 7 μ g/l and 5 μ g/L, respectively near the downgradient (northeast) corner of the Site. As mentioned above, a summary of the soil and groundwater sampling data from the Voluntary Investigation Report is provided on Figure 6.

Based on the NYSDOH Soil Vapor Intrusion Guidance, soil vapor sampling laboratory analytical data revealed elevated levels of PCE, TCE and 1,1,1-TCA in sub-slab and soil vapor samples collected inside and around the Industrial Building. Vapor intrusion sampling conducted off-site indicated the following:

- 21 Kettell Avenue: Mitigation required (subsequent sampling indicated no further action required);
- 45 Kettell Avenue: Continued monitoring required (subsequent sampling indicated no further action required); and,
- 33 Whittier Avenue: Continued monitoring required (subsequent sampling indicated "take reasonable and practical action to identify source(s) and reduce exposures" ¹).

¹ "Take reasonable and practical action to identify source(s) and reduce exposures" - The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). (NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006)



1.3.4 Additional Soil Vapor Sampling and Indoor Air Sampling

In 2009, ERM performed additional soil vapor sampling and indoor air sampling at the Site and surrounding properties. The purpose of the additional sampling was to determine if, based on NYSDOH's October 2006 Soil Vapor Intrusion Guidance (NYSDOH Guidance), mitigation was required at the sample locations. The report was presented to NYSDEC as "Progress Report No. 3," dated February 3, 2010.

Soil vapor and indoor air samples were collected at the following locations:

- 21 Kettell Avenue: One indoor air, one sub-slab soil vapor, and one outdoor air sample were collected and analyzed for VOCs; and,
- Industrial Building: Ten indoor air samples were collected and analyzed for VOCs.

The results of the analyses of the samples collected at 21 Kettell Avenue were compared to the NYSDOH Guidance matrices, which indicated that no further action is required.

The results of the analyses of the samples collected in the Industrial Building were also compared to the NYSDOH Guidance matrices. TCE was detected in ambient air at concentrations between 3.3 and 35 micrograms per cubic meter (μ g/m³), which, when compared to NYSDOH Guidance matrices, indicated that mitigation was required for the Industrial Building.

In 2010 ERM performed additional sub-slab vapor, outdoor air and indoor air sampling at 33 Whittier Avenue and 45 Kettell Avenue. The purpose of the additional sampling was to determine if, based on NYSDOH Guidance, continued monitoring was required at the sample locations. The results of the sampling were presented to NYSDEC as "Project Progress Report – Activities through March 2010" dated May 19, 2010.

Sub-slab vapor, outdoor air and indoor air samples were collected as follows:

- 45 Kettell Avenue: One indoor air, one sub-slab soil vapor, and one outdoor air sample were collected and analyzed for VOCs; and,
- 33 Whittier Avenue: One indoor air, one sub-slab soil vapor, and one outdoor air sample were collected and analyzed for VOCs.

The results of the analyses of the samples collected at 45 Kettell Avenue and 33 Whittier Avenue were compared to the NYSDOH Guidance matrices, which indicated that the 45 Kettell Avenue property requires no further action and the 33 Whittier property requires "reasonable and practical action to identify source(s) and reduce exposure". The 33 Whittier indoor air quality results were generally higher than the sub-slab vapor sampling results, suggesting interference



from products (e.g., cleaning supplies, paints, etc.) stored and used within the residence (also refer to the footnote which modifies the last bullet in Section 1.3.4 above).

1.3.5 Final Vapor Intrusion Mitigation System Completion Report

A pilot study work plan for installation of a SSDS in the Industrial Building was prepared by TRC and submitted to NYSDEC in February 2010. In March 2010 sub-slab pressure field pilot testing was performed by TRC and in June 2010 a work plan for installation of a full-scale SSDS in the Industrial Building was submitted to NYSDEC. A full-scale SSDS was installed in the Industrial Building under the supervision of TRC in 2010. Testing of the SSDS was completed by TRC in August 2010. In November 2010, on behalf of Stewart EFI, TRC submitted to the NYSDEC a Final Vapor Intrusion Mitigation System Completion Report for the Industrial Building. The purpose of the report was to document the installation and results of the testing of the SSDS in the Industrial Building. As documented in the Final Vapor Intrusion Mitigation System Completion Report, pressure field testing performed after installation of the SSDS showed that the Industrial Building sub-slab vapor had been successfully depressurized. Additionally, as part of the testing, eight (8) indoor air samples were collected inside the Industrial Building and analyzed for VOCs. The results of the analyses of the indoor air samples showed that TCE concentrations had been reduced by an order of magnitude when compared to the results of indoor air sampling performed prior to installation of the SSDS. The NYSDEC approved the Final Vapor Intrusion Mitigation System Completion Report in a letter dated December 10, 2010.

1.3.6 Preliminary Supplemental Investigation Report

The Preliminary Supplemental Investigation performed by TRC in April and May 2011, included the following field activities:

- Geophysical surveys to identify the portions of the former process wastewater drainage system beneath the Industrial Building floor slabs, confirm the locations and identify the dimensions of USTs inside the Industrial Building, and verify that the proposed soil boring locations were clear of subsurface utilities and structures;
- Visual surveys and mapping of the former process wastewater drainage system;
- Advancement to bedrock surface and continuous soil sampling of six soil borings on the residential and commercial lots which are part of the Site;
- Analysis of thirteen soil samples for TCL VOCs +10 tentatively identified compounds (TICs), TCL SVOCs +20 TICs, TAL metals plus cyanide, TCL polychlorinated biphenyls (PCBs), and TCL pesticides;



- Collection of one groundwater sample from each of the five existing bedrock monitoring wells and analysis of each sample for TCL VOCs +10 TICs, TCL SVOCs +20 TICs, filtered and unfiltered TAL metals and cyanide (unfiltered), TCL PCBs, and TCL pesticides; and,
- Survey by a licensed land surveyor of the soil sampling locations and monitoring wells.

The results of the Preliminary Supplemental Investigation are presented in a report dated May 13, 2011, which was approved by the NYSDEC on June 9, 2011, and is in Appendix C of this SMP. In addition, a summary of the results is presented below.

The results of the Preliminary Supplemental Investigation indicate the following:

- The scattered geophysical anomalies detected on the residential and commercial lots are likely representative of unconsolidated soils, former building remnants and utilities. There were no indications of the presence of an UST on either the commercial/residential or the commercial lot.
- Consistent with historic records, seven closed-in-place USTs were identified beneath the footprint of the Industrial Building. The locations and approximate dimensions of the closed-in-place USTs have been mapped. The locations of the USTs are shown on Figure 7.
- The former process wastewater drainage system located in the Industrial Building was mapped via geophysical and visual surveys. It was determined that the floor and trench drains and sub-slab piping drain to the sanitary sewer and sumps. The surveys confirmed that the sumps do not have outlets or drains, with the exception of one sump in the former Maintenance Equipment area which is connected to the sanitary sewer. Oil was found in one floor drain, one house trap, and one sump in the former North Press Room and a sludge-like material was found in a pit in the former Plating Room. Stewart EFI subsequently arranged for United Industrial Services to remove the oil and sludge in the floor drain, house trap, sump and the pit in the former North Press Room and Plating Room. Refer to Section 1.3.8 below regarding the removal and off-Site disposal of oil and sludge.
- Soil on the commercial/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 in the soil borings at depths from 12 to 17 feet bgs. Field observations indicated evidence of potentially impacted soil in one sample collected from one of the six soil borings. The sample collected 2 to 4 feet bgs from TRC-SB3 exhibited photoionization detector (PID) readings up to 5.7 parts per million (ppm) (and was submitted for laboratory analysis). There was no staining or odors noted in the borings and no separate phase liquids (e.g., fuel oil, gasoline) identified in the soil.
- With respect to the soil samples collected on the residential and commercial lots and submitted for analysis, there were no VOCs, SVOCs, PCBs, pesticides or cyanide detected at a concentration exceeding the Residential Use, Commercial Use, and



Protection of Groundwater SCOs. One metal (mercury) was detected at a concentration above the Residential Use SCO of 0.18 mg/kg and the Protection of Groundwater SCO of 0.73 mg/kg in one soil sample TRC-SB3(2-4"), at a concentration of 1.7 mg/kg. The concentration of mercury detected in the sample above the Residential Use SCO can be attributed to the characteristics of urban fill material found at the Site. Acetone, cadmium, chromium, copper, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, lead, mercury, PCBs, and zinc, were detected at concentrations above the Unrestricted Use SCOs (refer to Table 3). Groundwater was encountered in existing Site monitoring wells at depths ranging from approximately 12 to 28 feet bgs (or below top of floor slab). Groundwater surface elevation measurements indicate that groundwater generally follows the local topography and flows outward radially towards the north, east and south from near the center of the Site.

- During gauging with an oil/water interface probe and sampling of the on-Site monitoring wells there was no sheen, odor, or discoloration detected in groundwater. Also, there were no significantly elevated PID headspace readings (greater than 0.1 ppm above background) recorded during collection of groundwater samples.
- There were no VOCs, SVOCs, PCBs, or pesticides detected at a concentration exceeding the Class GA Values in the groundwater samples collected from the five monitoring wells. Cyanide was not detected in groundwater above the Class GA Value of 2,000 ug/L. Excluding iron, magnesium, manganese, and sodium, zinc was the only metal detected in groundwater above a Class GA Value. Zinc was detected in filtered and unfiltered samples collected from MW-02 at concentrations of 2,210 µg/L and 2,920 µg/L, respectively. The Class GA Value of zinc is 2,000 µg/L.

Based on the results of the Preliminary Supplemental Investigation, the following was concluded:

- There are seven closed-in-place USTs beneath the footprint of the Industrial Building. There is no evidence of a buried UST on the commercial and commercial/residential lots.
- Process wastewater was formerly discharged to the sanitary sewer system and sumps. Wastewater which collected in sumps was conveyed via pumps and overhead piping to the on-Site wastewater pretreatment system.
- Based on the results of the laboratory analysis, there is no evidence of any releases to soil on the commercial and commercial/residential lots. Mercury was detected in one of the 13 soil samples slightly above the applicable criteria. The sample, TRC-SB3(2-4"), was collected from 2 to 4 inches bgs in the front yard of the residence at 21 Kettell Avenue. The concentration of mercury detected is most likely attributable to the characteristics of the urban fill material found at the Site.
- Based on groundwater surface elevation measurements, the groundwater generally follows the local topography and flows outward radially towards the north, east and south from near the center of the Site.



• There was no evidence of impacts to groundwater found, with the exception of the concentration of zinc detected slightly above the Class GA Value in one monitoring well (MW-02).

Based on the results of the Preliminary Supplemental Investigation, the associated report submitted to NYSDEC on May 13, 2011 recommended the following:

- The results of the Preliminary Supplemental Investigation should be incorporated and included in the Final Supplemental Investigation Work Plan for the Site. The scope of the Final Supplemental Investigation Work Plan should consist of soil sampling around the closed-in-place USTs, in former process areas adjacent to several representative floor drains and in or near several representative sumps and trench drains.
- Following completion of the Final Supplemental Investigation, a comprehensive Remedial Investigation and Remedial Alternative Analysis Report and Site Management Plan (SMP) should be prepared to obtain a release and covenant not to sue under the Voluntary Cleanup Program.

Following submittal of the Preliminary Supplemental Investigation Report to NYSDEC in May 2011, Stewart EFI arranged for removal and off-site disposal of the oil found in one floor drain, one house trap, and one sump in the former North Press Room and a sludge-like material that was found in a pit in the former Plating Room. United Industrial Services removed the waste material, power washed the structures, and containerized all waste and wash liquids. On May 19, 2011, TRC confirmed that the floor drain, house trap, sump, and pit had been properly cleaned and that the waste was properly containerized.

After removal of the sludge and cleaning of the pit was complete, the pit was found to be approximately four feet long and four feet wide and three feet in depth, and have solid concrete walls and a solid concrete bottom. Additionally, a three inch diameter vertical drain pipe extending from the bottom of the pit terminating with a shut off valve was found. TRC and the geophysical survey subcontractor subsequently returned to the Site on May 26, 2010 to trace the drainpipe. The results of the geophysical survey indicated that the pipe runs west from the pit and connects with a sump in the Tumbling Room as shown on Figure 7; that sump was found to contain water. The sump in the former Tumbling Room was found to contain water, which is rainwater that accumulated from a leak in the roof/roof drain. In addition, after issuance of the Preliminary Supplemental Investigation Report, an additional sump in the Scrap Metal Bay was identified and found to contain oil (refer to Figure 7). Stewart EFI has since removed the oil from the sump and on June 19, 2011, TRC observed and confirmed that the sump in the Scrap Metal Bay had been properly cleaned and that the waste was properly containerized.



Stewart EFI arranged for American Environmental Assessment Corp. (American) to clean and decommission the former wastewater treatment plant (WWTP) in September 2011 (refer to Section 5.5). After the cleaning and decommissioning of the former WWTP was completed, the waste generated from previous cleaning activities performed by United Industrial Services and the waste generated from the cleaning and decommissioning of the former WWTP were removed from the Site by American. Non-hazardous petroleum waste including oil and recovered wastewater were removed by a vacuum truck and transported to Environmental Waste Treatment, LLC (EWT) in Farmingdale, New York for treatment and final disposal. Hazardous wastes were transported by Chemical Pollution Control to Stablex in Quebec, Canada for characterization, treatment, stabilization, and disposal. Waste disposal manifests will be added to Appendix I when available.

As previously discussed, TRC has confirmed that all of the USTs have been filled with concrete. Refer to Table 2 for a description of the USTs based on the most recent Site visit. Refer to Figure 7 for the locations of the USTs. The Petroleum Bulk Storage (PBS) registration for the facility was also recently updated with Westchester County for the remaining active tanks (see Appendix H).

1.3.7 Remedial Investigation and Remedial Alternative Analysis Report

The Final Supplemental Investigation performed by TRC in June 2011, included the following field activities:

- Investigation of the contents of the USTs;
- Advancement to bedrock surface and continuous soil sampling of twenty-six soil borings in the Industrial Building;
- Analysis of twenty-five soil samples and two duplicate soil samples for TCL VOCs +10 TICs, TCL SVOCs +20 TICs, TAL metals plus cyanide, TCL PCBs and TCL pesticides; and,
- Survey of sample locations.

The results of the Final Supplemental Investigation are presented in a report dated August 2011, which is in Appendix C of this SMP. In addition, a summary of the results is presented below.

The results of the Preliminary Supplemental Investigation indicated the following:

• The contents of the seven USTs located inside the Industrial Building were confirmed. The USTs were found to be completely filled with concrete with the exception of UST No. 1 and UST No. 2. UST No. 1 was found to be filled with concrete to the bottom of manway. UST No. 2 was found to be partially filled with concrete and contained approximately four inches of oil sludge on top of the concrete surface. The oil sludge has



been removed from UST No. 2 and USTs Nos. 1 and 2 have been completely filled with concrete. A summary of the information regarding the USTs is presented in Table 2.

Tank No.	Year Installed	Tank Type	Historic Contents*	Current Contents	Tank Capacity (gallons)	Tank Status
1	1965	UST	Fuel Oil	Concrete	5,000	Closed
2	1978	UST	Water Soluble Cutting Oil	Concrete**	5,000	Closed
3	1978	UST	Water Soluble Cutting Oil	Concrete	3,000	Closed
4	1994	AST	Fuel Oil	Fuel Oil	5,000	In Service
5	1994	AST	Fuel Oil	Fuel Oil	5,000	In Service
6	1978	UST	Water Soluble Cutting Oil	Concrete	3,000	Closed
7	1978	UST	Water	Concrete	8,000	Closed
8	1978	UST	Water	Concrete	8,000	Closed
9	NR	UST	Fuel Oil	Concrete	3,000	Closed
Note: * Information provided by Stewart EFI. ** Oil sludge was removed. NR – Not Reported						

Petroleum Bulk Storage Tank Information (PBS No. 3-012564)

Table 2

- Soil beneath the Industrial Building was found to consist primarily of brown and gray sand, silt and clay with gravel, concrete, red brick, ash, wood fragments and weathered bedrock. Bedrock was encountered in the soil borings at depths of 6 to 18 feet below the top of the floor slab. Groundwater was not encountered in the soil borings. Field observations indicated evidence of potentially impacted soil in one sample collected from one of the twenty-six soil borings. A PID reading of 12.6 ppm was recorded in the sample collected 15 to 16 feet below the top of the floor slab from TRC-SB25. The sample was submitted for laboratory analysis. There was no other evidence of potential contamination observed in the sample.
- There were no VOCs, PCBs, or pesticides detected at a concentration exceeding the applicable Industrial Use SCOs. Also, cyanide was not detected above the Industrial Use SCO.
- Four SVOCs were detected at concentrations above the Industrial Use SCOs in the soil sample collected 4 to 6 feet below the top of the floor slab from boring TRC-SB29. Benzo(a)anthracene was detected at a concentration of 18,000 micrograms per kilogram (µg/kg), which exceeds the Industrial Use SCO of 11,000 µg/kg. Benzo(a)pyrene was detected at a concentration of 17,000 µg/kg, which exceeds the Industrial Use SCO of 1,100 µg/kg. Benzo(b)fluoranthene was detected at a concentration of 19,000 µg/kg, which exceeds the Industrial Use SCO of 11,000 µg/kg. Dibenzo(a,h)anthracene was detected at a concentration of 3,000 µg/kg, which exceeds the Industrial Use SCO of



1,100 μ g/kg. The concentrations of SVOCs above Industrial Use SCOs were detected in the sample collected 4 to 6 feet below the top of the floor slab from boring TRC-SB29, a sample collected adjacent to UST No. 9; however, no evidence of a release was observed in the soil samples collected adjacent to UST No. 9. Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno[1,2,3-cd]pyrene were detected at concentrations exceeding the Unrestricted Use SCOs (refer to Table 3). Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno[1,2,3-cd]pyrene were detected at concentrations exceeding the Protection of Groundwater SCOs.

• One metal, arsenic, was detected at concentrations above the Industrial Use SCO in three of the twenty-five samples submitted for laboratory analysis. Arsenic was detected in the soil sample collected 16 to 18 feet below the top of the floor slab from boring TRC-SB22 at a concentration of 22.9 milligrams per kilogram (mg/kg), in the soil sample collected 12 to 14 feet below the top of the floor slab from boring TRC-SB23 at a concentration of 18.9 mg/kg, and in the soil sample collected 14 to 16 feet below the top of the floor slab from boring TRC-SB25 at a concentration of 19.8 mg/kg. The Industrial Use SCO for arsenic is 16 mg/kg. The concentrations of arsenic detected above the Industrial Use SCO were detected in samples collected beneath the former Plating Room and Tumbling Room and may be attributable to the former plating operations. Arsenic, chromium, copper, lead, mercury, nickel, sliver, and zinc were detected at concentrations exceeding the Unrestricted Use SCOs (refer to Table 3). Arsenic and silver were detected at concentrations exceeding the Protection of Groundwater SCOs.

1.3.8 Decommissioning of the Former Wastewater Treatment Plant

Wastewater from former operations was treated on-Site in the former WWTP. The treated effluent was discharged to the sewer under a Westchester County Department of Environmental Facilities discharge permit. Stewart EFI arranged for American Environmental Assessment Corp. (American) to clean and decommission the former WWTP in September 2011. Unused wastewater treatment chemicals such as sulfuric acid, sodium hydroxide solution, and hypochlorite solution were removed and transported under proper bills of lading to an off-site groundwater treatment plant for use at that facility. Stewart EFI WWTP decommissioning activities included sludge removal, activated carbon removal, crystallized sodium hydroxide removal, power washing of the floor slabs, triple rinsing all piping and tanks, containerizing piping and tanks, and equipment, and shipping all waste off-site for disposal or recycling.

On September 20, 2011, American removed from the Site for proper disposal all WWTP-related waste and the oil and sludge and cleaning wastewater drummed by United Industrial Services in May 2011. Non-hazardous petroleum waste including oil and wastewater generated during cleaning were removed via a vacuum truck and transported to Environmental Waste Treatment, LLC (EWT) in Farmingdale, New York for treatment and final disposal. Hazardous wastes were



transported by Chemical Pollution Control to Stablex in Quebec, Canada for characterization, treatment, stabilization, and disposal. On October 5, 2011, TRC inspected the former WWTP to confirm proper cleaning and decommissioning. Refer to Appendix I for a copy of the bills of lading. Waste disposal manifests will be added to Appendix I when available

Additionally the Remedial Investigation and Remedial Alternatives Analysis Report concluded the following:

Since there are isolated instances of soil which marginally exceeds the applicable SCOs and soil vapor exists beneath the Site, Institutional and Engineering Controls are required to protect human health and the environment. Long-term management of Institutional and Engineering Controls will be performed under the SMP for the Site. The Institutional Controls will consist of a deed restriction and the SMP and the Engineering Controls will consist of the active SSDS installed in the Industrial Building and the Site cover consisting of approximately ninety-five percent impervious surfaces (e.g., buildings, and asphalt and concrete pavement).

Based on an evaluation of the Proposed Alternative analyzed in the August 2011 Remedial Investigation and Remedial Alternative Analysis Report, the implementation of a no further action remedy with institutional and engineering controls (ICs/ECs) was recommended. The IC/ECs include continued operation of the sub-slab depressurization system (SSDS), maintenance of the existing Site cover and recording of a deed restriction, all of which have already been implemented.

1.4 SUMMARY OF REMEDIAL ACTIONS

Remedial activities were implemented at the Site in accordance with the NYSDEC-approved Vapor Intrusion Mitigation Work Plan dated June 18, 2010 and Remedial Investigation and Remedial Alternative Analysis Report dated August 2011.

The following is a summary of the Remedial Actions performed at the Site:

1. Maintenance of the Site cover. A Site cover currently exists and will be maintained to allow for the parcel-specific use noted below as a component of any Site redevelopment. The cover consists of either structures such as the buildings, pavement, and 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 only minor exception to the soil cover analytical requirements is that mercury was detected at 1.7 mg/kg in sample TRC-SB3(2-4") collected from 2 to 4 inches bgs in the front yard of the residence at 21 Kettell Avenue. The Residential Use SCO for mercury is 0.81 mg/kg. The concentration of mercury detected is most likely attributable to the



characteristics of the urban fill material at the Site and is not likely related to any on-Site operations. s;

- 2. Installation of an active SSDS in the Industrial Building to mitigate vapor intrusion;
- 3. Execution and recording of a deed restriction to restrict land use and prevent future exposure to any contamination remaining at the Site; and,
- 4. Development and implementation of this SMP for long term management of remaining contamination as required by the deed restriction, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

Remedial activities were completed at the Site in October 2011.

1.4.1 Sub-slab Depressurization System

A SSDS was installed in the Industrial Building in accordance with the Vapor Intrusion Mitigation Work Plan dated June 18, 2010, which was approved by the NYSDEC/NYSDOH in an email message dated June 24, 2010. The Final Vapor Intrusion Mitigation System Completion Report, dated November 2, 2010, presents a description of the full-scale, permanent SSDS installed in the Industrial Building. As documented in the Final Vapor Intrusion Mitigation of the SSDS showed that the Industrial Building sub-slab vapor had been successfully depressurized. The NYSDEC approved the Final Vapor Intrusion Mitigation System Completion Report in a letter dated December 10, 2010 (refer to Appendix C).

1.4.2 Remaining Contamination

This section provides a summary of the contamination remaining at the Site so that anyone performing future excavations at the Site can anticipate the environmental conditions that may be encountered. The following table provides a summary of known soil remaining on-Site above the unrestricted use levels. The locations of the samples are provided in Figure 12.

Sample Name	Constituent6 NYCRR Part 375Unrestricted Use SCO		Result
	Copper (mg/kg)	50	50.7
	Lead (mg/kg)	63	136
TRC-SB1 (6-8")	Zinc (mg/kg)	109	131
	4,4'-DDD (µg/kg)	3.3	4.4
	4,4'-DDT (µg/kg)	3.3	3.8
TRC-SB2 (6-8")/A	Lead (mg/kg)	63	169

 Table 3

 Summary of Remaining Soil Contamination Above Unrestricted Levels



Sample Name	Constituent	6 NYCRR Part 375 Unrestricted Use SCO	Result
	Zinc (mg/kg)	109	161
	Total PCBs (µg/kg)	100	830
	4,4'-DDD (µg/kg)	3.3	15
	4,4'-DDE (µg/kg)	3.3	5.5
	4,4'-DDT (µg/kg)	3.3	8.9
	Lead (mg/kg)	63	152
	Mercury (total) (mg/kg)	0.18	1.7
	Zinc (mg/kg)	109	123
TRC-SB3 (2-4")	Total PCBs (µg/kg)	100	270
	4,4'-DDD (μg/kg)	3.3	6.8
	4,4'-DDT (µg/kg)	3.3	13
	Dieldrin (µg/kg)	5	6.6
TRC-SB3 (4-6')	Total PCBs (µg/kg)	100	800
	Total PCBs (µg/kg)	100	740
TRC-SB5 (6-8")	4,4'-DDT (µg/kg)	3.3	59
	Dieldrin (µg/kg)	5	7.8
	Acetone (µg/kg)	50	60
	Cadmium (mg/kg)	2.5	3
	Lead (mg/kg)	63	131
TDC (D5 (10.10)	Zinc (mg/kg)	109	1,590
TRC-SB5 (10-12')	4,4'-DDD (μg/kg)	3.3	19
	4,4'-DDE (µg/kg)	3.3	7.5
	4,4'-DDT (µg/kg)	3.3	31
	Dieldrin (µg/kg)	5	39
	Chromium (total) (mg/kg)	30	33.6
IKC-SB0 (0-8)	4,4'-DDT (µg/kg)	3.3	9.2
	Chromium (total) (mg/kg)	30	251
TRC-SB8 (13.5-15.5')	Nickel (mg/kg)	30	119
	Zinc (mg/kg)	109	258
TRC-SB14 (6-8')	4,4'-DDT (µg/kg)	3.3	6.8
	Lead (mg/kg)	63	169
TDC CD10 (9 5 10 5')	Mercury (total) (mg/kg)	0.18	0.22
IKC-SB19 (8.5-10.5)	Zinc (mg/kg)	109	166
	4,4'-DDT (µg/kg)	3.3	6.3
	Arsenic (mg/kg)	13	13.8
TRC-SB21 (9-11')	Chromium (total) (mg/kg)	30	34.6
	Zinc (mg/kg)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	152
TDC CD22 (16 19)	Arsenic (mg/kg)	13	22.9
INC-SD22 (10-18)	Zinc (mg/kg)	109	232
TDC SD22 (12 140/4	Arsenic (mg/kg)	13	18.9
1KC-SD25 (12-14)/A	Zinc (mg/kg)	109	147
TDC CD24 (15 17)	Silver (mg/kg)	2	11.5
IKC-SB24 (15-17)	Zinc (mg/kg)	109	419
TRC-SB25 (14-16')	Arsenic (mg/kg)	13	19.8



Sample Name	Constituent	6 NYCRR Part 375 Unrestricted Use SCO	Result
_	Chromium (total) (mg/kg)	30	52.5
	Copper (mg/kg)	50	56.1
	Nickel (mg/kg)	30	33.2
	Zinc (mg/kg)	109	137
	Benzo(a)anthracene (μ g/kg)	1,000	18,000
	Benzo(a)pyrene (µg/kg)	1,000	17,000
	Benzo(b)fluoranthene (µg/kg)	1,000	19,000
TRC-SB29 (4-6')	Benzo(k)fluoranthene (µg/kg)	800	9,900
	Chrysene (µg/kg)	1,000	16,000
	Dibenzo(a,h)anthracene (μ g/kg)	330	3,000
	Indeno[1,2,3-cd]pyrene (µg/kg)	500	9,900
	Chromium (total) (mg/kg)	30	30.5
TRC-SB31 (11-13')/A	Zinc (mg/kg)	109	211
	4,4'-DDT (µg/kg)	3.3	4.2
	Acetone (µg/kg)	50	85
TRC-SB32 (8-10')	Silver (mg/kg)	2	4.2
	Cadmium (mg/kg)	2.5	11.6
	Chromium (total) (mg/kg)	30	32.4
	Copper (mg/kg)	50	175
SS-02 (SOIL) 1.5'	Lead (mg/kg)	63	145
	Nickel (mg/kg)	30	44.2
	Zinc (mg/kg)	109	511
	Copper (mg/kg)	50	70.9
SS-02 (SOIL) 7.5'	Lead (mg/kg)	63	70.9
	Zinc (mg/kg)	109	336
	Cadmium (mg/kg)	2.5	12.2
	Chromium (total) (mg/kg)	30 63 30 109 50 63 109 2.5 30	33.8
SS-02 (SOIL) 13.5'	Copper (mg/kg)	50	140
	Nickel (mg/kg)	30	41.4
	Zinc (mg/kg)	109	401
	Cadmium (mg/kg)	2.5	10.2
	Copper (mg/kg)	50	134
SS-02 (SOIL) 15.5'	Nickel (mg/kg)	30	40.7
	Zinc (mg/kg)	109	289
	Acetone (µg/kg)	50	60
SB-03 (2')	Lead (mg/kg)	63	155
	Zinc (mg/kg)	Unrestricted Use SCO 30 50 30 109 $1,000$ $1,000$ $1,000$ $1,000$ $1,000$ $1,000$ 330 $1,000$ 300 $1,000$ 300 $1,000$ 330 500 30 109 2.5 30 109 50 63 109 2.5 30 109 2.5 30 109 2.5 30 109 50 30 109 50 30 109 50 30 109 50 30 2	110
	Lead (mg/kg)	63	99.6
SB-04 (5')	Zinc (mg/kg)	109	117
SB-05 (9')	Acetone (ug/kg)	50	95
	Nickel (mg/kg)	30	435
SB-06 (2')	Silver (mg/kg)	2	15.2
	2-Butanone (MEK) (ug/kg)	120	200
SB-07 (0')	Methylene Chloride (µg/kg)	50	110



The following tables provide a summary of known contaminated soil remaining on-Site above the use-specific levels. The locations of the samples are provided in Figure 13.

Summary of Remaining both Containination Above ese Specific Levels							
Sample Name	Constituent (Unit)	Type of Restricted Use	6 NYCRR Part 375 SCO	Result			
TRC-SB3 (2-4")	Mercury (Total) (mg/kg)	Residential	0.81	1.7			
TRC-SB22 (16-18')	Arsenic (mg/kg)	Industrial	16	22.9			
TRC-SB23 (12-14')	Arsenic (mg/kg)	Industrial	16	18.9			
TRC-SB25 (14-16')	Arsenic (mg/kg)	Industrial	16	19.8			
	Benzo(a)anthracene (µg/kg)	Industrial	11,000	18,000			
	Benzo(a)pyrene (µg/kg)	Industrial	1,100	17,000			
TRC-SB29 (4-6 [°])	Benzo(b)fluoranthene (µg/kg)	Industrial	11,000	19,000			
	Dibenzo(a,h)anthracene (µg/kg)	Industrial	1,100	3,000			

 Table 4

 Summary of Remaining Soil Contamination Above Use-Specific Levels

Table 3 and Figure 12 summarize the results of all soil samples remaining at the Site after completion of remedial activities that exceed the Unrestricted SCOs.

Table 4 and Figure 13 summarize the results of all soil samples remaining at the Site after completion of remedial activities that exceed the Use-specific SCOs.



2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Since remaining contaminated soil and soil vapor exist beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the Site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the deed restriction;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan (refer to Appendix A) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and,
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the Site remedy, as determined by the NYSDEC.

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Site Cover

Exposure to remaining contamination in soil/fill at the Site is prevented by an existing Site cover system. This cover system is comprised of asphalt pavement, concrete-covered sidewalks, and concrete building floor slabs. The Excavation Work Plan that appears in Appendix A outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 3 of this SMP. Refer to Figure 16 for a signed and sealed as-built drawing for the existing Site covers.



2.2.1.2 Sub-slab Depressurization System

Based on the results of the Pilot Study and in accordance with the NYSDOH Guidance, a plan for full-scale sub-slab depressurization of the Industrial Building was developed and implemented. The objective of the permanent, full-scale SSDS is to create a vacuum below (i.e., depressurize) the lowest level floor slabs throughout the Industrial Building, thereby minimizing the potential for vapor intrusion. Installation of the SSDS was completed on August 9, 2010.

The SSDS consists of a total of 29 suction points and 41 monitoring points. Figures 9 through 11 are signed and sealed as-built drawings for the SSDS. Figure 9 shows the approximate locations of the suction points and monitoring points, Figure 10 shows the approximate locations of the suction fans on the roof, and Figure 11 shows suction point and monitoring point construction details. Piping from each suction point was run from the sub-slab area to the first floor ceiling and manifolded to a common header. Vertical risers connecting the manifolded piping were routed along the exterior of the building to the suction fans installed on the building roof. Each suction fan exhaust point is a minimum of ten feet from any building opening or air intake. Manufacturer information regarding the suction fans is provided on Figure 10 and included in Appendix F.

In order to provide a means to confirm the SSDS is operating properly, a flow switch and pressure (vacuum) gauge were installed near the inlet of each suction fan. Each flow switch will activate a remote visual and audible alarm inside the Industrial Building if flow is low. The alarm system is connected to the Industrial Building security alarm panel. On alarm activation, Stewart EFI is notified automatically via telephone.

Procedures for operating and maintaining the SSDS are documented in the Operation and Maintenance Plan (Section 4 of this SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.



2.2.2.1 Site Cover System

The Site cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity. Any future proposed changes to the Site cover system (e.g., redevelopment of the Site) will be approved by the NYSDEC prior to implementation.

2.2.2.2 Sub-slab Depressurization System (SSDS)

The active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSDS is no longer required, a proposal to discontinue the SSDS will be submitted by the property owner to the NYSDEC and NYSDOH.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to residential, commercial, and industrial uses only as appropriate based on the parcel use category outlined in Table 1 of this SMP and in the text below, which are consistent with local zoning. Adherence to these Institutional Controls on the Site is required by the deed restriction and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the deed restriction and this SMP by the Site Owner and the Site Owner's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- Monitoring must be performed as defined in this SMP; and,
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

Institutional Controls identified in the deed restriction may not be discontinued without an amendment to or extinguishment of the deed restriction.

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the deed restriction. A copy of the entire deed restriction is included in Appendix B. Site restrictions that apply to the Controlled Property are:



- The use of the portion of the Site identified as Block 6343, Lots 1, 25, 27, 47, and 49 may not be used for a less restricted use than "Industrial Use" which is defined as the land use category which shall only be considered for the primary purpose of manufacturing, production, fabrication or assembly processes and ancillary services and does not include any recreational component; and the owner of the Site shall not seek to remove the zoning variance for industrial use granted on July 6, 1982 for Lots 27 and 47;
- The use of the portion of the Site identified as Block 6344, Lots 1 and 2 may not be used for a less restricted use than "Commercial Use" which is defined as a land use category which shall only be considered for the primary purpose of buying, selling or trading of merchandise or services and includes passive recreational uses which are public uses with limited potential for soil contact;
- The use of the portion of the Site identified as Block 6342, Lot 5 and Block 6343, Lot 51 may not be used for a less restricted use than "Residential Use" which is the land use category which allows a site to be used for any use other than raising live stock or producing animal products for human consumption. Restrictions on the use of groundwater are allowed, but no other institutional or engineering controls are allowed relative to the residential use soil cleanup objectives. This is the land use category which will be considered for single family housing;
- The owner of the Site shall continue in full force and effect any institutional and engineering controls required under the Agreement, including the SSDS, and shall maintain such controls unless the owner first obtains permission to discontinue such controls from the Relevant Agency;
- All future activities on the Site that (i) results in the disturbance or excavation, which threatens the integrity of the existing cap which consists of the asphalt covered parking areas, the concrete covered sidewalks, demonstrated clean fill cover in non-paved areas and concrete building slabs, or (ii) results in disturbance of material containing residual contamination are prohibited unless such activities are conducted in accordance with the soil management provisions of the SMP;
- All future activities on the Site that results in unacceptable human exposure to residual contamination are prohibited;
- All groundwater, soil vapor and other environmental or public health monitoring related to the Site must be performed as required in the SMP;
- All environmental monitoring devices, including but not limited to, groundwater monitoring wells and soil vapor probes, must be protected and replaced as necessary or as directed by the NYSDEC to ensure continued functioning as specified in the SMP;
- Any new structures constructed on the Site must be evaluated for potential soil vapor intrusion and mitigated as necessary in accordance with the building mitigation provisions of the SMP;
- The owner of the Site shall prohibit the use of the groundwater underlying the Site without treatment rendering it safe for drinking water or industrial purposes, as



appropriate, unless the user first obtains permission to do so from the NYSDEC or Relevant Agency;

- All data and information pertinent to site management for the Property must be reported at the frequency and in a manner specified in the SMP; and,
- The owner of the Site shall annually, submit to the NYSDEC or Relevant Agency a written statement by an expert the NYSDEC finds acceptable certifying under penalty of perjury that the institutional and engineering controls employed at the Site are unchanged from the previous certification or that any changes to the controls employed at the Site were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment or constitute a violation or failure to comply with any SMP for such controls and giving access to such Site to NYSDEC to evaluate continued maintenance of such controls.

2.3.1 Excavation Work Plan

The Site has been investigated for restricted use (residential, commercial, and industrial). Any future intrusive work that will penetrate the Site cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix A to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) (outline) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP (outline) is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and Federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted with the Periodic Review Report (See Section 5).

The Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site owner will ensure that Site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.



2.3.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any new enclosed structures located over areas that contain remaining contamination, a soil vapor intrusion (SVI) evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, a SVI mitigation system may be installed as an element of the new building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting a SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to all tenants and occupants of the property within 15 days of receipt of validated data.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive Site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report (See inspection form in Appendix G). The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the deed restriction;
- Achievement of remedial performance criteria;



- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and,
- Changes, or needed changes, to the remedial or monitoring system.

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the Voluntary Cleanup Agreement (VCA), 6 NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

• At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Voluntary Cleanup Agreement (VCA) and all approved work plans and reports, including this SMP.



• Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance, the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. These emergency contact lists must be maintained in an easily accessible location at the Site.

Table 5Emergency Contact Numbers

Name	Number
Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 6Other Contact Numbers

Name	Number*	
Ralph Celone	(860) 449-3425	
Devid Class TBC		
Qualified Environmental Professional	(212) 221-7822	
Jennifer Miranda, TRC	(212) 221 7822	
Project Manager	(212) 221-7622	
Janet Brown, NYSDEC	(845) 256 3826	
NYSDEC VCP Site Manager	(0+3) 250-3620	
* Note: Contact numbers subject to change and should be updated as necessary		



2.5.2 Map and Directions to Nearest Health Facility

The attached Figure 15 also shows the route from the Site to the Hospital. Site Location: 630 Central Park Avenue, Yonkers, New York 10704 Nearest Hospital Name: Mount Vernon Hospital Medical Center Hospital Location: 12 North Seventh Avenue, Mount Vernon, New York 10550

Hospital Telephone: (703) 664-7111



Map Showing Route from the Site to the Hospital:

Whittier Ave

	1. Head southeast on Whittier Ave toward Nelson St	go 397 ft total 397 ft
Ļ	 2. Take the 1st right onto Trenchard St About 1 min 	go 0.2 mi total 0.3 mi
÷	3. Turn left onto Yonkers Ave About 3 mins	go 1.0 m i total 1.2 mi
	4. Continue onto Mt Vernon Ave	go 0.3 mi total 1.5 mi
÷	5. Turn left onto Stevens Ave About 1 min	go 0.3 mi total 1.8 mi
+	6. Turn left onto W Roosevelt Square	go 259 ft total 1.9 mi
	7. Continue onto N 7th Ave Destination will be on the left	go 285 ft total 1.9 mi
B	Mount Vernon Hospital	

Y 12 North Seventh Avenue, Mount Vernon, New York 10550


2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 5). The list will also be posted prominently at the Site and made readily available to all personnel at all times.



3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the Site cover system, and all affected Site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan provides information on:

- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;
- Preparing the necessary reports for the various monitoring activities to adequately address these issues;
- Reporting requirements; and,
- Periodic inspection and periodic certification.

Annual monitoring of the performance of the remedy will be conducted for the first 3 years. The frequency thereafter will be determined by NYSDEC. Monitoring programs are summarized in Table 7 and outlined in detail in Sections 3.2 and 3.3 below.

Monitoring Program	Frequency*
SSDS Inspection	24/7 via alarm system, Monthly, Severe Condition, and Annually
Site Covers	Monthly, Severe Condition, and Annually
Site-Wide Inspection	Annually
* The frequency of events will be conducted as specified until otherwis	e approved by NYSDEC and NYSDOH.

 Table 7

 Monitoring/Inspection Schedule



3.1.3 Well Replacement/Repairs and Decommissioning

After the completion of the remedial investigation, five bedrock monitoring wells remain on-Site. These wells will be decommissioned with prior approval from the NYSDEC and the decommissioning activities will be reported to NYSDEC in the Periodic Review Report. Well abandonment will be performed in accordance with NYSDEC's "CP-43: Groundwater Monitoring Well Decommissioning Policy" dated November 3, 2009.

3.2 SITE COVER SYSTEM MONITORING

The Site cover system (i.e., existing cap) consisting of ninety-five percent impervious surfaces (buildings and asphalt and concrete pavement) prevents human exposure to remaining contaminated soil/fill at the Site. A qualified environmental professional will conduct a yearly inspection of the covers. This inspection will include, at a minimum, visual inspection of the covers to determine if they are intact and free from damage. The results will be reported in the Periodic Review Report described in Section 5.3. Any damage to the covers will be repaired in kind.

3.3 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix G) and submitted to NYSDEC as part of the Periodic Report. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and,
- Confirm that Site records are up to date.



3.4 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-Site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and,
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 8 below.

Table 8 Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Periodic Review Report	Annually (first 3 years)
* The frequency of events will be conducted as specified until otherw	vise approved by NYSDEC



4.0 OPERATION AND MAINTENANCE PLAN

4.1 INTRODUCTION

This Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the Site. This Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDS;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSDS is operated and maintained.

Information on non-mechanical Engineering Controls (i.e., Site cover system) is provided in Section 3.2. A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

4.2 SUB-SLAB DEPRESSURIZATION SYSTEM OPERATION AND MAINTENANCE

The Industrial Building SSDS has been designed and installed to prevent VOCs in soil gas from entering the Industrial Building. Figures 9 through 11 show the plans and details for the SSDS. The principal components of the SSDS consist of:

- Suction points beneath the floor slab;
- Pipes running from each suction point vertically to the first floor ceiling, then horizontally below the first floor ceiling to a common header;
- Vertical risers from each common header from the first floor ceiling along the building exterior and discharging above the building roof;
- Exterior suction fans;
- Monitoring points at selected locations throughout the building floor slabs; and,
- A warning device (alarm) for each suction fan which is activated when, flow drops below the set point.

The requirements for the SSDS consist of: initial start up testing; routine maintenance and monitoring activities; and, non-routine maintenance activities. Each is described in the following subsections.



4.2.1 Initial SSDS Start Up

This subsection outlines the procedures for confirming the effectiveness and proper installation of the SSDS and complies with the post mitigation/confirmation testing requirements of NYSDOH's Guidance. The goal for operation of the SSDS was to achieve, at a minimum, a sub-slab differential pressure (with respect to building interior ambient pressure) of -0.002 inches of water. To achieve this goal, the following actions were performed during initial startup of the SSDS:

- 1. Shortly after start up of the SSDS, the sub-slab pressure at each monitoring point was measured utilizing a Magnehelic gauge. The minimal sub-slab differential pressure was measured at each sub-slab monitoring point.
- 2. After confirming sub-slab pressure of at least -0.002 inches of water, smoke tests were performed to identify any leaks through cracks in the concrete floor, floor joints, etc. Leaks through the floor slab were not identified.
- 3. The operation of each warning device for suction fan malfunction was confirmed.

The system testing described above will be conducted again if, in the course of the SSDS lifetime, significant changes are made to the system, and the system must be restarted.

4.2.2 System Operation: Routine Operation Procedures and Equipment Maintenance for SSDS

Routine maintenance and inspection will be conducted to confirm that the SSDS is operating properly and will continue until NYSDEC and NYSDOH have determined there is no need for such a system. The operation of the SSDS will not be discontinued without written approval from the NYSDEC. On a monthly basis, qualified building personnel will confirm that the suction fans and warning devices are working properly. Refer to Appendix G for a routine maintenance SSDS inspection checklist and Appendix F for operating manuals for the SSDS suction fans. (See Section 4.2.3 if routine monitoring indicates that the warning device(s) is not working properly.)

On an annual basis, the following will performed:

- Conduct a visual inspection of the complete system;
- Inspect the suction fans for signs of abnormal operations, and repair or replace if required;
- Inspect the discharge location of the vent pipes to confirm that no air intake or operable window is located nearby;



- Determine, through discussions with building management, if any heating, ventilation, and air conditioning (HVAC) system modifications have occurred that might affect the performance of the SSDS; and,
- Inspect the floor slab and foundation walls for evidence of cracks and/or holes, and repair of cracks and/or holes, if required.

4.2.3 Non-Routine Maintenance Activities for the SSDS

Non-routine maintenance would typically occur when a warning device indicates the system is not working properly, or the system becomes damaged. The scope of non-routine maintenance will vary depending upon the situation. In general, the following actions will be taken as part of non-routine maintenance:

- Examine the building for structural or HVAC system changes, or other changes that may affect the performance of the depressurization system (e.g., new combustion appliances or deterioration of the concrete slab);
- Examine the operation of the warning devices and the suction fans, and measure the subslab pressure at monitoring points; and,
- Repair or adjust the SSDS as appropriate. If necessary, the SSDS should be restarted (see Section 4.2.1 for system startup).

4.2.4 SSDS Deactivation

Deactivation of the SSDS will not occur without NYSDEC and NYSDOH approval. The property owner may request deactivation of the SSDS based upon appropriate sampling data.

4.3 MAINTENANCE REPORTING REQUIREMENTS

Maintenance reports and any other information generated during regular operations at the Site will be kept on-file on-Site. All reports, forms, and other relevant information generated will be available upon request by the NYSDEC and submitted as part of the Periodic Review Report, as specified in Section 5.0 of this SMP.

4.3.1 Routine Maintenance Reports

Form 1 located in Appendix G will be completed during each routine maintenance and inspection event. Checklists/forms and documentation will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;



- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc. (attached to the checklist/form).

4.3.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, documentation will be compiled, which will include, but not be limited to, the following information:

- Date;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of event;
- Date of repair;
- Other repairs or adjustments made to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and,
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).



5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan of this SMP. At a minimum, a Site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any SSDS component has occurred or whenever a severe condition has taken place, such as a natural disaster that may affect the ECs.

5.1.2 Inspection Forms and Maintenance Reports

All inspection events will be recorded on the appropriate forms for their respective system which are contained in Appendix G. Additionally, a general Site-wide inspection form will be completed during the Site-wide inspection (see Appendix G). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and Site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The Site remedy continues to be protective of public health and the environment and is performing as designed.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certification:



For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering controls employed at this Site are unchanged from the date the control was put in place, or last approved by the NYSDEC;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control;
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the deed restriction;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] for the Site.

The signed certification will be included in the Periodic Review Report described below.

For each institutional control identified for the Site, I certify that all of the following statements are true:

- The institutional control employed at this Site is unchanged from the date the control was put in place, or last approved by the NYSDEC;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control;
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the deed restriction;



- The information presented in this report is accurate and complete;
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] for the Site; and
- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-Site contamination are no longer valid.

Every five years the following certification will be added:

• The assumptions made in the qualitative exposure assessment remain valid.

An example of the certification form is included in Appendix E. The signed certification will be included in the Periodic Review Report described below.

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the NYSDEC every year, beginning eighteen months after the "No Further Action Letter" is issued by NYSDEC. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix B. The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The Periodic Review Report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual Site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;



- A Site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the VCA;
 - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
 - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and,
 - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

TABLES

TABLE 9 FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SITE MANAGEMENT PLAN SOIL CLEANUP OBJECTIVES FOR THE SITE AND CRITERIA FOR ON-SITE RE-USE OF EXCAVATED MATERIAL

VOLATILE ORGANIC COMPOUNDS (VOCs) (µg/kg)	Residential SCO	Commercial SCO	Industrial SCO
1,1,1-Trichloroethane (TCA)	100,000	500,000	1,000,000
1,1-Dichloroethane	19,000	240,000	480,000
1,1-Dichloroethene	100,000	500,000	1,000,000
1,2,4-Trimethylbenzene	47,000	190,000	380,000
1,2-Dichlorobenzene	100,000	500,000	1,000,000
1,2-Dichloroethane	2,300	30,000	60,000
1,3,5-Trimethylbenzene	47,000	190,000	380,000
1,3-Dichlorobenzene	17,000	280,000	560,000
1,4-Dichlorobenzene	9,800	130,000	250,000
1,4-Dioxane	9,800	130,000	250,000
2-Butanone (MEK)	100,000	500,000	1,000,000
Acetone	100,000	500,000	1,000,000
Benzene	2,900	44,000	89,000
Carbon Tetrachloride	1,400	22,000	44,000
Chlorobenzene	100,000	500,000	1,000,000
Chloroform	10,000	350,000	700,000
cis-1,2-Dichloroethene	59,000	500,000	1,000,000
Ethylbenzene	30,000	390,000	780,000
m&p-Xylene	$100.000^{(1)}$	500.000 ⁽¹⁾	$1.000.000^{(1)}$
Methylene Chloride	51.000	500.000	1.000.000
Methyl tert-butyl ether (MTBE)	62.000	500,000	1.000.000
n-Butylbenzene (Butylbenzene)	100.000	500.000	1.000.000
n-Propylbenzene	100,000	500,000	1,000,000
o-Xvlene	100.000 ⁽¹⁾	500.000 ⁽¹⁾	1,000,000 ⁽¹⁾
sec-Butylbenzene	100,000	500,000	1,000,000
tert-Butylbenzene	100,000	500,000	1,000,000
Tetrachloroethene (PCF)	5 500	150,000	300,000
	100.000	500,000	1 000 000
trans-1 2-Dichloroethene	100,000	500,000	1,000,000
Trichloroethene (TCE)	10,000	200,000	400.000
Vinyl Chloride	210	13,000	27 000
SEMIVOLATILE ORGANIC COMPOLINDS (SVOCs)	210	10,000	21,000
(µg/kg)	Residential SCO	Commercial SCO	Industrial SCO
2-Methylphenol (o-cresol)	100,000	500,000	1,000,000
3 & 4 Methylphenol (m&p-cresol)	34,000	500,000	1,000,000
Acenaphthene	100,000	500,000	1,000,000
Acenaphthylene	100,000	500,000	1,000,000
Anthracene	100,000	500,000	1,000,000
Benzo[a]anthracene	1,000	5,600	11,000
Benzo[a]pyrene	1,000	1,000	1,100
Benzo[b]fluoranthene	1,000	5,600	11,000
Benzo[g,h,i]perylene	100,000	500,000	1,000,000
Benzo[k]fluoranthene	1,000	56,000	110,000
Chrysene	1,000	56,000	110,000
Dibenz(a,h)anthracene	330	560	1,100
Dibenzofuran	14,000	350,000	1,000,000
Fluoranthene	100,000	500,000	1,000,000
Fluorene	100,000	500,000	1,000,000
Hexachlorobenzene	330	6,000	12,000
Indeno[1,2,3-cd]pyrene	500	5,600	11,000
Naphthalene	100,000	500,000	1,000,000
Pentachlorophenol	2,400	6,700	55,000
Phenanthrene	100,000	500,000	1,000,000
Phenol	100,000	500,000	1,000,000
Durana	100.000	500.000	1.000.000

TABLE 9 FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SITE MANAGEMENT PLAN SOIL CLEANUP OBJECTIVES FOR THE SITE AND CRITERIA FOR ON-SITE RE-USE OF EXCAVATED MATERIAL

METALS AND CYANIDE (mg/kg)	Residential SCO	Commercial SCO	Industrial SCO
Arsenic	16	16	16
Barium	350	400	10,000
Beryllium	14	590	2,700
Cadmium	2.5	9.3	60
Calcium	NC	NC	NC
Chromium (Trivalent)	36	1,500	6,800
Chromium (Hexavalent)	22	400	800
Copper	270	270	10,000
Cyanide (Total)	27	27	10,000
Lead	400	1,000	3,900
Manganese	2,000	10,000	10,000
Mercury (Total)	0.81	2.8	5.7
Nickel	140	310	10,000
Selenium	36	1,500	6,800
Silver	36	1,500	6,800
Zinc	2,200	10,000	10,000
POLYCHLORINATED BIPHENYLS (PCBs) (µg/kg)	Residential SCO	Commercial SCO	Industrial SCO
Total PCBs	1,000	1,000	25,000
PESTICIDES (µg/kg)	Residential SCO	Commercial SCO	Industrial SCO
4,4'-DDD	2,600	92,000	180,000
4,4'-DDE	1,800	62,000	120,000
4,4'-DDT	1,700	47,000	94,000
Aldrin	19	680	1,400
alpha-BHC	97	3,400	6,800
alpha-Chlordane	910	24,000	47,000
beta-BHC	72	3,000	14,000
delta-BHC	100,000	500,000	1,000,000
Dieldrin	39	1,400	2,800
Endosulfan I	4,800	200,000	920,000
Endosulfan II	4,800	200,000	920,000
Endosulfan sulfate	4,800	200,000	920,000
Endrin	2,200	89,000	410,000
gamma-BHC (Lindane)	280	9,200	23,000
Heptachlor	420	15,000	29,000
Silvex (2,4,5-TP)	58,000	500,000	1,000,000

Notes:

mg/kg - milligrams per kilogram

µg/kg - micrograms per kilogram

SCO - Soil Cleanup Objective

Residential SCO - If property is zoned Residential compare results to Protection of Public Health Residential Use SCOs. Commercial SCO - If property is zoned Commercial compare results to Protection of Public Health Commercial Use SCOs. Industrial SCO- If property is zoned Industrial compare results to Protection of Public Health Industrial Use SCOs.

 $^{\left(1\right)}$ - The SCO for m&p-xylene and o-xylene applies to total xylenes.

TABLE 10 FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SITE MANAGEMENT PLAN CRITERIA FOR IMPORTED SOILS

VOLATILE ORGANIC COMPOUNDS (VOCs) (µg/kg)	Residential Use	Commercial or Industrial Uses
1,1,1-Trichloroethane (TCA)	680	680
1,1-Dichloroethane	270	270
1,1-Dichloroethene	330	330
1,2,4-Trimethylbenzene	3,600	3,600
1,2-Dichlorobenzene	1,100	1,100
1,2-Dichloroethane	20	20
1,3,5-Trimethylbenzene	8,400	8,400
1,3-Dichlorobenzene	2,400	2,400
1,4-Dichlorobenzene	1,800	1,800
1,4-Dioxane	100	100
2-Butanone (MEK)	120	120
Acetone	50	50
Benzene	60	60
Carbon tetrachloride	760	760
Chlorobenzene	1.100	1.100
Chloroform	370	370
cis-1.2-Dichloroethene	250	250
Ethylbenzene	1.000	1.000
m&p-Xvlene	1.600 ⁽¹⁾	1 600 ⁽¹⁾
Methylene Chloride	50	50
Methyl tert-butyl ether (MTBE)	930	930
n-Butylbenzene (Butylbenzene)	12 000	12,000
	3 900	3 000
	3,900 4,000 ⁽¹⁾	5,900 4,000 ⁽¹⁾
	1,600	1,600
sec-Butylbenzene	11,000	11,000
	5,900	5,900
	1,300	1,300
Toluene	700	700
Tricklersetherse (TCE)	190	190
Visual a blasida	470	470
	20	20
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCS)	Residential Use	Commercial or
(µg/kg)	000	Industrial Uses
2-Methylphenol (0-cresol)	330	330
3 & 4 Methylphenol (m&p-cresol)	330	330
Acenaphthelese	98,000	98,000
Acenaphthylene	100,000	107,000
Anthracene	100,000	500,000
Benzolajanthracene	1,000	1,000
Benzolajpyrene	1 000	1,000
Benzolbjiluoranthene	1,000	4 700
	1,000	1,700
Benzo[g,h,i]perylene	1,000 100,000	1,700 500,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene	1,000 100,000 1,000	1,700 500,000 1,700
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene	1,000 1,000 1,000 1,000 1,000	1,700 500,000 1,700 1,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene	1,000 1,000 1,000 1,000 1,000 330	1,700 500,000 1,700 1,000 560
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran	1,000 100,000 1,000 1,000 330 14,000	1,700 500,000 1,700 1,000 560 210,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene	1,000 100,000 1,000 1,000 330 14,000 100,000	1,700 500,000 1,700 1,000 560 210,000 500,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene	1,000 100,000 1,000 1,000 330 14,000 100,000	1,700 500,000 1,700 1,000 560 210,000 500,000 386,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Hexachlorobenzene	1,000 100,000 1,000 1,000 330 14,000 100,000 100,000 330	1,700 500,000 1,700 1,000 560 210,000 500,000 386,000 3,200
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Hexachlorobenzene Indeno[1,2,3-cd]pyrene	1,000 1,000 1,000 1,000 330 14,000 100,000 100,000 330 500	1,700 500,000 1,700 1,000 560 210,000 500,000 386,000 3,200 5,600
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Hexachlorobenzene Indeno[1,2,3-cd]pyrene Naphthalene	1,000 1,000 1,000 1,000 330 14,000 100,000 100,000 330 500 12,000	1,700 500,000 1,700 1,000 560 210,000 500,000 386,000 3,200 5,600 12,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Hexachlorobenzene Indeno[1,2,3-cd]pyrene Naphthalene Pentachlorophenol	1,000 1,000 1,000 1,000 330 14,000 100,000 100,000 330 500 12,000 800	1,700 500,000 1,700 1,000 560 210,000 500,000 386,000 3,200 5,600 12,000 800
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Hexachlorobenzene Indeno[1,2,3-cd]pyrene Naphthalene Pentachlorophenol Phenanthrene	1,000 1,000 100,000 1,000 330 14,000 100,000 100,000 330 500 12,000 800 100,000	1,700 500,000 1,700 1,000 560 210,000 386,000 3,200 5,600 12,000 800 500,000
Benzo[g,h,i]perylene Benzo[k]fluoranthene Chrysene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Hexachlorobenzene Indeno[1,2,3-cd]pyrene Naphthalene Pentachlorophenol Phenanthrene Phenol	1,000 1,000 100,000 1,000 330 14,000 100,000 100,000 330 500 12,000 800 100,000 330	1,700 500,000 1,700 1,000 560 210,000 386,000 3,200 5,600 12,000 800 500,000 330

TABLE 10 FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SITE MANAGEMENT PLAN CRITERIA FOR IMPORTED SOILS

METALS AND CYANIDE (mg/kg)	Residential Use	Commercial or Industrial Uses
Arsenic	16	16
Barium	350	400
Beryllium	14	47
Cadmium	2.5	7.5
Chromium (Trivalent)	36	1,500
Chromium (Hexavalent)	19	19
Copper	270	270
Cyanide (Total)	27	27
Lead	400	450
Manganese	2,000	2,000
Mercury (Total)	0.73	0.73
Nickel	130	130
Selenium	4	4
Silver	8.3	8.3
Zinc	2,200	2,480
POLYCHLORINATED BIPHENYLS (PCBs) (µg/kg)	Residential Use	Commercial or Industrial Uses
Total PCBs	1,000	1,000
PESTICIDES (µg/kg)	Residential Use	Commercial or Industrial Uses
4,4'-DDD	2,600	14,000
4,4'-DDE	1,800	17,000
4,4'-DDT	1,700	47,000
Aldrin	19	190
alpha-BHC	20	20
alpha-Chlordane	910	2,900
beta-BHC	72	90
delta-BHC	250	250
Dieldrin	39	100
Endosulfan I	4,800	102,000
Endosulfan II	4,800	102,000
Endosulfan sulfate	4,800	200,000
Endrin	60	60
gamma-BHC (Lindane)	100	100
Heptachlor	380	380
Silvex (2,4,5-TP)	3,800	3,800

Notes:

Notes: Derived from DER-10 Appendix 5 mg/kg - milligrams per kilogram µg/kg - micrograms per kilogram SCO - Soil Cleanup Objective ⁽¹⁾ - The SCO for m&p-xylene and o-xylene applies to total xylenes.

		Sample ID Lab Sample ID)		VD-3a (6- 202141-1	8) VD-3b 1 2021	(13-15) MW 41-3 2	/2-B1a (1-4) 202842-1	MW2-B1b (6-8) 202842-2	DGSUMP1 (0 202842-3	.5-1) S	S-01 (12) 1084-05	SB-01 (0-6) F00991-01	SB-01 (15-15.5) F00991-02	SB-02 (0 F0991-0	-6) SE	-02 (10-11) -0991-04	SB-03 (1-2) F0991-05	SB-04 (4-5) F0991-07	SB-04 (8-9 F0991-0	.5)	SB-05 (8-9) F0991-08	DUP07 F099	/1807	SB-06 (1-2 F0991-11	2) 1 F	SB-07	TRC-SB1(6-8") 460-25491-1
		Sampling Date Matrix	9		10-03-200 Solid	02 10-03 Sc	-2002 0*	1-02-2003 Solid	01-02-2003 Solid	01-02-200 Solid	3 07	7-22-2006 Sludge	07-18-2007 Solid	07-18-2007 Solid	07-18-20 Solid	07 0	7-18-2007 Solid	07-18-2007 Solid	07-18-2007 Solid	07-18-200 Solid	17	07-18-2007 Solid	07-18- So	2007	07-18-200 Solid	07 0	7-18-2007 Solid	04-18-2011 Solid
		Dilution Factor	ſ		1		1	1	1	1		1	1	1	1		1	1	1	1		1	1	/kg	1 ma/ka		1 ma/ka	1
	0	Land Use		Desta dise a	Industria	l Indu	strial I	Industrial	Industrial	Industrial	Ir	Industrial	Industrial	Industrial	Industri	al	Industrial	Industrial	Industrial	Industria		Industrial	Indus	strial	Industria		ndustrial	Residential
VOLATILE ORGANIC COMPOUNDS (VOCs) (µg/kg)	Unrestricted Use SCO	SCO	SCO	SCO Groundwater S	r CO Result	Re	sult	Result	Result	Result		Result	Result	Result	Result		Result	Result	Result	Result		Result	Res	sult	Result		Result	Result
1,1,1-Trichloroethane (TCA) 1,1,1,2-Tetrachloroethane	680 NC	100,000 NC	500,000 NC	1,000,000 680 NC NC	5	U 5 U 5	U	5 U 5 U	5 U 5 U	5	U 6,9	900 J 6 U	6 U 6 U	5 U 5 U	5	UU	6 U 6 U	5 U 5 U	5 U 5 U	5	U U	5 U 5 U	5		5	UJ E	5 UJ	0.86 U NA
1,1,2,2-Tetrachloroethane	NC	NC	NC	NC NC	NA	NA	N	IA	NA	NA		6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	<u> </u>	5	U	5 UJ	0.86 U
1,1,2-1 lichloroethane	270	19,000	240,000	480,000 270	5	U 5	U	5 U 5 U	5 U	5	U 1,1	6 U 100 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ 5 UJ	0.86 U
1,1-Dichloroethene	330 NC	100,000	500,000	1,000,000 330	5	U 5	U	5 U	5 U	5	Ue	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 J	0.86 U
1,2,3-Trichlorobenzene	NC	NC	NC	NC NC	NA	NA	N	NA NA	NA	NA	6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	NC NC	NC NC	NC NC	NC NC	NA	NA NA	N N	AA AA	NA	NA	6	6 U	6 U 6 U	5 U 5 U	5	U	6 U 6 U	5 U 5 U	5 U 5 U	5	<u>U</u>	5 U 5 U	5	U	5	U	5 UJ 5 UJ	NA 0.86 U
1,2,4-Trimethylbenzene	3,600	47,000	190,000	380,000 3,600	NA	NA	N	NA I	NA	NA	14	40 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane	NC NC	NC NC	NC NC	NC NC NC	5 NA	U 5	U	5 U	5 U	NA 5	U e	6 U 6 U	6 U	5 U	5	U	6 U 6 U	5 U	5 U	5	U U	5 U 5 U	5		5	U	5 UJ 5 UJ	0.86 U
1,2-Dichlorobenzene	1,100	100,000	500,000	1,000,000 1,100	NA	NA	N	NA IA	NA	NA	6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	0.86 U
1,2-Dichloropropane	NC	2,300 NC	30,000 NC	NC NC	5	U 5	U	5 U	5 U	5	U é	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
1,3,5-Trimethylbenzene	8,400	47,000	190,000	380,000 8,400 560,000 2,400	NA	NA NA	N	A A	NA	NA	6	50 J	6 U	5 U	5	U	6 U	5 U	5 U	5	<u>U</u>	5 U	5	<u> </u>	5	U	5 UJ	0.86 U
1,3-Dichloropropane	NC	NC	NC	NC NC	NA	NA	N	NA A	NA	NA	6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	Ŭ	5 UJ	NA
1,4-Dichlorobenzene 2,2-Dichloropropane	1,800 NC	9,800 NC	130,000 NC	250,000 1,800 NC NC	NA	NA	N N	AA AA	NA	NA	6	6 U 6 U	6 U 6 U	5 U 5 U	5	U	6 U 6 U	5 U 5 U	5 U 5 U	5	<u>U</u>	5 U 5 U	5	U	5	U	5 UJ 5 UJ	0.86 U NA
1,4-Dioxane	100	9,800	130,000	250,000 100	NA	NA	N	NA	NA	NA	N	NA N	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	43 UR
2-Butanone (MEK) 2-Chlorotoluene	120 NC	100,000 NC	500,000 NC	1,000,000 120 NC NC	10 NA	U 11 NA		II U NA	10 U NA	11 NA	0 6	6 U 6 U	6 UJ	5 UJ	5	U	6 UJ 6 U	5 UJ 5 U	5 UJ 5 U	5	U	5 UJ 5 U	5	U	5	UJ 2	5 UJ	8.6 U NA
2-Hexanone	NC	NC	NC	NC NC	10	U 11	U 1	11 U	10 U	11	Ué	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	8.6 UJ
4-Methyl-2-pentanone	NC	NC	NC	NC NC NC	10	U 11	U 1	11 U	10 U	NA 11	U é	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	8.6 U
Acetone	50	100,000	500,000	1,000,000 50	10	U 11	U 1	11 U 5 U	10 U	7	Je	6 UJ	18 J	5 U	22	J	50 J	60 J	50 J	37		95 J	68		18	11	25 J	8.6 U
Bromobenzene	NC	NC	NC	NC NC	NA	NA	N	NA A	NA	NA	6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	Ŭ	5 UJ	NA
Bromochloromethane Bromodichloromethane	NC NC	NC NC	NC NC	NC NC	NA 5	U 5	U	1A 5 U	NA 5 U	NA 5	U 6	6 U 6 U	6 U	5 UJ 5 U	5	U	6 U 6 U	5 U	5 U	5	<u>U</u>	5 U	5		5	U	5 UJ 5 UJ	0.86 U
Bromoform	NC	NC	NC	NC NC	5	U 5	U	5 U	5 U	5	U e	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	0.86 UJ
Bromomethane Carbon Disulfide	NC NC	NC NC	NC NC	NC NC	5	U 5 U 5	U	5 U 5 U	5 U 5 U	5	U 6	6 U 6 U	6 UJ 6 U	5 U	5	UJ	6 UJ 6 U	5 U	5 UJ 5 U	5	UJ	5 UJ 5 U	5	U	5	UJ	5 UJ 5 UJ	0.86 U 0.86 U
Carbon Tetrachloride	760	1,400	22,000	44,000 760	5	U 5	U	5 U	5 U	5	Ue	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	0.86 U
Chloroethane	NC	NC	NC	NC NC	5	U 5	U U	5 U	5 U	5	U 1	6 0 17 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
Chloroform	370 NC	10,000	350,000 NC	700,000 370 NC NC	5	U 5	U	5 U	5 U	5	U e	6 U	6 U	5 U	5	U	3 J	5 U	5 U	5	U	5 U	5	<u> </u>	5	U	5 UJ	0.86 U
cis-1,2-Dichloroethene	250	59,000	500,000	1,000,000 250	5	U 5	U	5 U	5 U	5	U 1,7	700 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	0.86 U
cis-1,3-Dichloropropene Cvclohexane	NC NC	NC NC	NC NC	NC NC	5 NA	U 5 NA	U	5 U NA	5 U NA	5 NA	U é N	6 U	6 U 6 U	5 U 5 U	5	U	6 U 6 U	5 U 5 U	5 U 5 U	5	<u>U</u>	5 U 5 U	5	U	5	U	5 UJ 5 UJ	0.86 U 0.86 U
Dibromochloromethane	NC	NC	NC	NC NC	5	U 5	U	5 U	5 U	5	Ué	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
Dichlorodifluoromethane	NC	NC NC	NC NC	NC NC NC	NA	NA	N	NA NA	NA	NA	6	6 U 6 U	6 U	5 U	5	U	6 U 6 U	5 U	5 U	5	U U	5 U 5 U	5		5	U	5 UJ 5 UJ	0.86 U
Ethylbenzene	1,000	30,000	390,000	780,000 1,000	NA	U NA	UN	NA U	NA U	NA	U 6,4	400 JA	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	0.86 U
Freon TF ⁽²⁾	NC	NC	NC	NC NC	NA	NA	N	NA NA	NA	NA	N	NA US	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
Idomethane Isopropylbenzene	NC NC	NC NC	NC NC	NC NC	NA	NA	N	AA JA	NA	NA	6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	<u>U</u>	5 U	5	<u> </u>	5	U	5 UJ 5 UJ	NA 0.86 U
m&p-Xylene	260 ⁽¹⁾	100,000 ⁽¹) 500,000 ⁽¹⁾	1,000,000 ⁽¹⁾ 1,600 ⁽¹⁾	NA	NA	N	NA A	NA	NA	28,0	,000 A	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	1.7 U
Methyl Acetate Methylcyclohexane	NC NC	NC NC	NC NC	NC NC	NA	NA NA	N	NA NA	NA	NA	N	AA AA	6 U 6 U	5 U 5 U	5	U	6 U 6 U	5 U 5 U	5 U 5 U	5	<u>U</u>	5 U 5 U	5	U	5	U	5 UJ 5 UJ	0.86 U 0.86 U
Methylene Chloride	50	51,000	500,000	1,000,000 50	2	B 2	В	2 JB	2 JB	26	B 15	50 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U 1	10 J	0.86 U
Napthalene	930 NC	62,000 NC	500,000 NC	1,000,000 930 NC NC	NA	NA	N	NA NA	NA	NA	1	6 U 12 J	6 U	5 U	5	U	6 U 6 U	5 U	5 U	5	U U	5 U 5 U	5		5	U	5 UJ 5 UJ	0.86 U NA
n-Butylbenzene	12,000	100,000	500,000	1,000,000 12,000	NA	NA	N	AA IA	NA	NA	6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	<u> </u>	5	U	5 UJ	0.86 U
o-Xylene	260 ⁽¹⁾	100,000) 500,000 ⁽¹⁾	1,000,000 ⁽¹⁾ 1,600 ⁽¹⁾	NA	NA	N	NA A	NA	NA	5,6	600 JA	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	U	5	U	5 UJ	0.86 U
p-Isopropyltoluene	NC	NC	NC	NC NC 1000 000 11 000	NA	NA	N	AA AA	NA	NA	8	8 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5	<u> </u>	5	U	5 UJ	0.86 U
Styrene	NC	NC	NC	NC NC	5	U 5	U	5 U	5 U	5	U é	6 U	6 U	5 U	5	Ŭ	6 U	5 U	5 U	5	Ŭ	5 U	5	Ū	5	U	5 UJ	0.86 U
tert-Butylbenzene Tetrachloroethene (PCE)	5,900	100,000	500,000 150,000	1,000,000 5,900 300,000 1,300	NA 5	0 NA	U 1	NA 5 U	NA 5 U	NA 11	330.	/ J	6 U 6 U	5 U 5 U	5 5	UU	<u>6 U</u> 6 U	5 U 5 U	5 U 5 U	5 5	<u>U</u>	5 U 5 U	5		5 5	UUJ	5 UJ 2 J	0.86 U 0.86 U
Toluene	700	100,000	500,000	1,000,000 700	5	U 5	U 0).7 J	5 U	0.9	J 40	00 J	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	0.86 U
trans-1,3-Dichloropropene	NC	NC	NC	NC NC	5	U 5	U	5 U	5 U	5	U 6	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	<u>U</u>	5 U	5	U	5	U	5 UJ	0.86 U
Trichloroethene (TCE) Trichlorofluoromethane	470 NC	10,000 NC	200,000 NC	400,000 470 NC NC	5 NA	U 5 NA	U	5 U NA	5 U NA	5 NA	J 70,0	000 A	9	5 U 5 U	4	J	11 6 II	9 5 II	18 5 U	17 5	$-\mathbf{F}$	4 J 5 II	2		27 5		9 J 5 [I.I	0.86 U
Vinyl Acetate	NC	NC	NC	NC NC	5	U 5	U	5 U	5 U	5	U e	6 U	6 U	5 U	5	U	6 U	5 U	5 U	5	U	5 U	5		5	U	5 UJ	NA
Vinyl Chloride Xylene (Total)	20 NC ⁽¹⁾	210 NC ⁽¹⁾	13,000 NC ⁽¹⁾	27,000 20 NC ⁽¹⁾ NC ⁽¹⁾	5	U 5 U 5	U	5 U 5 U	5 U 5 U	5	U 6	6 J .000 A	6 U	5 U 5 U	5	UU	6 U 6 U	5 U 5 U	5 U 5 U	5	U U	5 U 5 U	5	U	5	U	5 UJ 5 UJ	0.86 U NA
Total VOCs	NC	NC	NC	NC NC	2	2	3	3.3	2	49.9	483,	3,943	27	0	26		64	70	68	54		99	70		45	4	13	0
μg/kg - micrograms per kilogram ⁽¹⁾ - The SCO for m&p-xylene and o-xylen ⁽²⁾ - Also known as 1,1,2-trichioro-1,2,2-tri Residential - Property is zoned Residenti Groundwater SCOs. Commercial - Property is zoned Commen Groundwater SCOs. Industrial - Property is zoned Industrial ar Groundwater SCOs. * - Recovery or RPD exceeds control limi J - Result is less than the RL but greater A - Dilution Factor 80 sample. NA - Not analyzed NC - No criterion P - Mondert arende newlt releated of fin	ne applies to total xyler iffluoroethane and 1,1,2 al and results are com- rcial and results are co- nd results are compare its than or equal to the M	nes. 2-trichlorotrifluori pared to Unrestr mpared to Unrest ed to Industrial U DL and the conc	bethane. icted Use SCOs, Res stricted Use SCOs, Co se SCOs, Unrestricte entration is an approx	idential Use SCOs, and Protection of ommercial Use SCOs, and Protection of d Use SCOs, and Protection of imate value.	of																							
SCO - Soil Cleanup Objective U - Analyte was not detected. Shading indicates result above SCO. Co	lor representing least	stringent SCO e	ceeded is shown unle	ess otherwise noted.																								

		Sample ID				TRC-SB1(15-17) TRC-SB2(6-8")	TRC-SB2(6-8")A	TRC-SB2(14-16')	TRC-SB3(2-4")	TRC-SB3(2-4')	TRC-SB3(4-6')	TRC-SB4(10-12')	TRC-SB4(12-14")	TRC-SB5(6-8")	TRC-SB5(10-12')	TRC-SB6(6-8")	TRC-SB6(12-14') TRC-SB7(11-13')	TRC-SB8(13.5-15.5')) TRC-SB9(5-7')	TRC-SB10(11-13)	TRC-SB11(6-8')
		Lab Sample ID Sampling Date				460-25491-2	460-25491-3	460-25491-4	460-25491-5	460-25491-6	460-25491-7	460-25491-8	460-25517-2	460-25517-1	460-25517-3	460-25517-4	460-25517-5	460-25517-6	460-27885-1	460-27885-2	460-27983-1	460-27885-3	460-27885-4
		Matrix				Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid								
		Dilution Factor				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Land Use				μg/κg Residential	μg/κg Commercial	µg/кg Commercial	μg/κg Commercial	μg/κg Commercial	µg/kg Industrial	μg/kg Industrial	μg/κg Industrial	μg/κg Industrial	μg/κg Industrial								
VOLATILE ORGANIC COMPOUNDS	Unrestricted	Residentia	Commercial	Industrial	Protection of																		
(VOCs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result								
1,1,1.2-Tetrachloroethane	NC	NC	500,000 NC	1,000,000	NC	0.69 U	0.94 U	1.0 U	NA U	1.2 U	NA U	NA U	NA U	NA U	0.97 U NA	NA U	0.94 U NA	0.94 U	NA U	1.2 U NA	NA U	1.4 U NA	0.96 U NA
1,1,2,2-Tetrachloroethane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,1,2-Trichloroethane	NC	NC 10,000	NC	NC 480.000	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,1-Dichloroethene	330	19,000	240,000	480,000	330	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U 0.49 J	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,1-Dichloropropene	NC	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
1,2,3-Trichlorobenzene	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,2,3-Trichloropenzene	NC NC	NC NC	NC NC	NC NC	NC	0.89 U	0.94 U	1.0 U	NA 1.1 U	NA 1.2 U	NA 1.1 U	NA 1.1 U	NA 11 U	NA 11 U	NA 0.97 U	NA 11 U	0.94 U	0.94 U	1 1 U	NA 1.2 U	NA 1.1 U	NA 1.4 U	0.96 U
1,2,4-Trimethylbenzene	3,600	47,000	190,000	380,000	3,600	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,2-Dibromoethane	NC 1 100	100.000	500.000	NC 1 000 000	NC 1 100	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,2-Dichloroethane	20	2,300	30,000	60,000	20	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,2-Dichloropropane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,3,5-Trimethylbenzene	8,400	47,000	190,000	380,000	8,400	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
1,3-Dichloropropane	2,400 NC	NC	280,000 NC	560,000 NC	2,400 NC	0.89 U	0.94 U	NA U	NA U	1.2 U	NA U	NA U	NA U	NA U	0.97 U NA	NA U	0.94 U NA	0.94 U	NA U	1.2 U NA	NA U	1.4 U	0.96 U
1,4-Dichlorobenzene	1,800	9,800	130,000	250,000	1,800	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
2,2-Dichloropropane	NC	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
1,4-Dioxane 2-Butanone (MEK)	100	9,800	130,000	250,000	100	44 UR	47 UR	54 UR 10	54 UR	56 UR	53 UR 11 U	54 UR 11 U	53 UR 11 U	56 UR	49 UR 97 II	58 UR	47 UR 94 U	47 UR 94 U	54 UR	59 UR 12 U	57 UR 11 U	68 UR 14 U	48 UR 96 U
2-Chlorotoluene	NC	NC	NC	NC	NC	NA U	NA	NA	NA	NA 0	NA U	NA	NA	NA	NA	NA							
2-Hexanone	NC	NC	NC	NC	NC	8.9 UJ	9.4 UJ	10 UJ	11 UJ	12 UJ	11 UJ	11 UJ	11 U	11 U	9.7 U	11 U	9.4 U	9.4 U	11 U	12 U	11 U	14 U	9.6 U
4-Chlorotoluene	NC	NC	NC	NC	NC	NA	NA	NA 10	NA	NA 12	NA	NA	NA 11	NA	NA	NA	NA	NA	NA	NA 12	NA	NA	NA
Acetone	50	100.000	500.000	1.000.000	50	6.9 U 8.9 U	9.4 U 24 II	40 11	4.0 11	12 U	11 U	11 U	11 U	11 U	9.7 U 9.7 U	2.4 J 60 .I	9.4 U 9.4 U	9.4 U 9.4 II.I		12 U	11 U	14 U 14 II	9.6 U
Benzene	60	2,900	44,000	89,000	60	0.89 U	0.94 U	1.0 U	<u>1.1</u> U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	0.84 J	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Bromobenzene	NC	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
Bromodichloromethane	NC	NC	NC NC	NC	NC NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U 1.2 U	1.1 U	1.4 U	0.96 U
Bromoform	NC	NC	NC	NC	NC	0.89 UJ	0.94 UJ	1.0 UJ	1.1 UJ	1.2 UJ	1.1 UJ	1.1 UJ	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 UJ	1.4 U	0.96 U
Bromomethane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Carbon Disulfide	NC 700	NC 1 400	NC 22.000	NC	NC 700	0.89 U	0.44 J	0.67 J	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.8	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Chlorobenzene	1,100	100.000	500.000	1.000.000	1.100	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Chloroethane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Chloroform	370	10,000	350,000	700,000	370	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	3.5
cis-1 2-Dichloroethene	250	59.000	500.000	1 000 000	250	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
cis-1,3-Dichloropropene	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Cyclohexane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Dibromochloromethane	NC	NC	NC	NC NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Dichlorodifluoromethane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U*	1.1 U*	0.97 U*	1.1 U*	0.94 U*	0.94 U*	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Ethylbenzene	1,000	30,000	390,000	780,000	1,000	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.20 J B	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Hexachlorobutadiene	NC	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
Homethane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U NA	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U NA	0.96 U
Isopropylbenzene	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
m&p-Xylene	260 ⁽¹⁾	100,000 ⁽¹⁾	500,000 ⁽¹⁾	1,000,000 ⁽¹⁾	1,600 ⁽¹⁾	0.42 J	1.9 U	2.0 U	2.2 U	2.4 U	2.1 U	2.2 U	2.2 U	2.2 U	0.50 J B	2.2 U	1.9 U	1.9 U	2.2 U	2.4 U	2.3 U	2.7 U	1.9 U
Methyl Acetate	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Methylene Chloride	50	51.000	500.000	1.000.000	50	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Methyl tert-butyl ether (MTBE)	930	62,000	500,000	1,000,000	930	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Napthalene	NC	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
n-Butylbenzene	3 900	100,000	500,000	1,000,000	3 900	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
o-Xylene	260 ⁽¹⁾	100,000 ⁽¹⁾	500,000 ⁽¹⁾	1.000.000 ⁽¹⁾	1,600 ⁽¹⁾	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	0.57 J	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
p-Isopropyltoluene	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
sec-Butylbenzene	11,000	100,000	500,000	1,000,000	11,000	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
tert-Butylbenzene	5,900	100.000	500,000	1,000,000	5,900	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Tetrachloroethene (PCE)	1,300	5,500	150,000	300,000	1,300	0.89 U	0.94 U	1.0 U	1.1 U	1.2 Ú	1.1 U	1.1 U	1.1 U	1.1 U	0.97 Ú	1.1 U	1.2	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Toluene	700	100,000	500,000	1,000,000	700	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	0.88 J	1.1 U	0.97 U	0.53 J	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
trans-1,3-Dichloropropene	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Trichloroethene (TCE)	470	10,000	200,000	400,000	470	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 Ū	1.2 Ū	1.1 U	1.4 U	8.2
Trichlorofluoromethane	NC	NC	NC	NC	NC	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Vinyl Acetate Vinyl Chloride	20	210	13.000	27.000	20	0.89 U	0.94 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	0.97 U	1.1 U	0.94 U	0.94 U	1.1 U	1.2 U	1.1 U	1.4 U	0.96 U
Xylene (Total)	NC ⁽¹⁾	NC ⁽¹⁾	NC ⁽¹⁾	NC ⁽¹⁾	NC ⁽¹⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA								
Total VOCs	NC	NC	NC	NC	NC	3.82	31.04	50.67	4	0	0	0	18.57	0.86	0.7	70.64	1.2	0	0	0	0	0	11.7
μg/kg - micrograms per kilogram (¹⁾ - The SCO for m&p-xylene and o-xylene ap (²⁾ - Also known as 1,1,2-triftohoro-1,2,2-triftuor Residential - Property is zoned Residential ar Groundwater SCOs. Commercial - Property is zoned Residential and re Groundwater SCOs. Industrial - Property is zoned Industrial and re Groundwater SCOs. * - Recovery or RPD exceeds control limits J - Result is less than the RL but greater than A - Diution Factor 80 sample. NA - Not analyzed NC - No criterion R - Noncdtect sample result rejected after QC SCO - Soil Cleanup Objective U - Analyte was not detected.	plies to total xyle cethane and 1,1, d results are com- and results are compare sults are compare or equal to the M	nes. 2-trichlorotrifluoro ppared to Unrestri impared to Unrest ed to Industrial Us IDL and the conce	ethane. cted Use SCOs, Res rricted Use SCOs, C le SCOs, Unrestricte entration is an appro:	sidential Use SCC ommercial Use SI ad Use SCOs, and ximate value.	s, and Protection of COs, and Protection of Protection of																		
Shading indicates result above SCO. Color re	epresenting least	stringent SCO ex	ceeded is shown unl	less otherwise no	ed.																		

		Sample ID			TRC-SB12	2(5-7') TR	C-SB13(6-8')	TRC-SB14	4(6-8') TRC-SB1	6(10.5-12.5')	TRC-SB17(10-	12') TRC-SB1	8(9-11') T	TRC-SB19(8	3.5-10.5') TH	RC-SB20(7-9')	TRC-SB21((9-11') TRC	C-SB22(16-18')	TRC-SB23(1	12-14') TRC-	-SB23(12-14')	A TRC-SB24((15-17') TRC-SE	B25(14-16')	TRC-SB26(10.5-12.5') T	RC-SB27(6-	B') TRC-S	B28(9-11')
		Lab Sample ID			460-278	85-5 4	60-27885-6	460-278	85-7 460-	27885-9	460-27926-1	460-27	926-2	460-279	26-3	460-27926-4	460-2798	33-2 4	460-27926-5	460-2792	6-6 4	60-27926-8	460-2792	26-7 460-	-27983-8	460-27	983-3	460-27983-4	460-2	27983-5
		Sampling Date Matrix			06-20-2 Solic	011 (06-20-2011 Solid	06-20-2 Solid	011 06-2	20-2011 Solid	06-21-2011 Solid	06-21-	2011 id	06-21-2 Solid	2011	06-21-2011 Solid	06-22-20 Solid	011 (06-21-2011 Solid	06-21-20 Solid)11 (06-21-2011 Solid	06-21-2	011 06-2	22-2011 Solid	06-22-	2011 id	06-22-2011 Solid	06-2	.2-2011 Solid
		Dilution Factor			1		1	1	,	1	1	1	iu	1	,	1	1		1	1		1	1		1	1	iu .	1		1
		Units			ua/ko	a	ua/ka	ua/ka	а I	ia/ka	ua/ka	ца/	ka	ua/k	a	ua/ka	ua/ka	1	ua/ka	ua/ka		ua/ka	μα/ko	a u	ua/ka	ца/	ka	ua/ka	u	ia/ka
		Land Use			Industr	rial	Industrial	Industr	rial Inc	dustrial	Industrial	Indus	trial	Indust	rial	Industrial	Industri	ial	Industrial	Industria	al	Industrial	Industr	rial Inc	dustrial	Indus	trial	Industrial	Ind	Justrial
VOLATILE ORGANIC COMPOUNDS	Unrestricted	Residential	Commercial	Industrial Protection of																										
(VOCs) (µg/kg)	Use SCO	SCO	SCO	SCO Groundwater SCO	Resu	lt	Result	Resu	lt R	lesult	Result	Res	ult	Resu	ılt	Result	Result	t	Result	Result	t	Result	Resu	ilt R	Result	Res	ult	Result	R	esult
1,1,1-Trichloroethane (TCA)	680 NC	100,000	500,000	1,000,000 680	1 NA	U	1.1 U	1 NA	U 1.1	U	1.1 U	U 1.1	U	1.3 NA	U	1.1 U	1.3 NA	U	1.2 U	1.1 NA	U	1.4 U	1.1	U 1.2	2 0	1.1 NA	U	1.2 U	J 1.2	
1.1.2.2-Tetrachloroethane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 0	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 0	J 1.2	U
1,1,2-Trichloroethane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 I	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
1,1-Dichloroethane	270	19,000	240,000	480,000 270	1	U	1.1 U	1	U 1.1	U	1.1 l	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
1,1-Dichloroethene	330	100,000	500,000	1,000,000 330	1	U	1.1 U	1	U 1.1	U	1.1 U	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1 NA	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 U	J 1.2	U
1.2.3-Trichlorobenzene	NC	NC	NC		1 1	U	1.1 U	1	U 1.1	U	1.1 U	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 U	J 1.2	U
1,2,3-Trichloropropane	NC	NC	NC	NC NC	NA	Ť	NA	NA	NA		NA	NA	-	NA		NA	NA	-	NA	NA	-	NA	NA	NA	A	NA		NA	NA	
1,2,4-Trichlorobenzene	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 l	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
1,2,4-Trimethylbenzene	3,600	47,000	190,000	380,000 3,600	1	U (0.29 J	1	U 1.1	U	1.1 1	J 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 2		1.1	U	1.2	J 1.2	<u> </u>
1,2-Dibromoethane	NC	NC	NC		1		1.1 U	1		0	1.1		0	1.3	0	1.1 U	1.3	0	1.2 U	1.1	0	1.4 U	1.1	U 1.2	2 0	1.1	0	1.2 1	J 1.2	
1,2-Dichlorobenzene	1,100	100,000	500,000	1,000,000 1,100	1	U	1.1 U	1	U 1.1	Ŭ	1.1	U 1.1	Ŭ	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 0	J 1.2	Ū
1,2-Dichloroethane	20	2,300	30,000	60,000 20	1	U	1.1 U	1	U 1.1	U	1.1 (U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
1,2-Dichloropropane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
1,3,5- I rimethylbenzene	8,400	47,000	190,000	380,000 8,400	1	U	1.1 U	1	U 1.1	U	1.1	J 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 0.9	9 J	1.1	U	1.2	J 1.2	U
1.3-Dichloropropane	2,400 NC	NC	280,000	NC NC	NA	0	NA U	NA	NA	0	NA NA	NA NA	0	NA	0	NA U	NA	0	NA 0	NA I.I	0	1.4 U	NA	0 1.2 NA	2 U	NA	0	NA NA	J 1.2	- 0
1,4-Dichlorobenzene	1,800	9,800	130,000	250,000 1,800	1	U	1.1 U	1	U 1.1	U	1.1 (U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
2,2-Dichloropropane	NC	NC	NC	NC NC	NA		NA	NA	NA		NA	NA		NA		NA	NA		NA	NA		NA	NA	NA	4	NA		NA	NA	
1,4-Dioxane	100	9,800	130,000	250,000 100	52	UR	53 UR	52	UR 53	UR	55 U	IR 53	UR	63	UR	53 UR	67	UR	58 UR	56	UR	68 UR	57	UR 58	UR	56	UR	68 U	R 58	UR
2-bulanone (WEK) 2-Chlorotoluene	120 NC	NC	500,000 NC	NC NC	10 NA	U	NA U	IU NA	U 11	U	NA	υ 11 ΝΔ	U	IS NA	U	NA U	13 NA	U	1∠ U NA	11 ΝΔ	U	NA U	11 ΝΔ	U 12		11 NA	U	1∠ U NA	J 12	
2-Hexanone	NC	NC	NC	NC NC	10	U	11 U	10	U 11	U	11 1	U 11	U	13	U	11 U	13	U	12 U	11	U	14 U	11	U 12	2 U	11	U	12 1	J 12	U
4-Chlorotoluene	NC	NC	NC	NC NC	NA		NA	NA	NA		NA	NA		NA		NA	NA		NA	NA		NA	NA	NA	Ą	NA		NA	NA	
4-Methyl-2-pentanone	NC	NC	NC	NC NC	10	U	11 U	10	U 11	U	11	U 11	U	13	U	11 U	13	U	12 U	11	U	14 U	11	U 12	2 U	11	U	12 1	J 12	U
Acetone Benzene	50	2 900	500,000	89 000 60	10		11 U	10	U 11	U 11	11	U 11		13		11 U	13		12 U	11		14 U	11	U 12		11		12 1	J 12 J 12	
Bromobenzene	NC	NC	NC	NC NC	NA	Ŭ	NA	NA	NA	Ű	NA	NA	-	NA		NA	NA	Ū	NA	NA		NA U	NA	NA NA	A U	NA		NA	NA NA	
Bromochloromethane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 I	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Bromodichloromethane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 (U 1.1	U	1.3	UJ	1.1 UJ	1.3	U	1.2 UJ	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2	J 1.2	U
Bromotorm	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 U	JJ 1.1	UJ	1.3	UJ	1.1 UJ	1.3	UJ	1.2 UJ	1.1	UJ	1.4 UJ	1.1	UJ 1.2	2 UJ	1.1	UJ	1.2 L	JJ 1.2	UJ
Carbon Disulfide	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	Ŭ	1.1 0	U 1.1	U	1.3	Ŭ	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 0.56	6 J	1.1	Ŭ	1.2	J 1.2	Ū
Carbon Tetrachloride	760	1,400	22,000	44,000 760	1	U	1.1 U	1	U 1.1	U	1.1 l	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Chlorobenzene	1,100	100,000	500,000	1,000,000 1,100	1	U	1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Chloroform	370	10.000	NC 350.000	NC NC 700.000 370	1	U	1.1 U	1	0 1.1	0	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	0	1.4 U	1.1	U 1.2	2 0	1.1	U	1.2 0	J 1.2	
Chloromethane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	Ŭ	1.1	U 1.1	U	1.3	Ŭ	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 0	J 1.2	U
cis-1,2-Dichloroethene	250	59,000	500,000	1,000,000 250	0.25	J	1.1 U	1	U 1.1	U	1.1 (U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
cis-1,3-Dichloropropene	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 U	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Dibromochloromethane	NC	NC	NC		1	U	1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	UJ	1.4 UJ	1.1	UJ 1.2	2 0	1.1	U	1.2 0	J 1.2	U U
Dibromomethane	NC	NC	NC	NC NC	NA		NA	NA	NA		NA	NA		NA	-	NA	NA		NA	NA		NA	NA	NA	A	NA		NA	NA	
Dichlorodifluoromethane	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 l	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Ethylbenzene Hexachlorobutadiene	1,000	30,000	390,000	780,000 1,000	1 NA	U	1.1 U	1	U 1.1	U	1.1 U	U 1.1	U	1.3 NA	U	1.1 U	1.3 NA	U	1.2 U	1.1 NA	U	1.4 U	1.1	U 1.2	2 0	1.1 NA	U	1.2 U	J 1.2	0
Freon TE ⁽²⁾	NC	NC	NC		1	U	1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2	J 1.2	U
Idomethane	NC	NC	NC	NC NC	NA	Ŭ	NA	NA	NA		NA	NA		NA	0	NA	NA		NA	NA		NA	NA	NA	A U	NA	0	NA	NA	<u> </u>
Isopropylbenzene	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 l	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 0.33	3 J	1.1	U	1.2 l	J 1.2	U
m&p-Xylene	260 ⁽¹⁾	100,000 ⁽¹⁾	500,000 ⁽¹⁾	1,000,000 ⁽¹⁾ 1,600 ⁽¹⁾	2.1	U	2.1 U	2.1	U 2.1	U	2.2 0	U 2.1	U	2.5	U	2.1 U	2.7	U	2.3 U	2.2	U	2.7 U	2.3	U 2.3	3 U	2.3	U	2.4 l	J 2.3	U
Methyl Acetate	NC	NC	NC	NC NC	1		1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Methylevelonexane Methylene Chloride	50	51,000	500.000	1.000.000 50	1	Ŭ	1.1 U	1	U 1.1	Ŭ	1.1	U 1.1	Ŭ	1.3	Ŭ	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 0	J 1.2	Ū
Methyl tert-butyl ether (MTBE)	930	62,000	500,000	1,000,000 930	1	U	1.1 U	1	U 1.1	U	1.1 U	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Napthalene	NC	NC	NC	NC NC	NA		NA	NA	NA		NA	NA		NA		NA	NA		NA	NA		NA	NA	NA	4	NA		NA	NA	
n-Butylbenzene	12,000	100,000	500,000	1,000,000 12,000	1		1.1 U	1		U	1.1 l	U 1.1		1.3	U	1.1 U	1.3		1.2 U	1.1		1.4 U	1.1	U 1.2	2 U	1.1		1.2 l	J 1.2	U
o-Xvlene	260 ⁽¹⁾	100,000	500,000 ⁽¹⁾	1,000,000 3,900 3,900 1,000,000 1,000,000 1,000,000 1,000,000	1	U U	1.1 11	1	U 11	U	1,1	U 11	U	1.3	U	1.1 U	1.3	U	1.2 11	1.1	U	1.4 11	1.1	U 0.81	1 .	1.1	U	1.2	J 1.2	
p-Isopropyltoluene	NC	NC	NC	NC NC	1	Ū	1.1 U	1	U 1.1	Ŭ	1.1 1	U 1.1	Ū	1.3	Ū	1.1 U	1.3	Ū	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 Ŭ	1.1	Ū	1.2 1	J 1.2	Ū
sec-Butylbenzene	11,000	100,000	500,000	1,000,000 11,000	1	U	1.1 U	1	U 1.1	U	1.1 l	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Styrene	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2	J 1.2	U
Tetrachloroethene (PCE)	5,900	100,000	500,000	300,000 5,900	1		1.1 U	1		U 11	1.1 l	U 1.1		1.3	U	1.1 U	1.3		1.2 U	1.1		1.4 U	1.1	U 1.2	2 U 4 I	1.1		1.2 l	J 1.2	
Toluene	700	100.000	500,000	1,000,000 700	1	Ŭ	1.1 U	1	U 1.1	U	1.1	U 1.1	U	1.3	Ŭ	1.1 U	1.3	Ŭ	1.2 U	1.1	Ŭ	1.4 U	1.1	U 1.2	2 U	1.1	Ŭ	1.2 0	J 1.2	U
trans-1,2-Dichloroethene	190	100,000	500,000	1,000,000 190	1	U	1.1 U	1	U 1.1	U	1.1 (U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
trans-1,3-Dichloropropene	NC	NC	NC	NC NC	1	U	1.1 U	1	U 1.1	U	1.1 0	U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 l	J 1.2	U
Trichlorofluoromethane	470	10,000	200,000 NC	400,000 470 NC NC	15		2.9	1.7		U 11	1.1 l	U 1.1		1.3	U	1.1 U	1.3		1.2 U	1.1		1.4 U	1.1	U 1.2	2 U	1.1		1.2	J 1.2	
Vinyl Acetate	NC	NC	NC	NC NC	NA	+ ĭ +	NA	NA	NA NA		NA	NA		NA		NA	NA		NA	NA		NA	NA	NA	A 0	NA		NA	NA	
Vinyl Chloride	20	210	13,000	27,000 20	1	U	1.1 U	1	U 1.1	U	1.1 (U 1.1	U	1.3	U	1.1 U	1.3	U	1.2 U	1.1	U	1.4 U	1.1	U 1.2	2 U	1.1	U	1.2 1	J 1.2	U
Xylene (Total)	NC ⁽¹⁾	NC ⁽¹⁾	NC ⁽¹⁾	NC ⁽¹⁾ NC ⁽¹⁾	NA		NA	NA	NA		NA	NA		NA		NA	NA		NA	NA		NA	NA	NA	4	NA		NA	NA	
Total VOCs	NC	NC	NC	NC NC	21.25	Ję	5.29 J	14.7	0		0	0		0		0	0		0	0		0	0	5.24	4 J	0		0	0	
Notes: ug/kg - micrograms per kilogram																														
(1) - The SCO for m&p-xylene and o-xylene and	pplies to total xvler	ies.																												
(2) - Also known as 1,1,2-trichloro-1,2,2-trifluo	proethane and 1,1,2	2-trichlorotrifluoroe	thane.																											
Residential - Property is zoned Residential ar	nd results are com	pared to Unrestric	ted Use SCOs, Resid	dential Use SCOs, and Protection of																										
Groundwater SCOs. Commercial - Property is zoned Commercial	and results are con	mnared to Unrectri	icted Lise SCOs. Co.	mmercial Lise SCOs and Protection of																										
Groundwater SCOs.	and results are col	mparea to oniesti		anu Fiotection of																										
Industrial - Property is zoned Industrial and re	esults are compare	ed to Industrial Use	e SCOs, Unrestricted	Use SCOs, and Protection of																										
* - Recovery or RPD exceeds control limits																														
J - Result is less than the RL but greater than	n or equal to the MI	DL and the concer	ntration is an approxi	mate value.																										
A - Dilution Factor 80																														
oumpto.																														

A - Diuton Factor 80 sample. NA - Not analyzed NC - No criterion R - Nondetect sample result rejected after QC review. SCO - Soil Cleanup Objective U - Analyte was not detected.

		Sample ID				TRC-SB29	9(4-6')	TRC-SB30)(6-8')	TRC-SB31((11-13)	TRC-SB31	(11-13')A	TRC-SB32	2(8-10')
	La	ab Sample ID				460-279	83-6	460-2792	26-9	460-2792	6-10	460-279	26-11	460-279	83-7
	S	ampling Date				06-22-2	011	06-21-2	011	06-21-2	011	06-21-2	2011	06-22-2	011
	D	ilution Factor				5010		50110		5010		501	u	5010	1
	5	Units				ua/ka	1	μα/ka	1	μα/ka	1	μα/k	a	ua/ke	a
		Land Use				Industr	ial	Industr	, ial	Industr	ial	Indust	rial	Indust	rial
VOLATILE ORGANIC COMPOUNDS	Unrestricted	Residential	Commercial	Industrial	Protection of										
(VOCs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Resu	lt	Resu	lt	Resu	lt	Resu	ult	Resu	<u>lt</u>
1,1,1-I richloroethane (ICA)	680 NC	100,000	500,000	1,000,000	680	1.1 NA	U	1.1 NA	U	1.1	U	0.99	U	1.2 NA	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	NC	NC	1 1	11	1 1	11	1 1	11	0.99		1.2	
1.1.2-Trichloroethane	NC	NC	NC	NC	NC	1.1	Ŭ	1.1	Ŭ	1.1	Ŭ	0.99	Ŭ	1.2	Ŭ
1,1-Dichloroethane	270	19,000	240,000	480,000	270	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
1,1-Dichloroethene	330	100,000	500,000	1,000,000	330	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
1,1-Dichloropropene	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	
1,2,3-Trichlorobenzene	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
1,2,3-1 richloropropane	NC	NC	NC	NC	NC	NA		NA		NA		NA 0.00		NA 1.2	
1.2.4-Trimethylbenzene	3 600	47.000	190.000	380,000	3.600	1.1	U	1.1	U U	1.1	U U	0.99	U	1.2	
1,2-Dibromo-3-Chloropropane	NC	NC	NC	NC	NC	1.1	Ŭ	1.1	Ŭ	1.1	Ŭ	0.99	Ŭ	1.2	Ŭ
1,2-Dibromoethane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
1,2-Dichlorobenzene	1,100	100,000	500,000	1,000,000	1,100	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
1,2-Dichloroethane	20	2,300	30,000	60,000	20	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
1,2-Dichloropropane	NC R COO	NC 47.000	NC 100.000	NC	NC 9.400	1.1	U	1.1	U	1.1	U	0.99	U	1.2	
1,3,5-11IInethylbenzene	8,400	47,000	190,000	380,000	8,400	1.1	U	1.1	U	1.1	U	0.99		1.2	U 11
1.3-Dichloropropane	2,400 NC	NC	200,000 NC	NC	2,400 NC	NA	0	NA		NA	0	0.99 NA	U	NA	
1,4-Dichlorobenzene	1,800	9,800	130.000	250.000	1,800	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
2,2-Dichloropropane	NC	NC	NC	NC	NC	NA		NA	Ē	NA		NA		NA	
1,4-Dioxane	100	9,800	130,000	250,000	100	58	UR	56	UR	59	UR	50	UR	58	UR
2-Butanone (MEK)	120	100,000	500,000	1,000,000	120	11	U	11	U	11	U	9.9	U	15	
2-Chlorotoluene	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	<u> </u>
2-Hexanone	NC	NC	NC	NC	NC	11 NA	U	11 NA	U	11	U	9.9	U	12 NA	U
4-Chlorotototene 4-Methyl-2-pentanone	NC	NC	NC	NC	NC	11	11	11	11	11	11	a a		12	<u> </u>
Acetone	50	100.000	500.000	1.000.000	50	12	Ŭ	11	Ŭ	11	Ŭ	9.9	Ŭ	85	–
Benzene	60	2,900	44,000	89,000	60	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Bromobenzene	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	
Bromochloromethane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Bromodichloromethane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Bromomethane	NC	NC	NC	NC	NC	1.1	UJ	1.1	UJ	1.1	UJ	0.99	UJ	1.2	UJ
Carbon Disulfide	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U U
Carbon Tetrachloride	760	1,400	22,000	44,000	760	1.1	Ŭ	1.1	Ŭ	1.1	Ŭ	0.99	Ŭ	1.2	Ŭ
Chlorobenzene	1,100	100,000	500,000	1,000,000	1,100	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Chloroethane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Chloroform	370	10,000	350,000	700,000	370	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Chloromethane	NC	NC	NC	NC 1 000 000	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	<u> </u>
cis-1,2-Dichloropropene	250 NC	59,000 NC	500,000 NC	1,000,000	250 NC	1.1	0	1.1	0	1.1	0	0.99		1.2	
Cyclohexane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	Ŭ	1.2	Ŭ
Dibromochloromethane	NC	NC	NC	NC	NC	1.1	Ŭ	1.1	UJ	1.1	UJ	0.99	UJ	1.2	Ŭ
Dibromomethane	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	
Dichlorodifluoromethane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Ethylbenzene	1,000	30,000	390,000	780,000	1,000	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	
Hemothene	NC	NC	NC	NC	NC	1.1 NA	U	1.1 NA	U	1.1	U	0.99	U	1.Z	0
Isopropylbenzene	NC	NC	NC	NC	NC	11	U	11	U	1 1	U	0.99	U	1.2	- U
m&p-Xvlene	260 ⁽¹⁾	100,000 ⁽¹⁾	500,000 ⁽¹⁾	1.000.000 ⁽¹⁾	1.600 ⁽¹⁾	2.2	Ŭ	2.3	Ŭ	2.1	Ŭ	2	Ŭ	2.3	τŬ
Methyl Acetate	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Methylcyclohexane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Methylene Chloride	50	51,000	500,000	1,000,000	50	1	J	1.1	U	1.1	U	0.99	U	1.2	U
Methyl tert-butyl ether (MTBE)	930	62,000	500,000	1,000,000	930	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
naptnalene	NC 12,000	NC 100.000	NC 500.000	NC 1 000 000	NC 12,000	NA 1.1		NA 1.1		NA 1.1		NA		NA 1.2	
n-Propylbenzene	3.900	100,000	500,000	1,000,000	3,900	1.1	U	1.1	U	1.1	U	0.99	Ŭ	1.2	Ŭ
o-Xvlene	260 ⁽¹⁾	100.000 ⁽¹⁾	500.000 ⁽¹⁾	1,000,000 ⁽¹⁾	1.600 ⁽¹⁾	1.1	Ŭ	1.1	Ŭ	1.1	Ŭ	0.99	Ŭ	1.2	Ŭ
p-Isopropyltoluene	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	Ŭ	1.2	Ŭ
sec-Butylbenzene	11,000	100,000	500,000	1,000,000	11,000	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Styrene	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
tert-Butylbenzene	5,900	100,000	500,000	1,000,000	5,900	1.1	U	1.1	U	1.1	U	0.99	Ų	1.2	U
Tetrachloroethene (PCE)	1,300	5,500	150,000	300,000	1,300	0.54	J	1.1	U	0.83	J	0.93	J	1.2	
trans-1 2-Dichloroethene	100	100,000	500,000	1,000,000	100	1.1	11	1.1	11	1.1	0	0.99	0	1.2	
trans-1,3-Dichloropropene	NC	NC	NC	NC	NC	1.1	Ŭ	1.1	Ŭ	1.1	Ŭ	0.99	Ŭ	1.2	τŬ
Trichloroethene (TCE)	470	10,000	200,000	400,000	470	1.1	Ū	1.1	Ū	1.1	Ū	0.99	Ū	1.2	Ū
Trichlorofluoromethane	NC	NC	NC	NC	NC	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Vinyl Acetate	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	
Vinyl Chloride	20	210	13,000	27,000	20	1.1	U	1.1	U	1.1	U	0.99	U	1.2	U
Xylene (Total)	NC ⁽¹⁾	NC	NC ⁽¹⁾	NC	NC ⁽¹⁾	NA 12.54		NA		INA 0.02		NA 0.02		NA 100	+

Notes:

 Total VOCs
 NC
 NC
 NC
 NC
 NC
 NC

 Works:

 µg/kg - micrograms per kilogram

 · The SCO for m&p-xylene and -xylene applies to total xylenes.

 · Also known as 1, 1,2-trichloro-1,2,2-trifluoroethane and 1,1,2-trichlororifluoroethane.

 Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of
 Groundwater SCOs.

 Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and Protection of
 Groundwater SCOs.

 Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of
 Groundwater SCOs.

 - Recovery or RPD exceeds control limits

 Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

 - No influence

 NG

 NA - Not analyzed
 NC - No criterion
 R - Nondect sample result rejected after QC review.
 SCO - Soil Cleanup Objective
 U - Analyte was not detected.

 Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted.

		Sample ID				VD-3	a (6-8)	VD-3b (13-15)	MW2-B1	a (1-4) MW	2-B1b (6-8)	DGSUN	MP1 (0.5-1)	TRC-SB1(6	5-8") 1 1	TRC-SB1(15-17')	TRC-SB2(6-8	8")	TRC-SB2(6-8")A	TRC-SB2(14-16')	TRC-SB3(2-4"	TRC-SB3(2-4	') TI	RC-SB3(4-6')	TRC-SB4(1	2-14")	TRC-SB4(10-12')
	Sá	ampling Date				10-03	3-2002	10-03-	2002	01-02-2	2003 01	-02-2003	01-0	02-2003	04-18-20	11	04-18-2011	04-18-2011	1	04-18-2011	04-18-2011	04-18-2011	04-18-2011	-	04-18-2011	04-19-2	011	04-19-2011
	D	Matrix Iution Factor				So	olid 1	Sol 1	id	Solio 1	d	Solid 1	5	Solid 1	Solid 1		Solid 1	Solid 1		Solid 1	Solid 1	Solid 1	Solid 1	_	Solid 1	Solid 1		Solid 1
		Units				μg	/kg	μg/l	kg	μg/k	g	μg/kg	μ	ıg/kg	μg/kg		μg/kg	μg/kg		μg/kg	μg/kg	μg/kg	μg/kg		μg/kg	μg/kg		μg/kg
SEMIVOLATILE ORGANIC	Unrestricted	Land Use Residential	Commercial	Industrial	Protection of	Indu	istrial	Indus	trial	Indust	rial Ir	ndustrial	Ind	lustrial	Residenti	ial	Residential	Residential		Residential	Residential	Residential	Residential	_	Residential	Resider	tial	Residential
COMPOUNDS (SVOCs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Re	sult	Res	ult	Resu	ılt	Result	R	esult	Result		Result	Result		Result	Result	Result	Result		Result	Resu	t	Result
1,2,4,5- I etrachlorobenzene 2.2'-oxybis[1-chloropropane]	NC NC	NC NC	NC NC	NC NC	NC NC	NA	_	NA NA		NA NA	N	A A	NA		370	UJ	360 U 360 U	370	UU	390 U 390 U	370 U 370 U	400 U 400 U	410 U 410 U))	400 U 400 U	380	UU	350 U 350 U
2,3,4,6-Tetrachlorophenol	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 UJ	370 L	UJ	390 UJ	370 UJ	400 U.	410 U	J	400 UJ	380	U	350 U
2,4,5-1 richlorophenol 2,4,6-Trichlorophenol	NC NC	NC NC	NC	NC NC	NC	NA	_	NA		NA	N	A A	NA		370	U	360 U 360 U	370	U	390 U 390 U	370 U 370 U	400 U 400 U	410 U 410 U))	400 U 400 U	380	U	350 U 350 U
2,4-Dichlorophenol	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
2,4-Dimetryiphenol 2,4-Dinitrophenol	NC	NC	NC	NC NC	NC	NA	-	NA		NA	N	A A	NA		1,100	U	1,100 UR	1,100 L	JR	1,200 UR	1,100 UR	1,200 UF	410 U	, R 1	,200 UR	1,100	U	1,100 U
2,4-Dinitrotoluene	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		75	U	73 U	76	U	79 U	75 U	82 U	82 L	J	81 U	77	U	71 U
2-Chloronaphthalene	NC NC	NC NC	NC	NC NC	NC	NA		NA		NA	N	A A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 U	J	400 U	380	U	350 U
2-Chlorophenol	NC	NC	NC	NC	NC	NA		NA 250		NA	N N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
2-Methylphenol (o-cresol)	330	100,000	500,000	1,000,000	330	330 NA	0	350 NA	0	350 NA	U 33	A 0	360 NA	0	370	U	360 U	370	U	390 U	370 U 370 U	400 U	410 0	J	400 U	380	U	350 U 350 U
2-Nitroaniline	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		750	U	730 U	760	U	790 U	750 U	820 U	820 L	J	810 U	770	U	710 U
3 & 4 Methylphenol (m&p-cresol)	330	34,000	500,000	1,000,000	330	NA	-	NA		NA	N	A A	NA		370	U	360 U 360 U	370	U	390 U 390 U	370 U 370 U	400 U 400 U	410 0	J	400 U	380	U	350 U 350 U
3,3'-Dichlorobenzidine	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		750	U	730 U	760	U	790 U	750 U	820 U	820 L	J	810 U	770	U	710 U
4,6-Dinitro-2-methylphenol	NC	NC	NC	NC	NC	NA		NA		NA		A	NA		1,100	U	1,100 U	1,100	U	1,200 U	1,100 U	1,200 U	1,200 L	, J 1	,200 U	1,100	U	1,100 U
4-Bromophenyl phenyl ether	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
4-Chloroaniline	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	, J	400 U	380	U	350 U
4-Chlorophenyl phenyl ether	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	Ū	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
4-Nitroaniline	NC	NC	NC	NC	NC	NA		NA		NA	N N	A	NA		750	U	730 U	760	U	790 U	750 U	820 U	820 L	, J	810 U	770	U	710 U
4-Nitrophenol	NC 20.000	NC	NC	NC	NC	NA 330	11	NA 350		NA 37	N N	A 11	NA 360		1,100	U	1,100 U	1,100	U	1,200 U	1,100 U	1,200 U	1,200 U	J 1	,200 U	1,100	U	1,100 U
Acenaphthylene	100,000	100,000	500,000	1,000,000	107,000	330	U	350	U	12	J 33	80 U	360	U U	370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Acetophenone	NC 100.000	NC 100.000	NC 500,000	NC	NC	NA 330		NA 350		NA 81	N	A II	NA 360		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Atrazine	NC	NC	NC	NC	NC	NA	0	NA	0	NA	5 5.	A	NA	0	370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Benzaldehyde Benzolalanthracene	NC 1.000	NC 1.000	NC 5.600	NC 11,000	NC 1.000	NA 330		NA 350		NA 200	N 1 33	A II	NA 360		370	UJ	360 UJ	370 L	UJ	390 UJ	370 UJ	400 U.	410 U	J	400 UJ	380	UJ	350 UJ
Benzo[a]pyrene	1,000	1,000	1,000	1,100	22,000	330	U	350	U	160	J 33	80 U	360	U U	39	J	36 U	110	0	120 U	37 U	480	41 U	, J	40 U	38	U	35 U
Benzo[b]fluoranthene Benzo[g h i]pervlene	1,000	1,000	5,600	11,000	1,700	330	U	350 350	U	140 83	J 33	30 U	360		41 44	J	36 U 360 U	140 75	J	180 U 85 U	37 U 370 U	720 430	41 U	J	40 U 400 U	38	U	35 U 350 U
Benzo[k]fluoranthene	800	1,000	56,000	110,000	1,700	330	Ŭ	350	Ŭ	160	J 33	80 U	360	Ŭ	37	Ŭ	36 U	37	Ů	61 U	37 U	40 U	41 U	ý J	40 U	38	Ŭ	35 U
Bis(2-chloroethoxy)methane Bis(2-chloroethyl)ether	NC NC	NC NC	NC NC	NC NC	NC NC	NA		NA NA		NA NA	N	A A	NA NA		370 37	UU	360 U 36 U	370 37	UU	390 U 39 U	370 U 37 U	400 U 40 U	410 L	J	400 U 40 U	380 38	U	350 U 35 U
Bis(2-ethylhexyl) phthalate	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	320	J	150 U	370 U	190 J	410 U	j	400 U	380	U	350 U
Butyl benzyl phthalate Caprolactam	NC NC	NC NC	NC NC	NC NC	NC NC	NA NA		NA NA		NA NA	N	A A	NA NA		370 370	UU	360 U 360 U	370 370	UU	390 U 390 U	370 U 370 U	400 U 400 U	410 U 410 U	J	400 U 400 U	380 380	UU	350 U 350 U
Carbazole	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 U	J	400 U	380	U	350 U
Dibenz(a,h)anthracene	330	<u>1,000</u> 330	56,000	110,000	1,000	330	U	350	U	35	J 33	30 U	360		19	J	360 U 36 U	37	J U	150 U 26 U	370 U 37 U	120	410 U	J	400 U 40 U	380	U	350 U 35 U
Dibenzofuran	7,000	14,000	350,000	1,000,000	210,000	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Dimethyl phthalate	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 U	J	400 U	380	U	350 U
Di-n-butyl phthalate	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Diphenyl (1,1'-Biphenyl)	NC	NC	NC	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 U	J	400 U	380	U	350 U
Fluoranthene	100,000	100,000	500,000	1,000,000	1,000,000	330	U	350	U	490 47	33	30 U	360		370 370	U	360 U	370 370	U	280 U 390 U	370 U 370 U	890 400 II	410 L	J	400 U	380	U	350 U
Hexachlorobenzene	330	330	6,000	12,000	3,200	NA	Ű	NA	Ŭ	NA	N N	A	NA		37	U	36 U	37	Ŭ	39 U	37 U	40 U	41 L	, J	40 U	38	U	35 U
Hexachlorobutadiene Hexachlorocyclopentadiene	NC	NC	NC NC	NC	NC NC	NA NA		NA NA		NA NA	N	A A	NA NA		75 370	U	73 U 360 U	76 370	UU	79 U 390 U	75 U 370 U	82 U 400 II	82 L	l I	81 U 400 U*	77 380	U	71 U 350 U
Hexachloroethane	NC	NC	NC	NC	NC	NA		NA	—	NA		A	NA		37	Ŭ	36 U	37	Ū	39 U	37 U	40 U	41 U	,	40 U	38	U	35 U
Indeno[1,2,3-cd]pyrene Isophorone	500 NC	500 NC	5,600 NC	11,000 NC	8,200 NC	330 NA	U	350 NA	U	88 NA	J 33	A U	360 NA		36 370	J U	36 U 360 U	56 370	U	95 U 390 U	37 U 370 U	400 400 U	41 L 410 l	J	40 U 400 U	38 380	UU	35 U 350 U
Naphthalene	12,000	100,000	500,000	1,000,000	12,000	330	U	350	U	44	J 30	00 U	360	U U	370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Nitropenzene N-Nitrosodi-n-propylamine	NC	NC	NC NC	NC	NC NC	NA		NA NA		NA NA	N N	A A	NA NA		37	UJ	36 U 36 U	37	U U	39 U 39 U	37 U 37 U	40 U 40 U	41 L 41 L	J	40 U 40 U	38	UU	35 U 35 U
N-Nitrosodiphenylamine	NC	NC	NC 0.700	NC	NC	NA		NA		NA	N	A	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Pentachiorophenoi Phenanthrene	100,000	2,400	6,700 500,000	1,000,000	1,000,000	330	U	NA 350	U	480	33	A 80 U	360) U	1,100 370	U	1,100 U 360 U	1,100 370	U	1,200 U 160 U	1,100 U 370 U	1,200 U 330 J	410 L	J 1 J	,200 U 400 U	380	U	1,100 U 350 U
Phenol	330	100,000	500,000	1,000,000	330	NA		NA 250		NA 470	N	A II	NA		370	U	360 U	370	U	390 U	370 U	400 U	410 L	J	400 U	380	U	350 U
Total SVOCs	NC	NC	NC	NC	NC	NA	0	NA	0	NA		A	NA		179	U	0	1,011	J	1,637 U	0	5,382	0	,	0	0	U	0
Notes: µg/kg - micrograms per kilogram Residential - Property is zoned Residential : Groundwater SCOs. Commercial - Property is zoned Commercia of Groundwater SCOs. Industrial - Property is zoned Industrial and Groundwater SCOs. * - Recovery or RPD exceeds control limits J - Result is less than the RL but greater tha NA - Not analyzed NC - No criterion R - Nondetect sample result rejected after C SCO - Soil Cleanup Objective	and results are comp al and results are con- results are compare an or equal to the MI QC review.	pared to Unrestri mpared to Unres d to Industrial U: DL and the conce	icted Use SCOs, Re stricted Use SCOs, (se SCOs, Unrestrict entration is an appro	sidential Use SC Commercial Use ed Use SCOs, a iximate value.	COs, and Protection of s SCOs, and Protection and Protection of																							
Shading indicates result above SCO. Color	representing least s	stringent SCO ex	ceeded is shown ur	nless otherwise r	noted.																							

		Sample ID				TRC-SB5(6-8")	TRC-SB5(10-12')	TRC-SB6(6-8")	TRC-SB6(12-14')	TRC-SB7(11-13')	TRC-SB8(13.5-15.5)) TRC-SB9(5-7')	TRC-SB10(11-13')	TRC-SB11(6-8')	TRC-SB12(5-7')	TRC-SB13(6-8')	TRC-SB14(6-8')
	L	ab Sample ID				460-25517-3	460-25517-4	460-25517-5	460-25517-6	460-27885-1	460-27885-2	460-27983-1	460-27885-3	460-27885-4	460-27885-5	460-27885-6	460-27885-7
	S	Sampling Date				04-19-2011	04-19-2011	04-19-2011	04-19-2011	06-20-2011	06-20-2011	06-22-2011	06-20-2011	06-20-2011	06-20-2011	06-20-2011	06-20-2011
	Г	Matrix Dilution Factor				Solid	Solid	50110	50110	5010	Solid	5010	50110	5010	Solid	Solid	5010
	L	Linits				ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ua/ka	ug/kg
		Land Use				Commercial	Commercial	Commercial	Commercial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial
SEMIVOLATILE ORGANIC	Unrestricted	Residential	Commercial	Industrial	Protection of												
COMPOUNDS (SVOCs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,2,4,5-Tetrachlorobenzene	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2,2-oxybis[1-chlorophenol	NC	NC	NC	NC	NC	360 U	370 U 370 U	370 U 370 U	350 U	340 U 340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2 4 5-Trichlorophenol	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2.4.6-Trichlorophenol	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2,4-Dichlorophenol	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2,4-Dimethylphenol	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2,4-Dinitrophenol	NC	NC	NC	NC	NC	1,100 U	1,100 U	1,100 U	1,100 U	1,000 U	1,100 U	1,000 U	1,000 U	R	1,100 U	1,000 U	1,100 U
2,4-Dinitrotoluene	NC	NC	NC	NC	NC	73 U	74 U	76 U	71 U	69 U	73 U	70 U	69 U	71 U	71 U	70 U	73 U
2,0-Dinitiotoluene 2-Chloronaphthalene	NC	NC	NC NC	NC	NC	360 U	370 U	370 11	350 11	340 11	73 U 360 U	350 11	340 U	350 11	350 11	70 U	360 11
2-Chlorophenol	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2-Methylnaphthalene	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2-Methylphenol (o-cresol)	330	100,000	500,000	1,000,000	330	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
2-Nitroaniline	NC	NC	NC	NC	NC	730 U	740 U	760 U	710 U	690 U	730 U	700 U	690 U	710 U	710 U	700 U	730 U
2-Nitrophenol	NC	NC 24.000	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
3 3'-Dichlorobenzidine	330 NC	34,000 NC	500,000 NC	1,000,000	330 NC	730 U	740 U	760 U	710 U	690 U	730 U	700 11	690 U	710 U	710 U	700 U	730 U
3-Nitroaniline	NC	NC	NC	NC	NC	730 U	740 U	760 U	710 U	690 U	730 U	700 U	690 U	710 U	710 U	700 U	730 U
4,6-Dinitro-2-methylphenol	NC	NC	NC	NC	NC	1,100 U	1,100 U	1,100 U	1,100 U	1,000 U	1,100 U	1,000 U	1,000 U	1,100 U	1,100 U	1,000 U	1,100 U
4-Bromophenyl phenyl ether	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
4-Chloro-3-methylphenol	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
4-Unioroaniline	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
4-Onlorophenyl phenyl ether	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
4-Nitroaniline	NC	NC	NC	NC	NC	730 U	740 U	760 U	710 U	690 U	730 U	700 U	690 U	710 U	710 U	700 U	730 U
4-Nitrophenol	NC	NC	NC	NC	NC	1,100 U	1,100 U	1,100 U	1,100 U	1,000 U	1,100 U	1,000 U	1,000 U	1,100 U	1,100 U	1,000 U	1,100 U
Acenaphthene	20,000	100,000	500,000	1,000,000	98,000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Acenaphthylene	100,000	100,000	500,000	1,000,000	107,000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Acetophenone	NC 100.000	NC 100.000	NC 500,000	NC 1.000.000	NC 1 000 000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Atrazine	NC	NC	300,000 NC	1,000,000	1,000,000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Benzaldehyde	NC	NC	NC	NC	NC	360 UJ	370 UJ	370 UJ	350 UJ	340 UJ	360 UJ	350 UJ	340 UJ	350 UJ	350 UJ	340 UJ	360 UJ
Benzo[a]anthracene	1,000	1,000	5,600	11,000	1,000	99	91	140	35 U	34 U	36 U	35 U	34 U	250	210	34 U	36 U
Benzo[a]pyrene	1,000	1,000	1,000	1,100	22,000	130	110	150	35 U	34 U	36 U	35 U	34 U	220	290	34 U	36 U
Benzo[b]fluoranthene	1,000	1,000	5,600	11,000	1,700	150	120	180	35 U	34 U	36 U	35 U	34 U	260	300	34 U	36 U
Benzolg,h,ilperylene	100,000	100,000	500,000	1,000,000	1,000,000	120 J	110 J	110 J	350 U	340 U	360 U	350 U	340 U	96 J	310 J	340 U	360 U
Bis(2-chloroethoxy)methane	NC	1,000 NC	30,000 NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	34 U	360 U
Bis(2-chloroethyl)ether	NC	NC	NC	NC	NC	36 U	37 U	37 U	35 U	34 U	36 U	35 U	34 U	35 U	35 U	34 U	36 U
Bis(2-ethylhexyl) phthalate	NC	NC	NC	NC	NC	130 J	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Butyl benzyl phthalate	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Caprolactam	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Chrysene	1 000	1,000	56 000	110,000	1 000	100 J	99 J	150 J	350 U	340 U	360 U	350 U	340 U	92 J	360	340 U	360 U
Dibenz(a,h)anthracene	330	330	560	1,100	1,000,000	36 U	37 U	27 J	35 U	34 U	36 U	35 U	34 U	28 J	35 U	34 U	36 U
Dibenzofuran	7,000	14,000	350,000	1,000,000	210,000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Diethyl phthalate	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Dimethyl phthalate	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Di-n-butyl phthalate	NC	NC	NC	NC	NC	360 U	370 U 370 U	370 U	350 U	340 U	360 U	350 U	340 U 340 U	350 U	350 U	340 U 340 U	360 U
Diphenyl (1.1'-Biphenyl)	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Fluoranthene	100,000	100,000	500,000	1,000,000	1,000,000	140 J	170 J	160 J	350 U	340 U	360 U	350 U	340 U	750	330 J	340 U	360 U
Fluorene	30,000	100,000	500,000	1,000,000	386,000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Hexachlorobenzene	330	330	6,000	12,000	3,200	36 U	37 U	37 U	35 U	34 U	36 U	35 U	34 U	35 U	35 U	34 U	36 U
nexachioroputadiene	NC	NC	NC	NC	NC	7.3 U 360 U	74 U 370 II	70 U 370 U	350 11	340 11	<u>360 U</u>	350 11	340 11	350 11	350 11	340 11	360 U
Hexachloroethane	NC	NC	NC	NC	NC	36 U	37 U	37 U	35 U	34 U	36 U	35 U	34 U	35 U	35 U	34 U	36 U
Indeno[1,2,3-cd]pyrene	500	500	5,600	11,000	8,200	110	100	120	35 U	34 U	36 U	35 U	34 U	110	250	34 U	36 U
Isophorone	NC	NC	NC	NC	NC	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Naphthalene	12,000	100,000	500,000	1,000,000	12,000	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Nitrobenzene	NC	NC	NC	NC	NC	36 U	37 U	37 U	35 U	34 U	36 U	35 U	34 U	35 U	35 U	34 U	36 U
N-Nitrosodinhenvlamine	NC	NC	NC	NC	NC	360 11	370 11	370 11	350 11	34 0	360 11	350 11	340 11	350 11	350 11	340 11	360 11
Pentachlorophenol	800	2,400	6,700	55,000	800	1,100 U	1,100 U	1,100 U	1,100 U	1,000 U	1,100 U	1,000 U	1,000 U	1,100 U	1,100 U	1,000 U	1,100 U
Phenanthrene	100,000	100,000	500,000	1,000,000	1,000,000	360 U	64 J	370 U	350 U	340 U	360 U	350 U	340 U	670	200 J	340 U	360 U
Phenol	330	100,000	500,000	1,000,000	330	360 U	370 U	370 U	350 U	340 U	360 U	350 U	340 U	350 U	350 U	340 U	360 U
Pyrene	100,000	100,000	500,000	1,000,000	1,000,000	140 J	140 J	140 J	350 U	340 U	360 U	350 U	340 U	400	520	340 U	360 U
Total SVOCS	NC	NC	NC	NC	NC	1,119	1,057	1,177	0	0	0	0	0	3,361 J	2,890 J	0	0
 ug/kg - micrograms per kilogram Residential - Property is zoned Residential : Groundwater SCOs. Commercial - Property is zoned Commercia of Groundwater SCOs. Industrial - Property is zoned Industrial and Groundwater SCOs. *. Recovery or RPD exceeds control limits J - Result is less than the RL but greater tha NA - Not analyzed No criterion R - Nondetect sample result rejected after 0 SCO - Soil Cleanup Objective 	and results are com al and results are co results are compare an or equal to the M QC review.	opared to Unrestr ompared to Unre ed to Industrial U IDL and the conc	icted Use SCOs, Re stricted Use SCOs, se SCOs, Unrestric entration is an appr	esidential Use S Commercial Us ted Use SCOs, oximate value.	COs, and Protection of e SCOs, and Protection and Protection of												
U - Analyte was not detected.																	
 - Analyte was not detected. Shading indicates result above SCO _ Color 	representing least	stringent SCO e	xceeded is shown u	nless otherwise	noted.												

		Sample ID				TRC-SB16(1	0.5-12.5')	TRC-SB17	(10-12')	TRC-SB18	8(9-11')	TRC-SB19(8.5-10.5')) TRC-S	B20(7-9')	TRC-SE	321(9-11')	TRC-SB2	2(16-18')	TRC-SB23(12-14')	TRC-SB23(1	2-14')A	TRC-SB24	(15-17')	TRC-SB2	5(14-16')	TRC-SB26(10).5-12.5')	TRC-SE	327(6-8')
	Li	ab Sample ID				460-278	85-9	460-279	26-1	460-279	26-2	460-279	926-3	460-2	27926-4	460-2	7983-2	460-27	926-5	460-2792	6-6	460-2792	26-8	460-279	26-7	460-27	983-8	460-2798	J3-3	460-22	7983-4
	0	Matrix				Solic	d	Solie	b	Solic	d	Soli	d	S	folid	00-22 S	olid	50 S0	lid	Solid	/ 1 1	Solid	,,,,	Solic	d	00-22- So	lid	Solid		00-22 Sc	olid
	D	ilution Factor				1		1		1		1			1		1	1		1		1		1		1		1			1
		Units				μg/kg	g	μg/k	g riol	μg/kg	g riol	μg/k	g	μ	g/kg	μQ	g/kg ustrial	μg/	kg	μg/kg	al	μg/kg	al	µg/k	g riol	μg/	kg	μg/kg	iol	μg	/kg
SEMIVOLATILE ORGANIC	Unrestricted	Residential	Commercial	Industrial	Protection of	industi	nai	indust	nai	indust	nai	indus	Indi	ind	ustriai	indo	1311101	indua	unai	industi	ai	industri	a	indust	nai	induc	bullai	industi	ai	indu	50101
COMPOUNDS (SVOCs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Resu	ılt 👘	Resu	ılt	Resu	ilt	Res	ult	Re	esult	Re	esult	Res	ult	Resul	t	Result	t	Resu	ult	Res	sult	Resu	t	Re	sult
1,2,4,5-Tetrachlorobenzene	NC NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	<u>U</u>	340	U	340	U	370	UJ	340		340	U
2,3,4,6-Tetrachlorophenol	NC	NC	NC	NC	NC	340	UJ *	360	UJ	350	UJ	360	UJ	350	UJ	370	U	340	UJ	340	UJ	340	UJ	340	UJ	370	UJ	340		340	U
2,4,5-Trichlorophenol	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
2,4,6-Trichlorophenol	NC NC	NC	NC NC	NC NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	<u>U</u>	340	U	340	U	370	U	340		340	<u> </u>
2,4-Dimethylphenol	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340		340	U
2,4-Dinitrophenol	NC	NC	NC	NC	NC	1,000	U	1,100	U	1,100	U	1,100	U	1,100	U	1,100	U	1,000	U	1,000	U	1,000	U	1,000	U	1,100	U	1,000	U	1,000	UR
2,4-Dinitrotoluene	NC	NC	NC	NC	NC	70	U	73	U	71	U	72	U	71	U	75	U	69	U	69 69	<u>U</u>	69 69	U	69	U	76 76	U	68		70	U
2-Chloronaphthalene	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
2-Chlorophenol	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
2-Methylnaphthalene	NC 220	NC	NC	NC	NC 220	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	<u>U</u>	340	U	340	U	370	U	340		340	U
2-Nitroaniline	NC	NC	NC	NC	NC	700	U	730	U	710	U	720	U	710	U	750	U	690	U	690	U	690	U	690	U	760	U	680		700	U
2-Nitrophenol	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
3 & 4 Methylphenol (m&p-cresol) 3 3'-Dichlorobenzidine	330 NC	34,000 NC	500,000 NC	1,000,000	330 NC	340	U 11	360	U	350	U	360	U 11	350		370		340 690		340 690	U 11	340 690	U	340 690	U	370	U	340 680		340	U
3-Nitroaniline	NC	NC	NC	NC	NC	700	U	730	U	710	U	720	U	710	U	750	U	690	U	690	U	690	U	690	U	760	U	680	U	700	U
4,6-Dinitro-2-methylphenol	NC	NC	NC	NC	NC	1,000	U	1,100	U	1,100	U	1,100	U	1,100	U	1,100	U	1,000	U	1,000	U	1,000	U	1,000	U	1,100	U	1,000	U	1,000	UR
4-Bromophenyl phenyl ether 4-Chloro-3-methylphenol	NC	NC	NC	NC	NC	340	U 11	360		350	U 11	360	U 11	350		370		340		340	U 11	340 340	U 11	340	U	370	U	340		340	U 11
4-Chloroaniline	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
4-Chlorophenyl phenyl ether	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
4-Methylphenol 4-Nitroaniline	NC NC	NC	NC NC	NC	NC NC	340 700	U 11	360 730	U U	350 710	U []	360 720	U	350 710	U	370 750	U U	340 690	U	340 690	U U	340 690	U	340 690	U	370	U	340 680		340 700	U 11
4-Nitrophenol	NC	NC	NC	NC	NC	1,000	Ŭ	1,100	Ŭ	1,100	Ŭ	1,100	Ŭ	1,100	Ŭ	1,100	Ŭ	1,000	Ŭ	1,000	U	1,000	Ŭ	1,000	Ŭ	1,100	Ŭ	1,000	Ŭ	1,000	Ū
Acenaphthene	20,000	100,000	500,000	1,000,000	98,000	340	U	360	U	350	U	120	J	350	U	370	U	340	U	340	<u>U</u>	340	U	340	U	370	U	340	<u> </u>	340	<u> </u>
Acetophenone	100,000 NC	100,000 NC	500,000 NC	1,000,000 NC	107,000 NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	<u>U</u>	340 340	U	340	U	370	U	340		340	U
Anthracene	100,000	100,000	500,000	1,000,000	1,000,000	340	Ŭ	360	Ŭ	350	Ŭ	310	J	350	Ŭ	370	Ŭ	340	Ŭ	340	Ŭ	340	Ŭ	340	Ŭ	370	Ŭ	340	Ŭ	340	Ū
Atrazine	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	<u>U</u>	340	U	340	U	370	U	340		340	U
Benzofalanthracene	1.000	1.000	5.600	11.000	1.000	340	U	360	U	350	U	760	UJ	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
Benzo[a]pyrene	1,000	1,000	1,000	1,100	22,000	34	U	36	U	35	U	690		29	J	37	U	34	U	34	U	34	U	34	U	37	U	34	U	34	U
Benzo[b]fluoranthene	1,000	1,000	5,600	11,000	1,700	34	U	34	J	35	U	770		37		37	U	34	U	34	<u>U</u>	34	U	34	U	37	U	34		34	U
Benzo[k]fluoranthene	800	1,000	56,000	110,000	1,700	340	U	36	UJ	35	U	350		35	U	370	U	340	U	340	U	340	U	340	U	370	U	340		340	U
Bis(2-chloroethoxy)methane	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
Bis(2-chloroethyl)ether Bis(2-ethylbexyl) phthalate	NC NC	NC NC	NC NC	NC NC	NC	34	U 11	36	U	35		36	U	35	U 11	37	U 11	34	U 11	34	<u> </u>	34 340	0	34	U	37	U	34		34	U
Butyl benzyl phthalate	NC	NC	NC	NC	NC	340	Ŭ	360	Ŭ	350	Ŭ	360	Ŭ	350	Ŭ	370	Ŭ	340	Ŭ	340	Ŭ	340	Ŭ	340	Ŭ	370	Ů	340	Ŭ	340	Ū
Caprolactam	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	<u>U</u>	340	U	340	U	370	U	340		340	<u> </u>
Chrysene	1,000	1,000	56,000	110,000	1,000	340	U	360	U	350	U	760	J	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340		340	U
Dibenz(a,h)anthracene	330	330	560	1,100	1,000,000	34	U	36	U	35	U	130		35	U	37	U	34	U	34	U	34	U	34	U	37	U	34	U	34	U
Dibenzofuran Diethyl obtbalate	7,000	14,000 NC	350,000	1,000,000	210,000	340	U	360	U	350	U	74	J	350	U	370	U	340	U	340	<u>U</u>	340	U 11	340	U	370	U	340		340	U
Dimethyl phthalate	NC	NC	NC	NC	NC	340	U	360	U	350	Ŭ	360	U	350	U	370	U	340	U	340	Ū	340	U	340	U	370	U	340		340	U
Di-n-butyl phthalate	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
Di-n-octyl phthalate	NC NC	NC NC	NC NC	NC NC	NC	340	U 11	360	U	350		360	U	350	U 11	370	U 11	340	U 11	340	<u> </u>	340 340	0	340	U	370	U 11	340		340	U
Fluoranthene	100,000	100,000	500,000	1,000,000	1,000,000	340	U	360	Ŭ	350	U	1,600	Ū	66	J	370	Ŭ	340	Ŭ	340	Ŭ	340	U	340	Ŭ	370	Ŭ	340	Ŭ	340	U
Fluorene	30,000	100,000	500,000	1,000,000	386,000	340	U	360	U	350	U	110	J	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340	U	340	U
Hexachlorobenzene	330 NC	330 NC	6,000 NC	12,000 NC	3,200 NC	34	U	36 73	U	35 71	U	36	U	35 71	U	37	U U	34 69	U	34 69	<u>ບ</u> ເມ	34 69	U U	<u>34</u> 69	U U	37	U	34 68		34 70	U
Hexachlorocyclopentadiene	NC	NC	NC	NC	NC	340	Ŭ	360	Ŭ	350	Ŭ	360	Ŭ	350	Ŭ	370	Ŭ	340	Ŭ	340	U	340	U	340	Ū	370	Ŭ	340	U	340	Ū
Hexachloroethane	NC	NC	NC F 600	NC	NC	34	U	36	U	35	U	36	U	35	U	37	U	34	U	34	U	34	U	34	U	37	U	34		34	U
Isophorone	NC	S00 NC	5,600 NC	NC	8,200 NC	34	U	36	U	35 350	U	360	U	35	U	370	U	34 340	U	34 340	U	34 340	U	34 340	U	37	U	34 340		34 340	U
Naphthalene	12,000	100,000	500,000	1,000,000	12,000	340	U	360	U	350	U	360	U	350	Ŭ	370	U	340	U	340	Ŭ	340	U	340	U	370	U	340	U	340	U
Nitrobenzene	NC	NC	NC	NC	NC	34	U	36	U	35	U	36	U	35	U	37	U	34	U	34	<u>U</u>	34	U	34	U	37	U	34	<u> </u>	34	U
N-Nitrosodiphenylamine	NC	NC	NC	NC	NC	340	U	360	U	350	U	360	U	350	U	370	U	340	U	340	U	340	U	340	U	370	U	340		340	U
Pentachlorophenol	800	2,400	6,700	55,000	800	1,000	U	1,100	U	1,100	U	1,100	U	1,100	U	1,100	U	1,000	U	1,000	U	1,000	U	1,000	U	1,100	U	1,000	U	1,000	U
Phenanthrene Phenol	100,000	100,000	500,000	1,000,000	1,000,000	340	U 11	360	U	350	U	1,300		350	U 11	370	U	340	U	340 340	<u>U</u>	340 340	U 11	340	U	370	U	340		340	U
Pyrene	100,000	100,000	500,000	1,000,000	1,000,000	340	U	360	U	350	U	1,400	Ŭ	62	J	370	U	340	Ŭ	340	U	340	U	340	U	370	U	340	U	340	U
Total SVOCs Notes: μg/kg - micrograms per kilogram Residential - Property is zoned Residential	NC and results are com	NC pared to Unrestr	NC	NC esidential Use S	NC COs, and Protection of	0		34	J	0		9,664	J	194	J	0	<u> </u>	0		0		0		0	<u> </u>	160	J	0		0	
Groundwater SCOs. Commercial - Property is zoned Commerci of Groundwater SCOs. Industrial - Property is zoned Industrial and Groundwater SCOs. * - Recovery or RPD exceeds control limits J - Result is less than the RL but greater th NA - Not analyzed NC - No criterion R - Nondretert sample result rejected after.	ial and results are co I results are compare an or equal to the M	mpared to Unree	stricted Use SCOs, I lse SCOs, Unrestrict entration is an appre	Commercial Use and Use SCOs, a oximate value.	e SCOs, and Protection and Protection of																										
SCO - Soil Cleanup Objective	QU IEVIEW.																														

SCO - Soil Cleanup Objective U - Analyte was not detected.

	L	Sample ID ab Sample ID				TRC-SB2 460-27	28(9-11') 7983-5	TRC-SB2 460-279	9(4-6') 983-6	TRC-SE 460-2	330(6-8') 7926-9	TRC-SB3 460-27	1(11-13') 926-10	TRC-SB3 460-27	1(11-13')A 7926-11	TRC-SB3 460-27	32(8-10') '983-7
	S	ampling Date				06-22	-2011 Iid	06-22-	2011 d	06-21	-2011	06-21	-2011 Iid	06-21	I-2011	06-22-	·2011 lid
	C	ilution Factor				1		10	u		1	1			1	1	iu
		Units				μg/	/kg	μg/k	g	μg	/kg	μg/	′kg	μg	/kg	μg/	kg
SEMIVOLATILE ORGANIC	Unrestricted	Residential	Commercial	Industrial	Protection of	Indu	strial	Indus	mai	Indu	Istrial	Indus	strial	Indu	istriai	Indus	strial
COMPOUNDS (SVOCs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Res	sult	Res	ult	Re	sult	Res	sult	Re	sult	Res	ult
2,2'-oxybis[1-chloropropane]	NC	NC	NC NC	NC NC	NC	340	U	3,400	U	330	U	340	U	340	U	350	U
2,3,4,6-Tetrachlorophenol	NC	NC	NC	NC	NC	340	U	3,400	U	330	UJ	340	UJ	340	U	350	U
2,4,5-1 richlorophenol 2.4,6-Trichlorophenol	NC NC	NC NC	NC NC	NC NC	NC NC	340 340	U	3,400	U U	330	U	340 340	U	340 340	U	350 350	<u> </u>
2,4-Dichlorophenol	NC	NC	NC	NC	NC	340	Ŭ	3,400	Ŭ	330	Ŭ	340	Ŭ	340	Ŭ	350	Ū
2,4-Dimethylphenol 2,4-Dinitrophenol	NC NC	NC NC	NC NC	NC NC	NC NC	340 1.000	U	3,400 10.000	U U	330 1.000	U UR	340 1.000	U	340 1.000	UU	350 1.100	<u> </u>
2,4-Dinitrotoluene	NC	NC	NC	NC	NC	69	U	690	U	67	U	68	U	69	U	72	U
2,6-Dinitrotoluene 2-Chloropaphthalene	NC NC	NC NC	NC NC	NC NC	NC NC	69 340	U U	690 3 400	<u> </u>	67 330	U U	68 340	U U	69 340	U	72 350	<u> </u>
2-Chlorophenol	NC	NC	NC	NC	NC	340	Ŭ	3,400	Ŭ	330	U	340	Ŭ	340	Ŭ	350	U
2-Methylnaphthalene 2-Methylphenol (o-cresol)	NC 330	NC 100.000	NC 500.000	NC 1 000 000	NC 330	340 340	U	510 3 400	 	330 330	U	340 340	U	340 340	U	350 350	<u> </u>
2-Nitroaniline	NC	NC	NC	NC	NC	690	Ŭ	6,900	Ŭ	670	Ŭ	680	Ŭ	690	Ŭ	720	Ū
2-Nitrophenol 3 & 4 Methylphenol (m&p-cresol)	NC 330	NC 34.000	NC 500.000	NC 1.000.000	NC 330	340 340	U	3,400 3,400	U 11	330	U	340 340	U	340 340	U	350 350	<u> </u>
3,3'-Dichlorobenzidine	NC	NC	NC	NC	NC	690	Ŭ	6,900	U	670	Ŭ	680	Ŭ	690	Ŭ	720	U
3-Nitroaniline	NC NC	NC	NC NC	NC NC	NC	690	U	6,900	U 11	670	U	680	U	690	U	720	<u> </u>
4-Bromophenyl phenyl ether	NC	NC	NC	NC	NC	340	Ŭ	3,400	Ŭ	330	U	340	Ŭ	340	U	350	U
4-Chloro-3-methylphenol	NC	NC	NC	NC	NC	340	U	3,400	U	330	U	340	U	340	U	350	U
4-Chlorophenyl phenyl ether	NC	NC	NC	NC	NC	340	U	3,400	U	330	U	340	U	340	U	350	U
4-Methylphenol	NC	NC	NC	NC	NC	340	U	3,400	U	330	U	340	U	340	U	350	U
4-Nitrophenol	NC	NC	NC	NC	NC	1,000	U	10,000	U	1,000	U	1,000	U	1,000	U	1,100	U
Acenaphthene	20,000	100,000	500,000	1,000,000	98,000	340	U	3,400		330	U	340	U	340	U	350	U
Acetophenone	100,000 NC	100,000 NC	500,000 NC	1,000,000 NC	107,000 NC	340	U	3,400	U U	330	U	340	U	340	U	350	U
Anthracene	100,000	100,000	500,000	1,000,000	1,000,000	340	U	5,800		330	U	340	U	340	U	350	U
Atrazine Benzaldehyde	NC	NC	NC	NC NC	NC	340	UJ	3,400	UJ	330	UJ	340	UJ	340	UJ	350	U
Benzo[a]anthracene	1,000	1,000	5,600	11,000	1,000	34	U	18,000		33	U	34	U	34	U	35	U
Benzo[a]pyrene Benzo[b]fluoranthene	1,000	1,000	5,600	1,100	1,700	34	U	17,000		33	U	34	U	34	U	35	U
Benzo[g,h,i]perylene	100,000	100,000	500,000	1,000,000	1,000,000	340	U	12,000		330	U	340	U	340	U	350	U
Benzo[k]rluoranthene Bis(2-chloroethoxy)methane	800 NC	1,000 NC	56,000 NC	110,000 NC	1,700 NC	34	U	9,900 3,400	U	33	U	34	U	34	U	35	U
Bis(2-chloroethyl)ether	NC	NC	NC	NC	NC	34	U	340	U	33	U	34	U	34	U	35	U
Bis(2-ethylhexyl) phthalate Butyl benzyl phthalate	NC NC	NC NC	NC NC	NC NC	NC NC	340 340	U	3,400 3,400	U U	330 330	U	340 340	U	340 340	U	350 350	U
Caprolactam	NC	NC	NC	NC	NC	340	U	3,400	U	330	U	340	U	340	U	350	U
Carbazole Chrvsene	NC 1.000	NC 1.000	NC 56.000	NC 110.000	NC 1.000	340 340	U	3,300	J	330	U	340 340	U	340 340	UU	350 350	U
Dibenz(a,h)anthracene	330	330	560	1,100	1,000,000	34	U	3,000		33	U	34	U	34	U	35	U
Dibenzoturan Diethyl phthalate	7,000 NC	14,000 NC	350,000 NC	1,000,000 NC	210,000 NC	340 340	U	1,800	J U	330	U	340 340	U	340 340	U	350	<u> </u>
Dimethyl phthalate	NC	NC	NC	NC	NC	340	Ŭ	3,400	Ŭ	330	Ŭ	340	Ŭ	340	Ŭ	350	Ū
Di-n-butyl phthalate	NC NC	NC NC	NC NC	NC NC	NC NC	340 340	U U	3,400	<u>U</u>	330 330	U U	340 340	U U	340 340	U	350 350	<u> </u>
Diphenyl (1,1'-Biphenyl)	NC	NC	NC	NC	NC	340	Ŭ	3,400	Ŭ	330	Ŭ	340	Ŭ	340	Ŭ	350	U
Fluoranthene	100,000	100,000	500,000	1,000,000	1,000,000	340 340	U	26,000	J	330 330	U	340 340	U	340 340	U	350 350	<u> </u>
Hexachlorobenzene	330	330	6,000	12,000	3,200	34	Ŭ	340	Ŭ	33	Ŭ	34	Ŭ	34	Ŭ	35	Ū
Hexachlorobutadiene Hexachlorocyclopentadiene	NC	NC	NC NC	NC	NC NC	69 340	U	690 3 400	U 11	67 330	U	68 340	U	69 340	U	72 350	<u> </u>
Hexachloroethane	NC	NC	NC	NC	NC	34	Ŭ	340	Ŭ	33	Ŭ	34	Ŭ	34	Ŭ	35	Ū
Indeno[1,2,3-cd]pyrene Isophorone	500	500	5,600	11,000	8,200	34 340	U	9,900	U	33 330	U	34 340	U	34 340	U	35 120	U .I
Naphthalene	12,000	100,000	500,000	1,000,000	12,000	340	Ŭ	570	J	330	Ŭ	340	Ŭ	340	Ŭ	350	U
Nitrobenzene N-Nitrosodi-n-propylamine	NC	NC	NC NC	NC	NC	34	U 11	340 340	U	33	U	34	U 11	34	U 11	35 35	U 11
N-Nitrosodiphenylamine	NC	NC	NC	NC	NC	340	U	3,400	U	330	U	340	U	340	Ŭ	350	U
Pentachlorophenol	800	2,400	6,700	55,000	800	1,000	U	10,000	U	1,000	U	1,000	U	1,000	U	1,100	U
Phenol	330	100,000	500,000	1,000,000	330	340	U	3,400	U	330	U	340	U	340	U	350	U
Pyrene Total SVOCs	100,000	100,000	500,000	1,000,000	1,000,000	340	U	28,000		330	U	340	U	340	U	350	<u> </u>
Notes: µJ(kg - micrograms per kilogram Residential - Property is zoned Residential al Groundwater SCOs. Commercial - Property is zoned Commercial of Groundwater SCOs. Industrial - Property is zoned Industrial and ru Groundwater SCOs. * - Recovery or RPD exceeds control limits J - Result is less than the RL but greater thar NA - Not analyzed NC - No criterion R - Nondetect sample result rejected after QU SCO - Soil Cleanup Objective	nd results are com and results are co esults are compan or or equal to the M C review.	apared to Unrestrie ompared to Unrest ed to Industrial Us IDL and the conce	tricted Use SCOs, R tricted Use SCOs, te SCOs, Unrestric	esidential Use SC Commercial Use ted Use SCOs, a oximate value.	COs, and Protection of SCOs, and Protection of nd Protection of												
Shading indicates result above SCO. Color i	representing least	stringent SCO ex	ceeded is shown u	nless otherwise n	oted.												

		San	nple ID			VD-3a ((6-8)	VD-3b (1	3-15)	MW2-B1a	(1-4)	MW2-B1b	o (6-8)	DGSUMP1	1 (0.5-1)	SS-01 ((12)	SS-02 (1-	1.5)	SS-02 (7-7.5)	SS-02 (13-13.5)	SS-02 (15-15.5)	SB-01 (0-6)	SB-01 (14-15.5)	SB-02 (0-6)	SB-02 (10-11)
		Lab S	ample ID			20214	1-1	20214	1-3	202842	2-1	20284	2-2	20284	2-3	E1084-	-05	E1084-0	07	E1084-06	E1084-04	E1084-03	F0991-01	F0991-02	F0991-03	F0991-04
		Samp	ling Date			10-03-2	2002	10-03-2	2002	01-02-2	003	01-02-2	2003	01-02-2	2003	07-22-2	2006	07-23-20	007	07-23-2007	07-23-2007	07-23-2007	07-18-2007	07-18-2007	07-18-2007	07-18-2007
		Ň	latrix			Solio	d	Soli	ł	Solid		Solio	d	Soli	d	Sludg	je	Solid		Solid	Solid	Solid	Solid	Solid	Solid	Solid
		Dilutio	on Factor			1		1		1		1		1		1		1		1	1	1	1	1	1	1
		L	Jnits			mg/k	g	mg/k	g	mg/kg	g	mg/k	g	mg/ł	kg	mg/k	g	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Lar	nd Use			Indust	rial	Indust	rial	Industr	ial	Indust	rial	Indust	trial	Industr	rial	Industri	al	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial
METALS AND	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																					
CYANIDE (mg/kg)	Use SCO	SCO	SCO	SCO	SCO	Resu	ult	Resu	ılt	Resu	lt	Resu	ult	Res	ult	Resu	ult	Result	t	Result	Result	Result	Result	Result	Result	Result
Aluminum	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		355		13,800		9,890	9,580	6,910	9,880	7,340	11,100	15,300
Antimony	NC	NC	NC	NC	NC	10.6	U	10.2	U	9.8	U	9.5	U	9.4	U	112	J	0.036	UJ	0.042 UJ	0.042 UJ	0.039 UJ	0.057 UJ	0.053 UJ	0.059 UJ	0.057 UJ
Arsenic	13	16	16	16	16	5.8	J	7.4		5.7	J	5.6	J	3	J	6.1		12.9		3.5	3.8	2.9	6.7 J	3.3 J	3.1 J	5.5 J
Barium	350	350	400	10,000	820	NA		NA		NA		NA		NA		143	J	86.1	J	136 J	47 J	35.8 J	57.6 J	30.8 J	70.4 J	65.9 J
Beryllium	7.2	14	590	2,700	47	1.8	U	0.51	J	0.66	J	0.5	J	1.6	U	0.13	J	0.3		0.26	0.11 J	0.13 J	0.39	0.41	0.38	0.59
Cadmium	2.5	2.5	9.3	60	7.5	2.7	U	2.6	U	2.5	U	2.4	U	2.4	U	6	J	11.6	J	2.4 J	12.2 J	10.2 J	0.36	0.19 J	0.27 J	0.37
Calcium	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		203,000	Α	1,650		1,200	3,310	2,150	5,510	760	14,400	893
Chromium (Total)	30 ⁽¹⁾	36 ⁽¹⁾	$1.500^{(1)}$	6.800 ⁽¹⁾	NC ⁽¹⁾	1.2	J	3.8		5		3.8		14		209	J	32.4	J	23.1 J	33.8 J	18.4 J	16 J	6.9 J	19.4 J	16.9 J
Chromium (Hexavalent)	1	22	400	800	19	NA		NA		NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA	NA
Cobalt	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		0.33	J	7.4	J	7.9 J	17.7 J	113 J	24.9	2.7 J	93.6 J	5.7 J
Copper	50	270	270	10.000	1.720	6.7		9.7		9.5		6.5		13.3		626	J	175	J	70.9 J	140 J	134 J	27.4	6.7	29.2	11.6
Cyanide (Total)	27	27	27	10.000	40	0.515	U	0.524	U	0.538	U	0.517	U	0.533	U	24.1	AA	0.4	J	0.36 J	0.3 J	0.34 J	NA	NA	NA NA	NA J
Iron	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		3,830		17,500		15,900	21,500	12,900	19,100 J	13,100 J	15,100 J	23,600 JAA
Lead	63	400	1,000	3,900	450	3.3	J	4.2	J	6	J	3.2	J	15.4		11,000	JA	145	J	70.9 J	40.4 J	28.7 J	27.9 J	4.7 J	24.7 J	14.4 J
Magnesium	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		115,000	Α	2,940	J	3,300 J	3,880 J	2,580 J	3,320 J	1,920 J	3,990 J	3,210 J
Manganese	1,600	2,000	10,000	10,000	2,000	NA		NA		NA		NA		NA		66.8	J	373	L	347 J	358 J	480 J	339 J	262 J	277 J	788 J
Mercury (Total)	0.18	0.81	2.8	5.7	0.73	2	U	2.1	U	2.1	U	2	U	0.039	J	0.12		0.0072	U	0.0077 U	0.0078 U	0.0076 U	0.007 U	0.0069 U	0.0073 U	0.0071 U
Nickel	30	140	310	10,000	130	2.5	J	3.4		5		3.2	J	10.4		250	J	44.2	J	28.9 J	41.4 J	40.7 J	15.6 J	7.4 J	16.6 J	11.9 J
Potassium	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		501		1,360		2,860	1,790	1,350	1,730	1,700	2,490	1,490
Selenium	3.9	36	1,500	6,800	4	14.5	U	13.9	U	13.4	U	12.9	U	12.9	U	2.3		0.048	U	0.05 U	0.045 U	0.043 U	2	1.5	1.4 J	2.6
Silver	2	36	1,500	6,800	8.3	2.7	U	2.6	U	2.5	U	2.4	U	2.4	U	12.2		0.012	U	0.014 U	0.014 U	0.013 U	0.019 U	0.019 U	0.45 J	0.02 U
Sodium	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA	1	311		150		127	238	177	307	129	526	92.5
Thallium	NC	NC	NC	NC	NC	19.9	U	19.1	U	18.4	U	17.8	U	17.8	U	0.96	J	1.4	J	1.2 J	1.3 J	1.8 J	1.9	1.7	1.7	0.54 J
Vanadium	NC	NC	NC	NC	NC	NA		NA		NA		NA		NA		1.6	J	25	ſ	23.7 J	30 J	17.2 J	24.6 J	12.2 J	28.7 J	29.6 J
Zinc	109	2,200	10,000	10,000	2,480	60.2		80.7		65.5		57		34.8		770	J	511	J	336 J	401 J	289 J	62.3 J	75.2 J	49.4 J	80.6 J

Notes:

Notes: mg/kg - milligrams per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs. Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and Protection of Groundwater SCOs. Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs. (¹⁾ - Trivalent chromium SCO A - Dilution Eactor 1

A - Dilution Factor 1

AA - Dilution Factor 10

AA - Durution Factor T0
B - Analyte detected in laboratory blank sample.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NA - Not analyzed
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R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected.

		San	nple ID			SB-03 (*	1-3)	SB-04 (4	4-5)	SB-04 (8-	9.5)	SB-05 (8	-9)	DUP071	807	SB-06 (1	1-2)	SB-07		TRC-SB1(6-8")	TRC-SB1	(15-17')	TRC-SB	2(6-8")	TRC-SB2((6-8")A	TRC-SB2((14-16')	TRC-SB:	3(2-4")	TRC-SB	3(2-4')
		Lab S	ample ID			F0991-	-05	F0991-	·07	F0991-0	06	F0991-0)8	F0991-	10	F0991-	11	F0991-0	9	460-25491-1	460-25	191-2	460-25	491-3	460-254	91-4	460-254	91-5	460-254	i91-6	460-254	491-7
		Samp	ling Date			07-18-2	2007	07-18-2	007	07-18-20	007	07-18-20	007	07-18-2	007	07-18-20	007	07-18-200	07	04-18-2011	04-18-	2011	04-18-	2011	04-18-2	2011	04-18-2	2011	04-18-2	2011	04-18-2	2011
		M	latrix			Solid	ł	Solid	1	Solid		Solid		Solid		Solid		Solid		Solid	Sol	d	Sol	id	Solio	d	Solio	d	Soli	d	Soli	id
		Dilutio	on Factor			1		1		1		1		1		1		1		4	4		4		4		4		4		4	
		l	Jnits			mg/kg	g	mg/kg	g	mg/kg)	mg/kg		mg/kg	g	mg/kg	g	mg/kg		mg/kg	mg/	٨g	mg/	kg	mg/k	g	mg/k	(g	mg/ł	ιg	mg/l	kg
		Lan	nd Use			Industr	rial	Industr	ial	Industri	ial	Industri	al	Industr	ial	Industr	ial	Industria	al	Residential	Reside	ential	Reside	ential	Resider	ntial	Reside	ntial	Reside	ntial	Reside	Intial
METALS AND	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																								í –			
CYANIDE (mg/kg)	Use SCO	SCO	SCO	SCO	SCO	Resu	ılt	Resu	lt	Result	t	Result	t	Resu	t	Resul	t	Result		Result	Res	ult	Res	ult	Resu	ult	Resu	ult	Res	ult	Res	ult
Aluminum	NC	NC	NC	NC	NC	6,040		8,050		6,540		9,510		11,600		4,090		6,750		8,320	6,800		7,430		8,160		6,160		10,800		13,600	
Antimony	NC	NC	NC	NC	NC	0.058	UJ	0.42	J	0.057	UJ	0.049	UJ	0.048	UJ	0.89	J	0.11	J	2.2 UJ	2.2	UJ	2.2	UJ	2.3	UJ	2.2	UJ	2.4	UJ	2.4	UJ
Arsenic	13	16	16	16	16	1.9	J	3.9	J	5.3	J	1.8	J	1.8	J	1.4	J	1.5	J	4.3	1.5		3.3		3.7		3.1		6.6		4.1	
Barium	350	350	400	10,000	820	75.4	J	127	J	52.2	J	43.3	J	43.8	J	69.1	J	36.2	J	74.4	55.6		112		99.4		43.1	J	72.6		80.0	
Beryllium	7.2	14	590	2,700	47	0.24	J	0.33		0.35		0.37		0.43		0.19	J	0.34		0.55	0.49		0.54		0.56		0.48		0.72		0.72	
Cadmium	2.5	2.5	9.3	60	7.5	0.47		0.28		0.18	J	0.2	J	0.18	J	0.7		0.15	J	1.1 U	1.1	U	0.17	J	1.1	U	1.1	U	1.2	U	1.2	U
Calcium	NC	NC	NC	NC	NC	8,890		10,700		5,370		2,000		1,310		36,100		18,500		22,300	1,440		7,970		10,700		987	J	1,310		1,020	J
Chromium (Total)	30 ⁽¹⁾	36 ⁽¹⁾	1.500 ⁽¹⁾	6.800 ⁽¹⁾	NC ⁽¹⁾	13.7	J	17.1	J	8.4	J	17.8	J	18.3	J	16.5	J	8.2	J	17.1	14		15.3		17.7		19.7		26.4		20.3	
Chromium (Hexavalent)	1	22	400	800	19	NA		NA		NA		NA		NA		NA		NA		NA	NA		NA		NA		NA		2.4	U	NA	
Cobalt	NC	NC	NC	NC	NC	4.5	J	5.7	J	4.6	J	9.8	J	8.6	J	5.3	J	4.6	J	5.2 J	6	J	5.3	J	5.8	J	5.8	J	7.4	J	6.6	J
Copper	50	270	270	10,000	1,720	34		18.8		7.9		17.9		13.7		28		19.5		50.7	9.1		29.9		29.8		10		25.5		5.5	J
Cyanide (Total)	27	27	27	10,000	40	NA		NA		NA		NA		NA		NA		NA		0.56 UA	0.54	UA	0.16	JA	0.59	UA	0.56	UA	0.61	UA	0.61	UA
Iron	NC	NC	NC	NC	NC	14,100	J	10,100	J	11,000	J ,	11,800	J	15,900	J	9,660	J	9,400	J	13,800	11,700		10,900		12,500		11,900		16,000		16,800	
Lead	63	400	1,000	3,900	450	155	JAB	99.6	J	34.5	J	14.3	J	9.3	J	21.6	J	8	J	136	3.8		119		169		6.5		152		9.0	
Magnesium	NC	NC	NC	NC	NC	3,850	J	3,030	J	1,860	J	2,700	J	3,130	J	9,660	J	2290	J	9,720	2,610		3,210		3,080		2,170		2,140		2,390	
Manganese	1,600	2,000	10,000	10,000	2,000	176	J	176	J	183	J	274	J	286	J	134	J	213	J	370	302		197	J	344	J	362		440		256	
Mercury (Total)	0.18	0.81	2.8	5.7	0.73	0.1		0.093		0.0073	U (0.0069	U	0.0063	U	0.0062	U	0.0064	U	0.062 A	0.035	UA	0.15	Α	0.17	Α	0.036	UA	1.7	A	0.096	Α
Nickel	30	140	310	10,000	130	11	J	11.9	J	5.6	J	14.3	J	13.5	J	435	J	11.5	J	12.3	11.3		12.5		14.0		11.6		14.3		11.0	
Potassium	NC	NC	NC	NC	NC	1,180		1,360		1,420		965		929		1680		1340		1,110 UJ	1,090	UJ	1,120	UJ	1,150	UJ	1,120	UJ	1,220	UJ	1,200	UJ
Selenium	3.9	36	1,500	6,800	4	1.7		1.5		1.7		1.7		2		0.066	U	0.4	J	2.2 UR	2.2	UR	2.2	UR	2.3	UR	2.2	UR	2.4	U	2.4	UR
Silver	2	36	1,500	6,800	8.3	0.019	U	0.017	U	0.019	U	0.017	U	0.016	U	15.2		0.017	U	0.22 J	0.18	J	0.33	J	2.3	U	2.2	U	2.4	U	2.4	U
Sodium	NC	NC	NC	NC	NC	297		198		454		112		102		158		226		1,110 UJ	1,090	UJ	1,120	U	71.5	J	1,120	UJ	1,220	UJ	1,200	UJ
Thallium	NC	NC	NC	NC	NC	2.1		1.1		1.4		1.2		1.4		1.3		0.94		2.2 UR	2.2	UR	2.2	UR	2.3	UR	2.2	UR	2.4	U	2.4	UR
Vanadium	NC	NC	NC	NC	NC	17.8	J	22.4	J	11.1	J	21.1	J	23.5	J	14.5	J	12	J	22.5	18.7		20.5		22.9		19.2		31.5		28.7	
Zinc	109	2,200	10,000	10,000	2,480	110	J	117	J	77.8	J	38	J	31.3	J	46.3	J	39.5	J	131	28.5		161		145		33.1		123		35.1	

Notes:

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		Sam	nple ID			TRC-SB3	8(4-6')	TRC-SB4	12-14")	TRC-SB4((10-12')	TRC-SB5	5(6-8")	TRC-SB5(10-12')	TRC-SB6	(6-8")	TRC-SB6(12-14')	TRC-SB7(1	11-13')	TRC-SB8(13.	.5-15.5')	TRC-SB9	(5-7')	TRC-SB10	11-13')	TRC-SB11(€	-8')	TRC-SB12	(5-7')
		Lab Sa	ample ID			460-254	91-8	460-255	517-1	460-255	517-2	460-255	517-3	460-255	17-4	460-255	17-5	460-255	17-6	460-2788	35-1	460-2788	35-2	460-279	83-1	460-278	85-3	460-27885	4	460-2788	35-5
		Sampl	ling Date			04-18-2	2011	04-19-2	2011	04-19-2	2011	04-19-2	2011	04-19-2	011	04-19-2	011	04-19-2	2011	06-20-20	011	06-20-20	011	06-22-2	011	06-20-2	011	06-20-201	(06-20-20	ງ11
		M	atrix			Solid	4	Soli	d	Soli	d	Soli	d	Solid		Solid	ł	Solio	d	Solid		Solid		Solic		Solic		Solid		Solid	
		Dilutio	n Factor			4		4		4		4		4		4		4		4		20		10		4		10		4	
		U	Inits			mg/k	g	mg/l	g	mg/k	g	mg/k	٨g	mg/k	g	mg/k	g	mg/k	g	mg/kg	g	mg/kg	3	mg/k	g	mg/k	g	mg/kg		mg/kç	J
		Lan	d Use			Resider	ntial	Reside	ntial	Reside	ntial	Comme	ercial	Comme	rcial	Comme	rcial	Comme	ercial	Industr	ial	Industri	ial	Industr	ial	Industr	ial	Industrial		Industri	al
METALS AND	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																										
CYANIDE (mg/kg)	Use SCO	SCO	SCO	SCO	SCO	Resu	ılt	Res	ult	Resu	ult	Resu	ult	Resu	lt	Resu	lt	Resu	ult	Resul	lt	Result	t	Resu	lt	Resu	lt	Result		Resul	.t
Aluminum	NC	NC	NC	NC	NC	10,400		9,880		4,120		5,230		5,390		6,370		2,760		4,290	J	22,300	J	4,870	J	4,240	J	7,560	J	6,310	J
Antimony	NC	NC	NC	NC	NC	2.4	U	2.1	UJ	2.1	UJ	2.2	UJ	2.2	UJ	2.1	UJ	2.0	UJ	2	UJ	10.6	UJ	4.9	UJ	1.9	UJ	5	IJ	2	UJ
Arsenic	13	16	16	16	16	2.2		5.7		11.4		2.3		2.1		2.1		4.3		6.9	J	5.3	UJ	8.7	J	5.5	J	5.2	J	9.1	J
Barium	350	350	400	10,000	820	35.3	J	40.6	J	44.0		59.3		106		83.0		17.0	J	24.4	J	43.4	J	16.5	J	25.2	J	69.4	J	43	ı —
Beryllium	7.2	14	590	2,700	47	0.61		0.30	J	0.42	U	0.44	U	0.44	U	0.42	U	0.39	U	0.2	J	2.2		0.99	U	0.39	U	0.99	U	0.39	J
Cadmium	2.5	2.5	9.3	60	7.5	1.2	U	0.33	J	0.26	J	0.35	J	3.0		0.28	J	0.98	U	1	U	5.3	U	2.5	U	0.97	U	2.5	U	0.99	U
Calcium	NC	NC	NC	NC	NC	1,060	J	1,600		507	J	20,200		26,300		67,400	AA	1,150		849	J	3,010	J	1,320	J	796	J	50,300		37,600	1
Chromium (Total)	30 ⁽¹⁾	36 ⁽¹⁾	1,500 ⁽¹⁾	6,800 ⁽¹⁾	NC ⁽¹⁾	22.9		14.2		2.0	J	15.3		14.7		33.6		2.3		2.5		251		4.9	U	3.4		9.6		6.9	1
Chromium (Hexavalent)	1	22	400	800	19	2.4	U	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	ı
Cobalt	NC	NC	NC	NC	NC	8.1	J	6.6	J	1.5	J	4.7	J	5.1	J	6.0	J	9.8	U	10	U	30.1	J	24.7	U	1.5	J	3.6	J	3.5	J
Copper	50	270	270	10,000	1,720	12.8		12.9		22.2		24.3		26.2		24.0		4.0	J	3	J	26.6	UJ	4.9	J	4.1	J	10.1	J	10.1	J
Cyanide (Total)	27	27	27	10,000	40	0.61	UA	0.57	UA	0.53	UA	0.37	JA	0.17	JA	0.17	JA	0.53	UA	0.52	UA	0.54	UA	0.52	UA	0.52	UA	0.53	JA	0.53	UA
Iron	NC	NC	NC	NC	NC	15,000		17,600		10,100		11,500		21,600		12,700		6,820		10,100		62,500	J	13,300		9,210		14,500		57,800	AA
Lead	63	400	1,000	3,900	450	11.3		9.0		3.4		52.2		131		44.6		3.0		4.3	J	5.3	UJ	3.3	J	2.9	J	61	J	20.1	J
Magnesium	NC	NC	NC	NC	NC	2,940		2,020		455	J	4,810		8,840		6,110		538	J	469	J	23,400	J	438	J	758	J	4,620	J	4,470	J
Manganese	1,600	2,000	10,000	10,000	2,000	212		230		241		236		275		203		142		225		1,370		246		188		338		377	1
Mercury (Total)	0.18	0.81	2.8	5.7	0.73	0.050	Α	0.051	Α	0.034	UA	0.15	Α	0.13	Α	0.12	Α	0.033	UA	0.032	UA	0.035	UA	0.033	UA	0.034	UA	0.065	A	0.040	Α
Nickel	30	140	310	10,000	130	13.7		9.2		4.0	J	13.0		13.9		21.0		1.7	J	3.1	J	119		1.7	J	3.6	J	8.3	J	7.2	J
Potassium	NC	NC	NC	NC	NC	1,180	UJ	632	J	879	J	1,370	J	1,340	J	2,510		670	J	956	J	17,100		1,080	J	784	J	1,640	J	1,200	ı —
Selenium	3.9	36	1,500	6,800	4	2.4	UR	2.1	U	2.1	U	2.2	U	2.2	U	2.1	U	2.0	U	2	UJ	10.6	UJ	4.9	U	1.9	UJ	5	JJ	2	UJ
Silver	2	36	1,500	6,800	8.3	2.4	U	2.1	U	2.1	U	2.2	U	2.2	U	2.1	U	2.0	U	2	UJ	10.6	UJ	4.9	UJ	1.9	UJ	5	ΠJ	2	UJ
Sodium	NC	NC	NC	NC	NC	1,180	UJ	107	J	65.8	J	141	J	221	J	145	J	60.3	J	99.6	J	5,320	U	2,470	U	82	J	2,490	U	127	J
Thallium	NC	NC	NC	NC	NC	2.4	UR	2.1	U	2.1	U	2.2	U	2.2	U	2.1	U	2.0	U	2	U	10.6	U	4.9	U	1.9	U	5	U	2	U
Vanadium	NC	NC	NC	NC	NC	29.5		22.8		12.4		17.2		17.5		23.2	J	3.4	J	4.7	J	130		3.9	J	6.1	J	15.9	J	15.9	
Zinc	109	2,200	10,000	10,000	2,480	34.4		35.6		35.5		53.1		1,590		57.8		27.1		51.4		258		68.3		39		76.7	J	68.5	

Notes:

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A - Dilution Factor 1

- AA Dilution Factor 10

AA - Durution Factor T0
B - Analyte detected in laboratory blank sample.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NA - Not analyzed
NC - No criterion
R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective U - Analyte was not detected.

		San	nple ID			TRC-SB1	3(6-8')	TRC-SB14	1(6-8')	TRC-SB16	(10.5-12.5') TRC-SB17((10-12')	TRC-SB18	(9-11')	TRC-SB19	(8.5-10.5')	TRC-SB20(7-9')	TRC-SB21(9-1	I) TRC-S	B22(16-1	8') TRC-	SB23(12-14')	TRC-SB23	(12-14')A	TRC-SB24	(15-17')	TRC-SB25((14-16')
		Lab S	ample ID			460-278	385-6	460-278	35-7	460-27	7885-9	460-2792	26-1	460-2792	26-2	460-27	926-3	460-27926-4	460-27983-2	460	-27926-5	46	0-27926-6	460-27	926-8	460-279	26-7	460-2798	83-8
		Samp	ling Date			06-20-2	2011	06-20-2	011	06-20	-2011	06-21-2	011	06-21-2	011	06-21	-2011	06-21-2011	06-22-2011	06	21-2011	06	6-21-2011	06-21-	2011	06-21-2	2011	06-22-20	:011
		M	latrix			Soli	d	Solid		So	olid	Solid	ł	Solid		So	lid	Solid	Solid		Solid		Solid	Sol	id	Soli	b	Solid	Ł
		Dilutio	on Factor			4		4		4	1	4		4		4	ļ	4	20		20		20	10)	20		20	
		L	Jnits			mg/k	kg	mg/k	g	mg	/kg	mg/kg	g	mg/kg	3	mg	/kg	mg/kg	mg/kg		mg/kg		mg/kg	mg/	kg	mg/k	.g	mg/kr	.g
		Lan	nd Use			Indust	trial	Industr	ial	Indu	strial	Industr	rial	Industr	ial	Indus	strial	Industrial	Industrial	lr	dustrial	l	ndustrial	Indus	trial	Indust	rial	Industr	rial
METALS AND	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																						ļ	1	
CYANIDE (mg/kg)	Use SCO	SCO	SCO	SCO	SCO	Resu	ult	Resu	lt	Re	sult	Resu	lt	Resu	t	Res	sult	Result	Result		Result		Result	Res	ult	Resu	ult	Resul	ult
Aluminum	NC	NC	NC	NC	NC	9,090	J	8,530	J	3,890	J	7,840		7,810		8,340		7,410	18,600 J	8,8	70	6,1	150 J	4,520	J	6,280		24,500	J
Antimony	NC	NC	NC	NC	NC	2	UJ	2.2	UJ	2	UJ	2.1	UJ	2.1	UJ	2	UJ	2.1 UJ	11 U	J 9.	9 U	J 9.	.9 UJ	5	UJ	9.9	UJ	10.9	UJ
Arsenic	13	16	16	16	16	4.6	J	6.4	J	2.5	J	4.3	J	3.7		4.8	J	4.5 J	13.8 J	22.	9 J	18	3.9 J	15.4	J	12.3	J	19.8	J
Barium	350	350	400	10,000	820	63.5		63		7.6	J	42.5		86.1		131		39.8 J	74.1 J	24	8 .	22	2.5 J	11.9	J	35	J	124	J
Beryllium	7.2	14	590	2,700	47	0.32	J	0.32	J	0.41	U	0.22	J	0.19	J	0.23	J	0.23 J	1.1 J	2	ι	J 2	2 U	1	U	2	U	2.2	U
Cadmium	2.5	2.5	9.3	60	7.5	0.98	U	1.1	U	1	U	1	U	1.1	U	0.22	J	1 U	5.5 L	5	ι	J 4.	.9 U	2.5	U	4.9	U	5.4	U
Calcium	NC	NC	NC	NC	NC	47,700		6,230		1,140		5,210		35,100		11,000		28,600	3,020 J	2,5	30 .	1,7	760 J	1,450	J	1,030	J	2,060	J
Chromium (Total)	30 ⁽¹⁾	36 ⁽¹⁾	1,500 ⁽¹⁾	6,800 ⁽¹⁾	NC ⁽¹⁾	14.2		11.3		3.4		11.7		20.3		24.8		8.9	34.6	9.	9 ι	J 9.	.9 U	5	U	9.9	U	52.5	
Chromium (Hexavalent)	1	22	400	800	19	NA		NA		NA		NA		NA		NA		NA	NA	NA	۱.	N	IA	NA		NA		NA	
Cobalt	NC	NC	NC	NC	NC	4.5	J	3.9	J	1.3	J	3.6	J	3.9	J	5.8	J	3.1 J	25.5 J	49	7 L	J 49	9.4 U	24.9	U	49.3	U	27.1	J
Copper	50	270	270	10,000	1,720	12.3	J	12.6	J	14.8	J	8.5	J	19.9	J	40.1	ſ	10.9 J	33.7 J	36	3 .	1	5 J	8.6	J	24.7	UJ	56.1	J
Cyanide (Total)	27	27	27	10,000	40	0.52	UA	0.55	UA	0.52	UA	0.55	UA	0.53	UA	0.54	UA	0.53 UA	0.56 U	A 0.2	2 J.	A 0.:	51 UA	0.52	UA	0.52	UA	0.28	JA
Iron	NC	NC	NC	NC	NC	13,800		13,900		7,920		12,100		13,200		16,700		13,600	61,500	23,2	00	15,4	400 J	10,900	J	16,600		81,800	
Lead	63	400	1,000	3,900	450	28	J	42.1	J	3	J	17.3	J	37.9		169	J	14.7 J	4.3 J	9.	9 .	7.	.3 J	5.6	J	8.5	J	3.7	J
Magnesium	NC	NC	NC	NC	NC	4,700	J	3,810	J	745	J	2,610	J	5,790	J	5,440		2,060 J	11,800 J	38	7 .	96	68 J	607	J	323	J	14,300	J
Manganese	1,600	2,000	10,000	10,000	2,000	285		202		130		208		238		318		245	978	49	7	29	95 J	204	J	376		1,030	
Mercury (Total)	0.18	0.81	2.8	5.7	0.73	0.025	JA	0.077	Α	0.041	Α	0.033	UA	0.056	Α	0.22	A	0.094 A	0.036 U/	A 0.0	33 U	A 0.0	033 UA	0.031	UA	0.034	UA	0.037	UA
Nickel	30	140	310	10,000	130	11.1		9.1		3	J	7.3	J	10.9		16.6		7.5 J	28 J	8.	3 .	7.	.4 J	3.8	J	3	J	33.2	J
Potassium	NC	NC	NC	NC	NC	1,100		1,250		942	J	944	J	1,440		1,700		1,080	13,100	2,1	10 .	1,5	540 J	1,260	J	1,370	J	17,600	
Selenium	3.9	36	1,500	6,800	4	2	U	2.2	UJ	2	UJ	2.1	UJ	2.1	UJ	2	UJ	2.1 UJ	11 U	J 9.	9 U	J 9.	.9 UJ	5	UJ	9.9	UJ	10.9	UJ
Silver	2	36	1,500	6,800	8.3	2	U	2.2	UJ	2	UJ	2.1	UJ	2.1	UJ	2	UJ	2.1 UJ	11 U	J 9.	9 U	J 9.	.9 UJ	5	UJ	11.5	J	10.9	UJ
Sodium	NC	NC	NC	NC	NC	127	J	80.5	J	276	J	122	J	451	J	307	J	138 J	5,510 L	4,9	70 L	J 4,9	940 U	154	J	4,930	U	1,760	J
Thallium	NC	NC	NC	NC	NC	2	U	2.2	U	2	U	2.1	U	2.1	U	2	U	2.1 U	11 L	9.	9 ι	J 9.	.9 U	5	U	9.9	U	10.9	U
Vanadium	NC	NC	NC	NC	NC	18.2		17.5		6.7	J	15.4		20.7		26.2		14.2	181	3.	3 .	8	.6 J	5.6	J	4.6	J	199	
Zinc	109	2,200	10,000	10,000	2,480	58.4		97.4		31.3		62		85.4		166		58.5	152	23	2	12	26	147		419		137	

Notes:

Notes: mg/kg - milligrams per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs. Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and Protection of Groundwater SCOs. Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs. (¹⁾ - Trivalent chromium SCO A - Dividing Eactor 1

A - Dilution Factor 1

- AA Dilution Factor 10

AA - Durution Factor T0
B - Analyte detected in laboratory blank sample.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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SCO - Soil Cleanup Objective

U - Analyte was not detected.

		Sam	Sample ID				10.5-12.5')	TRC-SB27	'(6-8')	TRC-SB28	(9-11')	TRC-SB29	(4-6')	TRC-SB30	0(6-8')	TRC-SB31((11-13')	TRC-SB3	(11-13')A	TRC-SB32	(8-10')
	Lab Sample ID						983-3	460-2798	33-4	460-2798	83-5	460-2798	33-6	460-2792	26-9	460-2792	26-10	460-27	926-11	460-279	83-7
	Sampling Date							06-22-2	D11	06-22-20	011	06-22-20)11	06-21-2	011	06-21-2	011	06-21	-2011	06-22-2	.011
		M	atrix			So	lid	Solid		Solid		Solid		Solid		Solic		So	lid	Solic	Ł
		Dilutio	n Factor			4		10		10		4		10		10		4		4	
		U	nits			mg	/kg	mg/kg]	mg/kg	g	mg/kg]	mg/kg	g	mg/k	g	mg	/kg	mg/k	g
		Lan	d Use			Indus	strial	Industr	ial	Industr	ial	Industri	al	Industr	ial	Industr	ial	Indus	strial	Industr	rial
METALS AND	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																
CYANIDE (mg/kg)	Use SCO	SCO	SCO	SCO	SCO	Res	sult	Resu	t	Resu	lt	Resul	t	Resu	lt	Resu	lt	Res	sult	Resu	ilt
Aluminum	NC	NC	NC	NC	NC	3,120	J	6,040	J	3,550	J	6,680	J	3,640		4,880	J	9,860	J	5,450	J
Antimony	NC	NC	NC	NC	NC	2	UJ	5.2	UJ	5	UJ	2	UJ	5	UJ	5.1	UJ	1.9	UJ	2.1	UJ
Arsenic	13	16	16	16	16	4.9	J	8.2		9.4	J	6.7	J	6.1	J	5.4	J	2	_	3.4	J
Barium	350	350	400	10,000	820	23.4	J	52.7	J	29.4	J	44.5		24.2	J	55.4	J	52.4		31	J
Beryllium	7.2	14	590	2,700	47	0.4	U	1	U	1	U	0.22	J	1	U	1	U	0.38	U	0.42	U
Cadmium	2.5	2.5	9.3	60	7.5	0.99	U	2.6	U	2.5	U	1	U	2.5	U	2.6	U	0.95	U	1	U
Calcium	NC	NC	NC	NC	NC	1,060		1,190	J	721	J	5,420		1,600	J	1,200	J	1,490		4,120	
Chromium (Total)	30 ⁽¹⁾	36 ⁽¹⁾	1,500 ⁽¹⁾	6,800 ⁽¹⁾	NC ⁽¹⁾	2	U	5.2	U	5	U	6.3		5	U	5.1	UJ	30.5	J	6.1	
Chromium (Hexavalent)	1	22	400	800	19	NA		NA		NA		NA		NA		NA		NA		NA	
Cobalt	NC	NC	NC	NC	NC	9.9	U	25.8	U	25.2	U	2.9	J	24.9	U	25.6	U	6.7	_	1.9	J
Copper	50	270	270	10,000	1,720	3.4	J	9.8	J	4.4	J	12.3	J	12.5	UJ	7.8	J	9.5	_	31.7	J
Cyanide (Total)	27	27	27	10,000	40	0.51	UA	0.52	UA	0.51	UA	0.51	UA	0.5	UA	0.51	UA	0.14	JA	0.33	JA
Iron	NC	NC	NC	NC	NC	10,100		16,100		8,620		13,300		12,600		13,300		17,500		14,000	
Lead	63	400	1,000	3,900	450	1.9	J	9.5		3.9	J	6.5	J	2.5	J	2.8	J	2.6	_	16.3	J
Magnesium	NC	NC	NC	NC	NC	165	J	713	J	246	J	1,910	J	155	J	259	J	6,080	_	1,370	J
Manganese	1,600	2,000	10,000	10,000	2,000	200		312		167		283		219		237	J	353	J	216	
Mercury (Total)	0.18	0.81	2.8	5.7	0.73	0.031	UA	0.034	UA	0.033	UA	0.033	UA	0.033	UA	0.034	UA	0.033	UA	0.053	Α
Nickel	30	140	310	10,000	130	7.9	U	3	J	20.1	U	6.6	J	19.9	U	4.2	J	19.3		9.4	
Potassium	NC	NC	NC	NC	NC	940	J	1,650	J	599	J	1,230		1,120	J	1,040	J	1,520		1,200	
Selenium	3.9	36	1,500	6,800	4	2	UJ	5.2	UJ	5	UJ	2	UJ	5	UJ	5.1	UJ	1.9	UJ	2.1	UJ
Silver	2	36	1,500	6,800	8.3	2	UJ	5.2	UJ	5	UJ	2	UJ	5	UJ	5.1	UJ	1.9	UJ	4.2	J
Sodium	NC	NC	NC	NC	NC	93.4	J	2,580	U	2,520	U	147	J	2,490	U	237	J	387	J	270	J
Thallium	NC	NC	NC	NC	NC	2	U	5.2	U	5	U	2	U	5	U	5.1	U	1.9	U	2.1	U
Vanadium	NC	NC	NC	NC	NC	9.9	U	6.3	J	3	J	12.2		24.9	U	2.9	J	36.2	J	8.3	J
Zinc	109	2,200	10,000	10,000	2,480	52.6		75.4		35.6		48.8		61.5		110		211	J	77.5	

Notes:

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A - Dilution Factor 1

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AA - Durution Factor T0
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R - Nondetect sample result rejected after QC review.

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		Sample	ID			TRC-SB1	(6-8")	TRC-SB1	(15-17')	TRC-SB2(6-8")	TRC-SB2	2(6-8")A	TRC-SB2	2(14-16')	TRC-SE	3(2-4")	TRC-SB3	6(2-4')	TRC-SB	3(4-6')	TRC-SB4	(12-14")	TRC-SB4	(10-12')	TRC-SB5	5(6-8")	TRC-SB5	5(10-12')
		Lab Samp	le ID			460-254	91-1	460-254	491-2	460-25491-3	460-25	491-4	460-25	491-5	460-25	491-6	460-254	91-7	460-254	491-8	460-25	517-1	460-25	517-2	460-255	17-3ء	460-25	517-4
		Sampling	Date			04-18-	11	04-18	-11	04-18-11	04-18	3-11	04-18	3-11	04-18	8-11	04-18-	11	04-18	-11	04-19	9-11	04-19	-11	04-19	-11	04-19	9-11
		Matrix	(Solid	ł	Soli	d	Solid	So	lid	So	id	So	lid	Solid	4	Soli	id	So	lid	Soli	d	Soli	d	Sol	lid
		Dilution Fa	actor			1		1		1	1		1		1		1		1		1		1		1		1	1
		Units				µa/k	a	ua/k	a	ua/ka	uq/	ka	μα/	ka	uq/	ka	ug/k	a	ua/k	a	uq/	ka	ua/k	a	ua/k	a	μα/ł	ka
		Land U	se			Reside	ntial	Reside	ential	Residential	Reside	ential	Reside	ential	Resid	ential	Resider	ntial	Reside	ential	Resid	ential	Reside	ential	Comme	ercial	Comm	iercial
POLYCHLORINATED	Unrestricted	Residential	Commercial	Industrial	Protection of																							
BIPHENYLS (PCBs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Resu	lt	Res	ult	Result	Res	ult	Res	ult	Res	sult	Resu	lt	Resu	ult	Res	sult	Res	ult	Resu	ult	Res	sult
Aroclor 1016	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	82	U	82	U	81	U	76	U	71	U	73	U	74	U
Aroclor 1221	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	82	U	82	U	81	U	76	U	71	U	73	U	74	U
Aroclor 1232	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	82	U	82	U	81	U	76	U	71	U	73	U	74	U
Aroclor 1242	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	82	U	82	U	81	U	76	UJ	71	UJ	73	UJ	74	UJ
Aroclor 1248	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	82	U	82	U	81	U	76	UJ	71	UJ	73	UJ	74	UJ
Aroclor 1254	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	82	U	82	U	81	U	76	UJ	71	UJ	73	UJ	74	UJ
Aroclor 1260	NC	NC	NC	NC	NC	52	J	18	J	76 UJ	85	J	56	J	82	U	47	J	81	U	76	UJ	71	UJ	740	J	100	J
Aroclor 1262	NC	NC	NC	NC	NC	74	U	73	U	830 J	79	UJ	75	U	82	U	82	U	800	J	76	UJ	71	UJ	73	UJ	74	UJ
Aroclor 1268	NC	NC	NC	NC	NC	74	U	73	U	76 U	79	U	75	U	270	J	82	U	81	U	76	UJ	71	UJ	73	UJ	74	UJ
Total PCBs	100	1,000	1,000	25,000	3,200	52	J	18	J	830	85		56	J	270		47	J	800		0		0		740		100	
Notes:																												

yg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs.

Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of

Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected.

			1.00																								
		Sample	: ID			TRC-SB6	6(6-8")	TRC-SB6	(12-14')	TRC-SB7(11-13')	TRC-SB8(13.5	5-15.5')	TRC-S	SB9(5-7')	TRC-SB1	D(11-13')	TRC-SB1	1(6-8')	TRC-SB1	2(5-7')	TRC-SB1	13(6-8')	TRC-SB1	4(6-8')	TRC-SB16(10	.5-12.5')
		Lab Samp	ole ID			460-255	517-5	460-25	517-6	460-278	85-1	460-2788	5-2	460-2	27983-1	460-27	885-3	460-278	85-4	460-278	85-5	460-27	885-6	460-278	385-7	460-2788	35-9
		Sampling	Date			04-19-	-11	04-19	-11	06-20-	-11	06-20-1	1	06-	22-11	06-20)-11	06-20	-11	06-20-	·11	06-20)-11	06-20	-11	06-20-1	1
		Matrix	x			Soli	d	Sol	d	Soli	d	Solid		S	olid	Sol	id	Soli	d	Solid	ł	Sol	id	Soli	d	Solid	
Dilution Factor					1		1		1		1			1	1		1		1		1		1		1		
Units					μq/k	q	μq/ł	q	μg/k	q	μg/kg		μ	a/kg	μq/	٨q	μg/k	q	μg/k	q	μq/ł	q	μq/k	q	μg/kg	ī	
		Land U	se			Comme	ercial	Comm	ercial	Indust	rial	Industria	l	Indu	ustrial	Indus	trial	Indust	rial	Indust	rial	Indus	trial	Indus	trial	Industri	al
POLYCHLORINATED	Unrestricted	Residential	Commercial	Industrial	Protection of																						
BIPHENYLS (PCBs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Resu	ult	Res	ult	Resu	ılt	Result		Re	esult	Res	ult	Resu	ılt	Resu	ılt	Res	ult	Res	ult	Result	t
Aroclor 1016	NC	NC	NC	NC	NC	76	U	71	U	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1221	NC	NC	NC	NC	NC	76	U	71	U	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1232	NC	NC	NC	NC	NC	76	U	71	U	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1242	NC	NC	NC	NC	NC	76	UJ	71	UJ	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1248	NC	NC	NC	NC	NC	76	UJ	71	UJ	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1254	NC	NC	NC	NC	NC	76	UJ	71	UJ	69	U	72	U	70	U	70	U	71	U	70	U	70	U	83		70	U
Aroclor 1260	NC	NC	NC	NC	NC	55	J	71	UJ	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1262	NC	NC	NC	NC	NC	76	UJ	71	UJ	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Aroclor 1268	NC	NC	NC	NC	NC	76	UJ	71	UJ	69	U	72	U	70	U	70	U	71	U	70	U	70	U	73	U	70	U
Total PCBs	100	1,000	1,000	25,000	3,200	55	J	0		0		0		0		0		0		0		0		83		0	
Notes:																											

yg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs.

Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected.

	Sample ID						TRC-SB	18(9-11')	TRC-SB19	(8.5-10.5')	TRC-SB	20(7-9')	TRC-SE	B21(9-11')	TRC-SB22(16-18')	TRC-SB23(12-14')	TRC-SB2	23(12-14')A	TRC-SB	24(15-17')	TRC-SB2	5(14-16')	TRC-SB26	(10.5-12.5')
		Lab Sampl	e ID			460-27926-1	460-27	926-2	460-27	926-3	460-27	926-4	460-2	27983-2	460-2792	26-5	460-27926-6	460-2	27926-8	460-2	27926-7	460-27	983-8	460-27	/983-3
		Sampling I	Date			06-21-11	06-2	1-11	06-2	1-11	06-21	-11	06-	22-11	06-21-	11	06-21-11	06-	21-11	06-3	21-11	06-22	2-11	06-2	2-11
		Matrix				Solid	So	lid	So	lid	So	id	S	Solid	Solid		Solid	S	olid	S	olid	Sol	id	So	lid
Dilution Factor						1	1		1		1			1	1		1		1		1	1		1	1
Units						μg/kg	μg/	′kg	μg/	kg	μg/	kg	μ	g/kg	μg/kg	1	μg/kg	μ	g/kg	μ	g/kg	μg/'	kg	μg/	/kg
Land Use						Industrial	Indu	strial	Indus	strial	Indus	trial	Ind	ustrial	Industr	ial	Industrial	Ind	ustrial	Indu	ustrial	Indus	strial	Indu	strial
POLYCHLORINATED	Unrestricted	Residential	Commercial	Industrial	Protection of																				
BIPHENYLS (PCBs) (µg/kg)	YCHLORINATED Unrestricted Residential Commercial Industrial Protection of IENYLS (PCBs) (µg/kg) Use SCO SCO SCO Groundwater S						Res	sult	Res	sult	Res	ult	Re	esult	Resu	t	Result	Re	esult	Re	esult	Res	ult	Res	sult
Aroclor 1016	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	U	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1221	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	U	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1232	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	U	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1242	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	U	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1248	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	U	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1254	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	UR	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1260	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	UR	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1262	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	UR	69	U	69 U	69	U	69	U	76	U	68	U
Aroclor 1268	NC	NC	NC	NC	NC	73 U	71	U	72	U	71	U	75	UR	69	U	69 U	69	U	69	U	76	U	68	U
Total PCBs	100	1,000	1,000	25,000	3,200	0	0		0		0		75	UR	0		0	0		0		0		0	
Notes:																									

yg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs.

Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of

Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected.

		Sample	ID			TRC-SE	327(6-8')	TRC-SB	28(9-11')	TRC-SE	329(4-6')	TRC-SE	330(6-8')	TRC-SB3	31(11-13')	TRC-SB3	81(11-13')A	TRC-SB	32(8-10')
		Lab Samp	le ID			460-2	7983-4	460-2	7983-5	460-2	7983-6	460-2	7926-9	460-27	7926-10	460-27	7926-11	460-27	7983-7
		Sampling	Date			06-2	22-11	06-2	2-11	06-2	22-11	06-2	21-11	06-2	21-11	06-2	21-11	06-2	2-11
		Matrix				So	olid	S	olid	So	olid	Sc	olid	Sc	blid	S	olid	Sc	olid
	Dilution Factor						1		1		1		1		1		1		1
	Units					μg	/kg	μ	/kg	μg	/kg	μg	/kg	μg	/kg	μ	j/kg	μg	/kg
	Land Use					Indu	ıstrial	Indu	strial	Indu	strial	Indu	strial	Indu	Istrial	Indu	ustrial	Indu	strial
POLYCHLORINATED	Unrestricted	Residential	Commercial	Industrial	Protection of														
BIPHENYLS (PCBs) (µg/kg)	Use SCO	SCO	SCO	SCO	Groundwater SCO	Re	Result		sult	Re	sult	Re	sult	Re	sult	Re	esult	Re	sult
Aroclor 1016	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1221	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1232	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1242	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1248	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1254	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1260	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1262	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Aroclor 1268	NC	NC	NC	NC	NC	70	U	69	U	69	U	67	U	68	U	69	U	72	U
Total PCBs	100 1,000 1,000 25,000 3,200		3,200	0		0		0		0		0		0		0			
NL /																			

Notes:

yg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs.

Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of

Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected.

								-		-			-		-												
		Sa	mple ID			TRC-SB1	(6-8")	TRC-SB1(15-17')	TRC-SB2	(6-8")	TRC-SB2(6-8")A	TRC-SB2(14-1	6')	TRC-SB3(2	2-4")	TRC-SB3	(2-4')	TRC-SB3	8(4-6')	TRC-SB4(1	2-14")	TRC-SB4	(10-12')	TRC-SE	35(6-8")
		Lab S	Sample ID			460-254	91-1	460-2549	91-2	460-254	91-3	460-2549	91-4	460-25491-5	5	460-25491	1-6	460-2549	91-7	460-254	91-8	460-255	17-1	460-25	517-2	460-25	517-3
		Samp	oling Date			04-18-	11	04-18-	11	04-18-	11	04-18-	11	04-18-11		04-18-1	1	04-18-1	11	04-18-	11	04-19-	11	04-19	<i>i</i> -11	04-1	9-11
		Ν	<i>N</i> atrix			Solic	ł	Solid	1	Solic		Solid	1	Solid		Solid		Solid		Solio	ł	Solid		Sol	d	So	lid
		Diluti	on Factor			1		1		1		1		1		1		1		1		1		1		1	1
		I	Units			μg/kg	g	μg/kg	3	μg/kg	3	μg/kg	3	μg/kg		μg/kg		μg/kg	1	μg/kg	g	μg/kg	1	μg/ł	g	μg/	kg
		La	nd Use			Resider	ntial	Resider	ntial	Resider	ntial	Resider	ntial	Residential		Residenti	ial	Residen	ntial	Resider	ntial	Resider	itial	Reside	Intial	Comm	rcial
	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																				i		
PESTICIDES (µg/kg)	Use SCO	SCO	SCO	SCO	SCO	Resu	lt	Resu	lt	Resu	lt	Resu	lt	Result		Result		Resul	t	Resu	lt	Resu	t	Res	ult	Res	sult
4,4'-DDD	3.3	2,600	92,000	180,000	14,000	4.4	J	7.3	U	15		6.0	J	7.5 l	J	6.8	J	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
4,4'-DDE	3.3	1,800	62,000	120,000	17,000	7.5	U	7.3	U	5.5	J	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
4,4'-DDT	3.3	1,700	47,000	94,000	136,000	3.8	J	7.3	U	8.2		8.9		7.5 l	J	13		8.2	U	8.1	U	7.6	U	7.1	U	59	
Aldrin	5	19	680	1,400	190	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
alpha-BHC	20	97	3,400	6,800	20	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
alpha-Chlordane	94	910	24,000	47,000	2,900	7.5	U	7.3	U	5.9	J	7.9	U	7.5 l	J	8.2	U	11		7.6	J	7.6	U	7.1	U	7.3	U
beta-BHC	36	72	3,000	14,000	90	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Chlordane	NC	NC	NC	NC	NC	75	U	73	U	76	U	79	U	75 l	J	82	U	72	J	81	U	76	U	71	U	73	U
delta-BHC	40	100,000	500,000	1,000,000	250	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Dieldrin	5	39	1,400	2,800	100	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	6.6	J	8.2	U	8.1	U	7.6	U	7.1	U	7.8	
Endosulfan I	2,400	4,800	200,000	920,000	102,000	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Endosulfan II	2,400	4,800	200,000	920,000	102,000	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Endosulfan sulfate	2,400	4,800	200,000	920,000	1,000,000	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Endrin	14	2,200	89,000	410,000	60	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	4.8	J	8.2	U	8.1	U	7.6	U	7.1	U	3.9	J
Endrin aldehyde	NC	NC	NC	NC	NC	3.9	J	7.3	U	7.6	U	7.9	U	7.5 l	J	8.1	J	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Endrin ketone	NC	NC	NC	NC	NC	12		4.6	J	8.0		15		7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	19	
gamma-BHC (Lindane)	100	280	9,200	23,000	100	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
gamma-Chlordane	NC	NC	NC	NC	NC	7.5	U	7.3	U	6.2	J	7.9	U	7.5 l	J	8.2	U	7.6	J	8.1	U	7.6	U	7.1	U	7.3	U
Heptachlor	42	420	15,000	29,000	380	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Heptachlor epoxide	NC	NC	NC	NC	NC	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Methoxychlor	NC	NC	NC	NC	NC	7.5	U	7.3	U	7.6	U	7.9	U	7.5 l	J	8.2	U	8.2	U	8.1	U	7.6	U	7.1	U	7.3	U
Silvex (2,4,5-TP)	3,800	58,000	500,000	1,000,000	3,800	19	U	19	U	19	U	20	U	19 l	J	21	U	21	U	21	U	19	U	18	U	19	U
Toxaphene	NC	NC	NC	NC	NC	75	U	73	U	76	U	79	U	75 l	J	82	U	82	U	81	U	76	U	71	U	73	U

Notes:

µg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs.

Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion

R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected.

TABLE 15 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN

SUMMARY OF RESULTS OF	ANALYSIS OF SOIL	SAMPLES FOR PESTICIDES
	ANALI DID DI DOIL	

Sample ID			TRC-SB5(10-12')	TRC-SB6(6-8")	TRC-SB6(12-14) TRC-SB7(11-13')	TRC-SB8(13.5-15.5)	TRC-SB9(5-7) TRC-SB10(11-13)) TRC-SB11(6-8')	TRC-SB12(5-7')	TRC-SB13(6-8')	TRC-SB14(6-8')			
Lab Sample ID				460-25517-4	460-25517-5	460-25517-6	460-27885-1	460-27885-2	460-27983-1	460-27885-3	460-27885-4	460-27885-5	460-27885-6	460-27885-7		
Sampling Date				04-19-11	04-19-11	04-19-11	06-20-11	06-20-11	06-22-11	06-20-11	06-20-11	06-20-11	06-20-11	06-20-11		
Matrix				Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid		
Dilution Factor				1	1	1	1	1	1	1	1	1	1	1		
Units			μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg			
Land Use			Commercial	Commercial	Commercial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial			
	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater											
PESTICIDES (µg/kg)	Use SCO	SCO	SCO	SCO	SCO	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
4,4'-DDD	3.3	2,600	92,000	180,000	14,000	19	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
4,4'-DDE	3.3	1,800	62,000	120,000	17,000	7.5	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
4,4'-DDT	3.3	1,700	47,000	94,000	136,000	31	9.2	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 UJ	7 U	7 U	6.8 J
Aldrin	5	19	680	1,400	190	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
alpha-BHC	20	97	3,400	6,800	20	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
alpha-Chlordane	94	910	24,000	47,000	2,900	10	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	5.7 J
beta-BHC	36	72	3,000	14,000	90	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Chlordane	NC	NC	NC	NC	NC	140 J	76 U	71 U	69 U	73 U	70 L	69 U	71 U	70 U	70 U	55 J
delta-BHC	40	100,000	500,000	1,000,000	250	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Dieldrin	5	39	1,400	2,800	100	39	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Endosulfan I	2,400	4,800	200,000	920,000	102,000	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Endosulfan II	2,400	4,800	200,000	920,000	102,000	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Endosulfan sulfate	2,400	4,800	200,000	920,000	1,000,000	7.4 U	7.6 U	7.1 U	6.9 UJ	7.3 UJ	7 L	6.9 UJ	7.1 U	7 UJ	7 UJ	7.3 UJ
Endrin	14	2,200	89,000	410,000	60	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Endrin aldehyde	NC	NC	NC	NC	NC	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Endrin ketone	NC	NC	NC	NC	NC	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
gamma-BHC (Lindane)	100	280	9,200	23,000	100	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
gamma-Chlordane	NC	NC	NC	NC	NC	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	5.5 J
Heptachlor	42	420	15,000	29,000	380	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Heptachlor epoxide	NC	NC	NC	NC	NC	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 U	7 U	7 U	7.3 U
Methoxychlor	NC	NC	NC	NC	NC	7.4 U	7.6 U	7.1 U	6.9 U	7.3 U	7 L	6.9 U	7.1 UJ	7 U	7 U	7.3 U
Silvex (2,4,5-TP)	3,800	58,000	500,000	1,000,000	3,800	19 U	19 U	18 U	18 U	18 U	18 L	18 U	18 U	18 U	18 U	19 U
Toxaphene	NC	NC	NC	NC	NC	74 U	76 U	71 U	69 U	73 U	70 L	69 U	71 U	70 U	70 U	73 U

Notes:

µg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs.

Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion

R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected. Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted.
TABLE 15 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN

		Sai	mple ID			TRC-SB16(10.5-12.5')	TRC-SB17	(10-12')	TRC-SB18	8(9-11')	TRC-SB19(8.	5-10.5')	TRC-SB2	0(7-9')	TRC-SB2	1(9-11')	TRC-SB22	(16-18')	TRC-SB23(12-14')	TRC-SB23	(12-14')A	TRC-SB2	4(15-17')
		Lab S	Sample ID			460-27	885-9	460-279	26-1	460-279	926-2	460-2792	6-3	460-279	26-4	460-279	983-2	460-2793	26-5	460-2792	26-6	460-279	926-8	460-27	/926-7
		Samp	oling Date			06-20	D-11	06-21-	11	06-21-	-11	06-21-1	1	06-21-	11	06-22	-11	06-21-	11	06-21-1	11	06-21	-11	06-2	1-11
		Ń	Aatrix			Sol	lid	Solic	ł	Solio	d	Solid		Solic	ł	Soli	d	Solic	1	Solid		Sol	d	So	lid
		Diluti	on Factor			1		1		1		1		1		1		1		1		1		1	í –
		ι	Jnits			μg/l	kg	μg/kg	9	μg/k	g	μg/kg		μg/kg	g	μg/k	g	μg/kg]	μg/kg		μg/ł	g	μg/	/kg
		Lai	nd Use			Indus	strial	Indust	rial	Indust	rial	Industria	al	Industi	rial	Indust	rial	Industr	ial	Industr	al	Indus	trial	Indu	strial
	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																				
PESTICIDES (µg/kg)	Use SCO	SCO	SCO	SCO	SCO	Res	sult	Resu	lt	Resu	ult	Result		Resu	lt	Res	ult	Resu	lt	Resul	t	Res	ult	Res	sult
4,4'-DDD	3.3	2,600	92,000	180,000	14,000	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
4,4'-DDE	3.3	1,800	62,000	120,000	17,000	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
4,4'-DDT	3.3	1,700	47,000	94,000	136,000	7	U	7.4	U	7.1	U	6.3	J	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Aldrin	5	19	680	1,400	190	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	U	6.9	U	6.9	U	6.9	U	6.9	U
alpha-BHC	20	97	3,400	6,800	20	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	U	6.9	U	6.9	U	6.9	U	6.9	U
alpha-Chlordane	94	910	24,000	47,000	2,900	7	U	7.4	U	7.1	U	7.2	U	18		7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
beta-BHC	36	72	3,000	14,000	90	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	U	6.9	U	6.9	U	6.9	U	6.9	U
Chlordane	NC	NC	NC	NC	NC	70	U	74	U	71	U	72	U	56	J	75	U	69	U	69	U	69	U	69	U
delta-BHC	40	100,000	500,000	1,000,000	250	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	U	6.9	U	6.9	U	6.9	U	6.9	U
Dieldrin	5	39	1,400	2,800	100	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Endosulfan I	2,400	4,800	200,000	920,000	102,000	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Endosulfan II	2,400	4,800	200,000	920,000	102,000	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Endosulfan sulfate	2,400	4,800	200,000	920,000	1,000,000	7	UJ	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Endrin	14	2,200	89,000	410,000	60	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Endrin aldehyde	NC	NC	NC	NC	NC	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Endrin ketone	NC	NC	NC	NC	NC	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
gamma-BHC (Lindane)	100	280	9,200	23,000	100	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	U	6.9	U	6.9	U	6.9	U	6.9	U
gamma-Chlordane	NC	NC	NC	NC	NC	7	U	7.4	U	7.1	U	7.2	U	11		7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Heptachlor	42	420	15,000	29,000	380	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	U	6.9	U	6.9	U	6.9	U	6.9	U
Heptachlor epoxide	NC	NC	NC	NC	NC	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Methoxychlor	NC	NC	NC	NC	NC	7	U	7.4	U	7.1	U	7.2	U	7.1	U	7.5	UR	6.9	U	6.9	U	6.9	U	6.9	U
Silvex (2,4,5-TP)	3,800	58,000	500,000	1,000,000	3,800	18	U	19	U	18	U	18	U	18	U	19	U	18	U	17	U	18	U	18	U
Toxaphene	NC	NC	NC	NC	NC	70	U	74	U	71	U	72	U	71	U	7.5	UR	69	U	69	U	69	U	69	U

Notes:

μg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs. Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and

Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion

R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected. Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted.

TABLE 15 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN

		Sa	mple ID			TRC-SB25	6(14-16')	TRC-SB26(10.5-12.5'	TRC-SB2	27(6-8')	TRC-SB2	8(9-11')	TRC-SB29	9(4-6')	TRC-SB3	30(6-8')	TRC-SB31	(11-13')	TRC-SB31	(11-13')A	TRC-SB3	2(8-10')
		Lab S	Sample ID			460-279	983-8	460-27983-3	460-279	983-4	460-279	983-5	460-2798	33-6	460-27	926-9	460-279	26-10	460-279	926-11	460-27	983-7
		Samp	oling Date			06-22-	-11	06-22-11	06-22	-11	06-22	-11	06-22-2	11	06-21	-11	06-21	-11	06-21	1-11	06-22	-11
		Ň	Matrix			Solio	d	Solid	Sol	id	Soli	d	Solid		Sol	id	Soli	d	Sol	id	Sol	id
		Diluti	on Factor			1		1	1		1		1		1		1		1		1	
		l	Units			μg/k	g	μg/kg	μg/ł	g	μg/k	g	μg/kg	9	μg/ł	kg	μg/k	g	μ g /l	kg	μg/l	٢g
		La	nd Use			Indust	rial	Industrial	Indus	trial	Indust	rial	Industr	ial	Indus	trial	Indust	rial	Indus	strial	Indus	trial
	Unrestricted	Residential	Commercial	Industrial	Protection of Groundwater																	
PESTICIDES (µg/kg)	Use SCO	SCO	SCO	SCO	SCO	Resu	ult	Result	Res	ult	Resu	ult	Resul	lt	Res	ult	Resu	ult	Res	ult	Res	ult
4,4'-DDD	3.3	2,600	92,000	180,000	14,000	7.6	U	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
4,4'-DDE	3.3	1,800	62,000	120,000	17,000	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
4,4'-DDT	3.3	1,700	47,000	94,000	136,000	7.6	UR	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	4.2	J	4.2	J	7.2	UR
Aldrin	5	19	680	1,400	190	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
alpha-BHC	20	97	3,400	6,800	20	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
alpha-Chlordane	94	910	24,000	47,000	2,900	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	3.6	J
beta-BHC	36	72	3,000	14,000	90	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
Chlordane	NC	NC	NC	NC	NC	76	U	68 U	70	U	69	U	69	U	67	U	68	U	68	U	72	U
delta-BHC	40	100,000	500,000	1,000,000	250	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
Dieldrin	5	39	1,400	2,800	100	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
Endosulfan I	2,400	4,800	200,000	920,000	102,000	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
Endosulfan II	2,400	4,800	200,000	920,000	102,000	7.6	UR	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
Endosulfan sulfate	2,400	4,800	200,000	920,000	1,000,000	7.6	UR	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	10		7.2		7.2	UR
Endrin	14	2,200	89,000	410,000	60	7.6	U	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
Endrin aldehyde	NC	NC	NC	NC	NC	7.6	UR	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
Endrin ketone	NC	NC	NC	NC	NC	7.6	UR	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	UR
gamma-BHC (Lindane)	100	280	9,200	23,000	100	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
gamma-Chlordane	NC	NC	NC	NC	NC	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
Heptachlor	42	420	15,000	29,000	380	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
Heptachlor epoxide	NC	NC	NC	NC	NC	7.6	U	6.8 U	7	U	6.9	U	6.9	U	6.7	U	6.8	U	6.8	U	7.2	U
Methoxychlor	NC	NC	NC	NC	NC	7.6	UR	6.8 U	7	UR	6.9	U	6.9	U	6.7	U	20	J	8.4	J	7.2	UR
Silvex (2,4,5-TP)	3,800	58,000	500,000	1,000,000	3,800	19	U	17 U	18	U	17	U	17	U	17	U	17	U	17	U	18	U
Toxaphene	NC	NC	NC	NC	NC	7.6	UR	68 U	7	UR	69	U	69	U	67	U	68	U	68	U	68	UR

Notes:

μg/kg - micrograms per kilogram Residential - Property is zoned Residential and results are compared to Unrestricted Use SCOs, Residential Use SCOs, and Protection of Groundwater SCOs. Commercial - Property is zoned Commercial and results are compared to Unrestricted Use SCOs, Commercial Use SCOs, and Protection of Groundwater SCOs.

Industrial - Property is zoned Industrial and results are compared to Industrial Use SCOs, Unrestricted Use SCOs, and Protection of

Groundwater SCOs. J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NA - Not analyzed

NC - No criterion R - Nondetect sample result rejected after QC review.

SCO - Soil Cleanup Objective

U - Analyte was not detected. Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted.

TABLE 16 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN

SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-1		MW-2	2	MW-3	5	MW-1		MW-2		MW-3	3	MW-4	
Lab Sample ID		202843	-2	202843	-1	202843	ς Υ	E1251-0)5	E1251-0	01	E1250-	03	E1250-0	06
Sampling Date		12-30-20	02	12-30-20	002	12-30-20	002	08-16-20	006	08-16-20	006	08-16-20	006	08-16-20	006
Dilution Factor		vvater 1		vvater 1		vvater 1		vvater 1		vvater 1		vvater 1	r	vvater 1	
Units						ua/l									
		Unfiltere	ed	Unfiltere	ed	Unfiltere	ed	Unfiltere	ed	Unfiltere	ed	Unfilter	ed	Unfiltere	ed
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Values (µg/L)	Result		Result	t	Result	t	Result	t	Result	t	Resul	t	Result	t
1,1,1-Trichloroethane (TCA)	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-I richloroethane	1	5	0	5	U	5	U	5	U	5	U	5	U	5	U
1 1-Dichloroethene	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichlorobenzene	5	NA	Ŭ	NA		NA		NA	Ŭ	NA		NA	Ū	NA	
1,2,4-Trichlorobenzene	5	NA		NA		NA		NA		NA		NA		NA	
1,2,4-Trimethylbenzene	5	NA		NA		NA		NA		NA		NA		NA	
1,2-Dibromo-3-Chloropropane	0.04	NA		NA		NA		NA		NA		NA		NA	
1,2-Dibromoetnane	0.0006	NA NA		NA NA		NA NA		NA 5	11	5	11	NA 5		<u>5</u>	11
1.2-Dichloroethane	0.6	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	1	5	U	5	Ū	5	Ū	5	Ū	5	Ū	5	Ū	5	Ū
1,3,5-Trimethylbenzene	5	NA		NA		NA		NA		NA		NA		NA	
1,3-Dichlorobenzene	3	NA		NA		NA		5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	3	NA NA		NA		NA		5 F	0	5 F	U	5 F	U	5 F	U
1.4-Dioxane	NC	NA	-	NA	\vdash	NA	\vdash	o NA	01	o NA	UJ	э NA	UJ	5 NA	UJ
2-Butanone (MEK)	50	10	U	10	U	10	U	NA		NA		NA		NA	
2-Hexanone	50	10	U	10	U	10	U	NA		NA		NA		NA	
4-Methyl-2-pentanone	NC	10	U	10	U	10	U	NA		NA		NA		NA	
Acetone	50	2	J	10	U	10	U	NA		NA		NA		NA	
Acrolopitrile	NC	NA NA		NA NA		NA NA		NA 25	11	25	11	NA 25		25	11
Benzene	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	5	NA	-	NA		NA		NA	-	NA		NA	-	NA	-
Bromodichloromethane	50	5	U	5	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ
Bromoform	50	5	U	5	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ
Bromomethane	5	10	0	10	U	10	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	5	5	U	5	U	5	U	5	Ŭ	5	U	5	U	5	U
Chloroethane	5	10	U	10	U	10	U	5	U	5	U	5	U	5	U
Chloroform	7	5	U	5	U	5	U	5	U	5	U	1	J	5	U
Chloromethane	5	10	0	10		10		5		5		5		5	U 11
cis-1,2-Dichloropropene	0 4 ^(a)	5	11	5	U	5	U	5	11	5	U	5	U	5	U
Cvclohexane	NC	NA	-	NA		NA		NA	Ŭ	NA	Ū	NA		NA	-
Dibromochloromethane	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	5	NA		NA		NA		NA		NA		NA		NA	
	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
	5	NA NA		NA		NA		NA NA		NA NA		NA NA	\vdash	NA	\vdash
m&p-Xvlene	5 5 ^(b)	NA		NA		NA		5	U	5	U	5	11	5	U
Methyl acetate	NC	NA	-	NA	\vdash	NA	\vdash	NA	Ĕ	NA	F	NA	F	NA	
Methylcyclohexane	NC	NA		NA		NA		NA		NA		NA		NA	
Methylene Chloride	5	5	U	5	U	1	J	5	U	5	U	5	U	5	U
Methyl tert-butyl ether (MTBE)	10	NA		NA		NA		NA		NA		NA		NA	\square
n-Butylbenzene	5	NA NA		NA NA		NA NA		NA NA		NA NA		NA NA		NA NA	
o-Xvlene	5 ^(b)	NA		NA		NA		5	υ	5	U	5	U	5	U
p-Isopropyltoluene	5	NA		NA		NA		NA	-	NA	-	NA		NA	_
sec-Butylbenzene	5	NA		NA		NA		NA		NA		NA		NA	
Styrene	5	5	U	5	U	5	U	NA		NA		NA		NA	
Terr-Butylbenzene	5	NA F		NA F		NA F		NA F		NA F		NA F		NA F	
Toluene	5	5	U	5	IJ	5	IJ	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	5	5	U	5	Ū	5	Ū	5	Ū	5	Ū	5	Ū	5	Ŭ
trans-1,3-Dichloropropene	0.4 ^(a)	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene (TCE)	5	3	J	5	U	3	J	5	U	5	U	5	U	5	U
Trichlorofluoromethane	5	NA		NA	<u> </u>	NA	L.,	5	U	5	U	5	U	5	U
Vinyi acetate	NC	10	U	10	U	10	U	NA F		NA F		NA F		NA F	
Xvlene (Total)	Z NC	5	U	5	U	5	11	5 5	11	5 5	1	5 5		ວ 5	U
Total VOCs	NC	5	-	0	-	4	-	0		0		1	-	0	-

Total VOCs Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. U - Analyte was not detected.

R - Nondetect sample result rejected after QC review. NA - Not Analyzed.

NC - No Criterion.

 $^{(a)}$ 0.4 $\mu\text{g/L}$ applies to the sum of cis- and trans-1,3-dichloropropene

^(b) There is no Standard or Guidance Value for total xylenes. The Standard

(ii) Also known as 1,1,2-trichloro-1,2,2-trifluoroethane and 1,1,2-trichlorotrifluoroethane.

TABLE 16 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN

SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR VOLATILE ORGANIC COMPOUNDS

Sample ID		MW/ 5			11	M\\\/_1		M\\\/_1	٨	MW/ 2	,	M\A/_3	2	MANA/	1
Lab Sample ID)	E1250-0	12	E1250-0	04	460-2540	2-1	460-2540	4	460-2540	12-3	460-2552	5 24-1	460-2542	+ 26-1
Sampling Date		08-16-20	06	08-16-20	006	04-18-1	11	04-18-1	1	04-18-1	1	04-19-1	11	04-15-1	11
Matrix		Water		Water	r	Water	r	Water	r	Water	r	Wate	r	Wate	r
Dilution Factor		1		1		1		1		1		1		1	
Units		μg/L		μg/L		μg/L		μg/L		μg/L		μg/L		μg/L	
		Unfiltere	ed	Unfiltere	ed	Unfiltere	ed	Unfiltere	ed	Unfiltere	ed	Unfilter	ed	Unfilter	ed
VOLATILE ORGANIC COMPOUNDS	Class GA Values (µg/L)														
(VOCS)		Result		Result	t	Resul	t	Resul	t	Result	t	Resul	t	Resul	t
1,1,2,2 Totrachloroothano	5	5	0	5		1.0		1.0		1.0		1.0		1.0	0
1 1 2-Trichloroethane	1	5	U	5	Ŭ	1.0	U	1.0	U	1.0	11	1.0	U	1.0	U
1.1-Dichloroethane	5	5	Ŭ	5	Ŭ	1.0	Ŭ	1.0	Ŭ	0.21	J	1.0	Ŭ	1.0	Ŭ
1,1-Dichloroethene	5	5	Ŭ	5	Ū	1.0	Ū	1.0	Ŭ	0.25	J	1.0	Ū	1.0	Ŭ
1,2,3-Trichlorobenzene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trichlorobenzene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	UJ
1,2,4-Trimethylbenzene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromo-3-Chloropropane	0.04	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromoethane	0.0006	NA F	11	NA F	11	1.0	U	1.0		1.0		1.0	0	1.0	U
1 2-Dichloroethane	3	5 5		5	11	1.0		1.0	11	1.0	11	1.0	11	1.0	
1 2-Dichloropropane	1	5	U	5	U U	1.0	U U	1.0	U U	1.0	U U	1.0	Ŭ	1.0	U U
1,3,5-Trimethylbenzene	5	NA		NA		1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ
1,3-Dichlorobenzene	3	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	3	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Chloroethyl vinyl ether	NC	5	UJ	5	UJ	NA		NA		NA		NA	I	NA	
1,4-Dioxane	NC	NA		NA	<u> </u>	50	UR	50	UR	50	UR	50	UR	50	UR
2-Butanone (MEK)	50	NA NA		NA	<u> </u>	10	U	10		10	U 111	10	0	10	U
2-Rexample	50 NC	NA NA		NA NA		10	UJ	10	00	10	01	10	0	10	0
Acetone	50	NA		NA		10	U	10	U	10	U	10	Ŭ	10	U
Acrolein	NC	NA		NA		NA	-	NA	-	NA	-	NA		NA	_
Acrylonitrile	NC	25	U	25	U	NA		NA		NA		NA		NA	
Benzene	1	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromochloromethane	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromodichloromethane	50	5	UJ	5	UJ	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromomothano	50	5	01	5	01	1.0		1.0		1.0		1.0		1.0	
Carbon disulfide	60	NA	0	NA	0	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon tetrachloride	5	5	U	5	U	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	UJ	1.0	UJ
Chlorobenzene	5	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroethane	5	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroform	7	230		240		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	5	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,2-Dichloropropopo	5 0 (^{a)}	5		4	J	1.0		1.0		1.0		1.0	0	1.0	0
Cyclobeyane	0.4 ⁰⁷	NA	0	NΔ	0	1.0	11	1.0	11	1.0	11	1.0	11	1.0	0
Dibromochloromethane	50	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	Ŭ	1.0	U
Dichlorodifluoromethane	5	NA	-	NA		1.0	Ū	1.0	Ū	1.0	Ŭ	1.0	U	1.0	U
Ethylbenzene	5	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Freon TF ⁽¹⁾	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
m&p-Xylene	5 ^(b)	5	U	5	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Methyl acetate	NC	NA		NA	<u> </u>	2.0	U	2.0	U	2.0	U	2.0		2.0	U
Methylopo Chlorido	NC E	5 5		NA 5		1.0		1.0		1.0		1.0		1.0	0
Methyl tert-butyl ether (MTBE)	10	NA	0	NA	0	1.0	U	1.0	U	1.0	U	1.0	Ŭ	1.0	U
n-Butylbenzene	5	NA		NA		1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	UJ	1.0	UJ
N-Propylbenzene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	UJ
o-Xylene	5 ^(b)	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
p-Isopropyltoluene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	UJ
sec-Butylbenzene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	UJ
Styrene	5	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	5	INA 5	11	INA 5	11	1.0		1.0		1.0	11	1.0	UJ	1.0	UJ
Toluene	5	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1,2-Dichloroethene	5	5	Ŭ	5	Ū	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ
trans-1,3-Dichloropropene	0.4 ^(a)	5	Ū	5	Ū	1.0	U	1.0	Ū	1.0	Ū	1.0	Ū	1.0	Ū
Trichloroethene (TCE)	5	54		52		1.0	U	1.0	U	1.0	U	0.53	J	1.0	U
Trichlorofluoromethane	5	5	U	5	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Vinyl acetate	NC	NA		NA	L	NA	Ļ	NA	<u> </u>	NA	<u> </u>	NA		NA	
Vinyl chloride	2	5 F	U	5	U	1.0 NA	U	1.0 NA	U	1.0	U	1.0	U	1.0 NA	U
Total VOCs	NC	284	0	296	0	0		0	-	0.46	-	0.53	+	0	
				200			1			0.40		0.00			

Total VOCs Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. U - Analyte was not detected.

R - Nondetect sample result rejected after QC review. NA - Not Analyzed.

NC - No Criterion.

 $^{(a)}$ 0.4 $\mu\text{g/L}$ applies to the sum of cis- and trans-1,3-dichloropropene

^(b) There is no Standard or Guidance Value for total xylenes. The Standard

(ii) Also known as 1,1,2-trichloro-1,2,2-trifluoroethane and 1,1,2-trichlorotrifluoroethane.

TABLE 16 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN

SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR VOLATILE ORGANIC COMPOUNDS

Sample ID		MW-5	5	GW EQUIP BLA	NK 1	TRIP BLA	NK 1	TRIP BLA	NK 2	TRIP BLA	NK 3
Lab Sample IE)	460-2552	24-2	460-25426-2	2	460-2542	26-3	460-2549	92-4	460-2552	24-3
Sampling Date)	04-19-1	11	04-15-11		04-15-1	11	04-18-	11	04-19-1	11
Matrix Dilution Eactor	,	Wate	r	VVater 1		Wate	r	Wate	r	Wate	r
		ug/l		ug/l		uq/l		י עמ/ו		י עמען	
Onto		Unfilter	ed	Unfiltered		Unfilter	ed	Unfilter	ed	Unfilter	ed
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Values (µg/L)	Resul	lt	Result		Resul	t	Resu	lt	Resul	lt
1,1,1-Trichloroethane (TCA)	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1,2,2-Tetrachloroethane	5	1.0	U	1.0	U	1.0	U	1.0	UJ	1.0	U
1,1,2-Trichloroethane	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,1-Dichloroethane	5	1.0	0	1.0		1.0		1.0	0	1.0	0
1.2.3-Trichlorobenzene	5	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	U	1.0	Ŭ
1,2,4-Trichlorobenzene	5	1.0	UJ	1.0	U	1.0	U	1.0	U	1.0	U
1,2,4-Trimethylbenzene	5	1.0	U	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
1,2-Dibromo-3-Chloropropane	0.04	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dibromoethane	0.0006	1.0		1.0		1.0		1.0		1.0	
1 2-Dichloroethane	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,2-Dichloropropane	1	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ū	1.0	Ŭ
1,3,5-Trimethylbenzene	5	1.0	Ū	1.0	Ū	1.0	Ū	1.0	Ū	1.0	Ū
1,3-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
1,4-Dichlorobenzene	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
2-Unioroetnyi vinyi ether	NC	NA 50	I IR	NA 50	1 IP	NA 50	I IP	NA 50	1 IP	NA 50	1 IP
2-Butanone (MEK)	50	10	U	10	U	10	U	10	U	10	U
2-Hexanone	50	10	U	10	Ŭ	10	Ŭ	10	U	10	Ŭ
4-Methyl-2-pentanone	NC	10	U	10	U	10	U	10	U	10	U
Acetone	50	10	U	10	U	10	U	10	U	10	U
Acrolein	NC	NA		NA		NA		NA		NA	
Benzene	NC 1	1.0		1.0	11	1.0		1.0	11	1.0	
Bromochloromethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromodichloromethane	50	1.0	U	1.0	Ū	1.0	Ū	1.0	Ū	1.0	Ū
Bromoform	50	1	U	1.0	U	1.0	U	1.0	U	1.0	U
Bromomethane	5	1.0	UR	1.0	UR	1.0	UR	1.0	UR	1.0	UR
Carbon disulfide	60	1.0	0	1.0	UJ	1.0	0	1.0	0	1.0	0
Chlorobenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroethane	5	1.0	U	1.0	Ū	1.0	Ū	1.0	Ū	1.0	U
Chloroform	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloromethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
cis-1,2-Dichloroethene	5	1.0	U	1.0	0	1.0	0	1.0	U	1.0	U
Cis-1,3-Dichloropropene	0.4 ⁽⁻⁾	1.0	0	1.0		1.0		1.0	0	1.0	
Dibromochloromethane	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dichlorodifluoromethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Ethylbenzene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Freon TF ⁽¹⁾	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	5 c(b)	1.0	U	1.0	0	1.0	0	1.0	0	1.0	0
Methyl acetate	5 ⁶⁹	2.0		2.0	11	2.0	11	2.0	11	2.0	11
Methylcyclohexane	NC	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	U	1.0	Ŭ
Methylene Chloride	5	1.0	U	1.0	U	0.25	J	1.0	U	0.26	J
Methyl tert-butyl ether (MTBE)	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
n-Butylbenzene	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	U	1.0	UJ
	5 r(b)	1.0	UJ	1.0	UJ	1.0	UJ TT	1.0	0	1.0	UJ
p-lsopropyltoluene	57	1.0	111	1.0	UU UU	1.0	UU UU	1.0	11	1.0	111
sec-Butylbenzene	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	U	1.0	UJ
Styrene	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
tert-Butylbenzene	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	U	1.0	UJ
Tetrachloroethene (PCE)	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
trans-1 2-Dichloroethene	5	1.0		1.0	11	1.0		1.0	11	1.0	
trans-1.3-Dichloropropene	0 4 ^(a)	1.0	11	1.0	11	1.0	11	1.0	11	1.0	11
Trichloroethene (TCE)	5	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ	1.0	Ŭ
Trichlorofluoromethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Vinyl acetate	NC	NA		NA		NA		NA		NA	
Vinyl chloride	2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Total VOCs	NC			0 0		0.25		0	1	0.26	+
Notos	inc	U	1	5		0.20		U		0.20	1

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the MDL and the

concentration is an approximate value. U - Analyte was not detected.

R - Nondetect sample result rejected after QC review. NA - Not Analyzed.

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 $^{(a)}$ 0.4 $\mu\text{g/L}$ applies to the sum of cis- and trans-1,3-dichloropropene

^(b) There is no Standard or Guidance Value for total xylenes. The Standard

(ii) Also known as 1,1,2-trichloro-1,2,2-trifluoroethane and 1,1,2-trichlorotrifluoroethane.

TABLE 17 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS

Sample ID Lab Sample ID		MW-1 202843	-2	MW-2 202843	! -1	MW-3 202843	3 -3	MW-1 E1251-0	05	MW-2 E1251-0)1	MW-3 E1250-0))3	MW-4 E1250-0	06	MW-5 E1250-0	; 02
Sampling Date Matrix		12-30-20 Water	002	12-30-20 Water	002	12-30-20 Water	002 r	08-16-20 Water	006 r	08-16-20 Water	006	08-16-20 Water	006	08-16-20 Water	006	08-16-20 Water)06 r
Dilution Factor		1		1		1		1		1		1		1		1	
Units		μg/L Unfiltere	ed	μg/L Unfiltere	ed	μg/L Unfiltere	ed	μg/L Unfiltere	ed	μg/L Unfiltere	ed	μg/L Unfiltere	ed	μg/L Unfiltere	ed	μg/L Unfiltere	ed
SEMIVOLATILE ORGANIC	Class GA			D				D		D		D				D	
1,2,4,5-Tetrachlorobenzene	5	NA	t I	NA		NA	t	NA	t I	NA		NA		NA		NA	1
1,2,4-Trichlorobenzene	NC	NA		NA		NA		NA		NA		NA		NA		NA	
1,3-Dichlorobenzene	NC	NA		NA		NA		NA		NA		NA		NA		NA	
1,4-Dichlorobenzene	NC 5	NA		NA		NA		NA		NA		NA		NA		NA	
2,3,4,6-Tetrachlorophenol	NC	NA		NA		NA		NA		NA		NA		NA		NA	
2,4,5-Trichlorophenol	NC	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-Dichlorophenol	5	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-Dimethylphenol	50	NA		NA		NA		NA		NA		NA		NA		NA	
2,4-Dinitrophenoi	5	NA		NA		NA		NA		NA		NA		NA		NA	
2,6-Dinitrotoluene	5	NA		NA		NA		NA		NA		NA		NA		NA	
2-Chlorophenol	NC	NA		NA		NA		NA		NA		NA		NA		NA	
2-Methylnaphthalene	NC	10 NA	U	11 NA	U	10 NA	U	NA		NA		NA		NA		NA	\vdash
2-Nitroaniline	5	NA		NA		NA		NA		NA		NA		NA		NA	
2-Nitrophenol	NC	NA		NA		NA		NA		NA		NA		NA		NA	\vdash
3,3'-Dichlorobenzidine	5	NA		NA		NA		NA		NA		NA		NA		NA	
3-Nitroaniline 4 6-Dinitro-2-methylohenol	5 NC	NA		NA		NA		NA		NA		NA		NA		NA	\vdash
4-Bromophenyl phenyl ether	NC	NA		NA		NA		NA		NA		NA		NA		NA	
4-Chloro-3-methylphenol	NC 5	NA		NA		NA		NA		NA		NA		NA		NA	
4-Chlorophenyl phenyl ether	NC	NA		NA		NA		NA		NA		NA		NA		NA	
4-Methylphenol	NC 5	NA		NA		NA		NA		NA		NA		NA		NA	
4-Nitrophenol	NC	NA		NA		NA		NA		NA		NA		NA		NA	
Acenaphthene Acenaphthylene	20 NC	10	U	11	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetophenone	NC	NA	0	NA	0	NA	0	NA	0	NA	U	NA	U	NA	0	NA	0
Anthracene	50 7.5	NA NA		NA NA		NA NA		10 NA	U	10 NA	U	10 NA	U	10 NA	U	10 NA	U
Benzaldehyde	NC	NA		NA		NA		NA		NA		NA		NA		NA	
Benzo[a]anthracene Benzo[a]pyrene	0.002 >ND	10	U	11 11	U	10 10	UU	10	UU	10	U	10 10	U	10 10	U	10	UU
Benzo[b]fluoranthene	0.002	10	U	11	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo[g,h,i]perylene Benzo[k]fluoranthene	NC 0.002	10 10	U U	11 11	U U	10 10	U U	10 10	U U	10 10	UU	10 10	U U	10 10	UU	10	U U
Bis(2-chloroethoxy)methane	5	NA		NA		NA		NA		NA		NA		NA		NA	
Bis(2-chloroethyl)ether Bis(2-ethylhexyl) phthalate	1 5	NA NA		NA NA		NA NA		NA		NA		NA NA		NA NA		NA NA	-
Butyl benzyl phthalate	50	NA		NA		NA		NA		NA		NA		NA		NA	
Caprolactam	NC NC	NA		NA		NA		NA		NA		NA		NA		NA	
Chrysene	0.002	10	U	11	U	10	U	10	U	10	U	10	U	10	U	10	U
Dibenz(a,n)anthracene	NC	NA	U	NA	U	NA	U	10	U	10	U	10	U	10	U	10	U
Diethyl phthalate	50	NA		NA		NA		NA		NA		NA		NA		NA	
Di-n-butyl phthalate	50	NA		NA		NA		NA		NA		NA	L	NA		NA	
Di-n-octyl phthalate	50	NA		NA		NA		NA		NA		NA		NA		NA	
Fluoranthene	50	10	U	11	U	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	50	10 NA	U	11 NA	U	10 NA	U	10 NA	U	10 NA	U	10 NA	U	10 NA	U	10 NA	U
Hexachlorobutadiene	0.04	NA		NA		NA		NA		NA		NA		NA		NA	
Hexachlorocyclopentadiene Hexachloroethane	5	NA		NA		NA		NA		NA		NA		NA		NA	\vdash
Indeno[1,2,3-cd]pyrene	0.002	10	U	11	U	10	U	10	U	10	U	10	U	10	U	10	U
Isophorone Naphthalene	50	NA 10		NA 11		NA 10		NA 10		NA 10		NA 10	11	NA 10		NA 10	
Nitrobenzene	0.4	NA	5	NA		NA	5	NA	5	NA	5	NA	5	NA		NA	5
N-Nitrosodi-n-propylamine	NC 50	NA NA		NA NA		NA NA		NA		NA NA		NA NA	-	NA NA		NA NA	\vdash
Pentachlorophenol	1	NA		NA		NA		NA		NA		NA		NA		NA	
Phenanthrene Phenol	50	10 NA	U	11 NA	U	10 NA	U	10 NA	U	10 NA	UJ	10 NA	U	10 NA	U	10 NA	U
Pyrene	50	10	U	11	U	10	U	10	U	10	UJ	10	U	10	U	10	U
Total SVOCs	NC	0		0	I	0		0		0		0		0	I	0	

Notes: µg/L - micrograms per liter J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. U - Analyte was not detected. NA - Not Analyzed. NC - No Criterion. >ND - Benzo(a)pyrene exceedance is any concentration above the detection limit. Shading indicates result above Class GA Values.

TABLE 17 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS

Sample ID		DUP-00)1	MW-1	0.4	MW-1/	A NO O	MW-2	2	MW-3		MW-4		MW-5	5	GW EQUIP BLAN	NK 1
Sampling Date		08-16-20	04	460-2549	12-1	04-18-1	12-2	04-18-1	12-3 11	460-2552	4-1	460-2542	1	460-2552	24-2 11	04-15-11	
Matrix		Water		Water	r	Water	r	Water	r	Water		Water		Wate	r	Water	
Dilution Factor		1		1		1		1		1		1		1		1	
Units	r	μg/L	!	μg/L	!	μg/L	!	μg/L		μg/L	1	μg/L	1	μg/L	1	μg/L	
SEMIVOLATILE ORGANIC	Class GA	Unfiltere	ea	Unfiltere	ea	Unfiltere	ea	Unfiltere	ea	Unfiltere	ea	Unfiltere	ea	Unfilter	ea	Unfiltered	
COMPOUNDS (SVOCs)	Values (µg/L)	Result	t	Result	t	Resul	t	Result	t	Result	t	Result	t	Resul	t	Result	
1,2,4,5-Tetrachlorobenzene	5	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
1,2,4-Trichlorobenzene	NC	NA		NA		NA		NA		NA		NA		NA		NA	
1,2-Dichlorobenzene	NC NC	NA NA		NA NA		NA NA		NA NA		NA NA		NA NA		NA NA		NA NA	
1,4-Dichlorobenzene	NC	NA		NA		NA		NA		NA		NA		NA		NA	
2,2'-oxybis[1-chloropropane]	5	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
2,3,4,6-Tetrachlorophenol	NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
2,4,5-Trichlorophenol	NC NC	NA NA		11		11		11		11		11	11	12	U	11	
2,4-Dichlorophenol	5	NA		11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	12	Ŭ	11	Ŭ
2,4-Dimethylphenol	50	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
2,4-Dinitrophenol	10	NA		32	U	33	U	33	U	33	U	33	U	35	U	32	U
2.6-Dinitrotoluene	5	NA		2.1	U	2.2	U	2.2	U	2.2	U	2.2	U	2.4	U	2.1	U
2-Chloronaphthalene	10	NA		11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	12	Ŭ	11	Ŭ
2-Chlorophenol	NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
2-Methylnaphthalene	NC	NA NA	<u> </u>	11	U 11	11		11		11		11		12		11	U
2-Nitroaniline	5	NA		21	U	22	U	22	Ŭ	22	U	22	Ŭ	24	Ū	21	U
2-Nitrophenol	NC	NA		11	U	11	U	11	U	11	U	11	Ū	12	U	11	U
3 & 4 Methylphenol (m&p-cresol)	NC	NA	11 U 21 U 11 U 11 U 21 U		11	U	11	U	11	U	11	U	12	U	11	U	
3,3-Dichlorobenzidine	5	NA NA		21		22		22		22	U	22		24	U	21	U
4,6-Dinitro-2-methylphenol	NC	NA		32	Ŭ	33	U	33	Ŭ	33	U	33	U	35	U	32	U
4-Bromophenyl phenyl ether	NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
4-Chloro-3-methylphenol	NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
4-Chlorophenyl phenyl ether	D NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
4-Methylphenol	NC	NA		11	U	11	U	11	Ŭ	11	U	11	U	12	U	11	U
4-Nitroaniline	5	NA		21	U	22	U	22	U	22	U	22	U	24	U	21	U
4-Nitrophenol	NC 20	NA 10		32	U	33	U	33	U	33	U	33	U	35	U	32	U
Acenaphthylene	NC	10	U	11	U	11	U	11	U	11	U	11	U	12	U	11	U
Acetophenone	NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Anthracene	50	10	U	11	U	11	U	11	U	11	U	11	U	12	U	11	U
Atrazine Benzaldehvde	7.5 NC	NA		11	UJ	11	UJ	11	UJ	11	UJ	11	UJ	12	UJ	11	UJ
Benzo[a]anthracene	0.002	10	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Benzo[a]pyrene	>ND	10	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Benzo[b]fluoranthene	0.002	10	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Benzo[k]fluoranthene	0.002	10	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Bis(2-chloroethoxy)methane	5	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Bis(2-chloroethyl)ether	1	NA		1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Bis(2-ethylnexyl) phthalate	50 50	NA NA		11		11		11		11		11	11	12	U	11	
Caprolactam	NC	NA		11	U	11	U	11	Ŭ	11	U	11	Ŭ	12	U	11	U
Carbazole	NC	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Unrysene Dibenz(a h)anthracene	0.002	10		11		11		11		11		11		12		11	
Dibenzofuran	NC	10	U	11	U	11	U	11	Ŭ	11	Ŭ	11	Ŭ	12	Ŭ	<u>1</u> 1	U
Diethyl phthalate	50	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Dimethyl phthalate	50	NA		11		11		11		11		11		12	U	11	U
Di-n-octyl phthalate	50	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Diphenyl (1,1'Biphenyl)	5	NA		11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	12	Ŭ	11	Ŭ
Fluoranthene	50	10	U	11	U	11	U	11	U	11	U	11	U	12	U	11	U
Fluorene	50	10 NA	U	11	U	11	U	11	U	11	U	11	U	12	U	11	U
Hexachlorobutadiene	0.5	NA		2.1	U	2.2	U	2.2	U	2.2	U	2.2	U	2.4	U	2.1	U
Hexachlorocyclopentadiene	5	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Hexachloroethane	5	NA		1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Indeno[1,2,3-cd]pyrene	0.002	10 NA	U	1.1		1.1		1.1		1.1		1.1		1.2		1.1	
Naphthalene	10	10	U	11	U	11	U	11	U	11	U	11	U	12	U	11	U
Nitrobenzene	0.4	NA		1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
N-Nitrosodi-n-propylamine	NC	NA		1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Pentachlorophenol	50	NA NA		11 32		33		33		11 33		11 33		35		11 32	U
Phenanthrene	50	10	U	11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	11	Ŭ	12	Ŭ	<u>1</u> 1	U
Phenol	1	NA		11	U	11	U	11	U	11	U	11	U	12	U	11	U
Pyrene	50	10	U	11	U	11	U	11	U	11	U	11	U	12	U	11	U
Notoo:	NC	U		U		U		U	I	U		U	L	U	I	U	

Notes: µg/L - micrograms per liter J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. U - Analyte was not detected. NA - Not Analyzed. NC - No Criterion. >ND - Benzo(a)pyrene exceedance is any concentration above the detection limit. Shading indicates result above Class GA Values.

TABLE 18 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR METALS AND CYANIDE

Sampl	e ID	MW-1		MW-2		MW-3		MW-1		MW-2		MW-3		MW-4		MW-5	j l
Lab Sam	nple ID	202843	-2	202843	-1	202843	-3	E1251-()5	E1251-0)1	E1250-0)3	E1250-0	06	E1250-0	02
Samplin	g Date	12-30-20	02	12-30-20	02	12-30-20	02	08-16-20	06	08-16-20	06	08-16-20	06	08-16-20	006	08-16-20	006
Mati	rix	Water		Water	ſ												
Dilution	Factor	1		1		1		1		1		1		1		1	
Unit	ts	μg/L		μg/L													
		Unfiltere	ed	Unfiltere	əd												
METALS AND CYANIDE	Class GA Values (µg/L)	Result		Result	t	Result	İ	Result	t	Result		Result		Result	t	Resulf	t
Aluminum	NC	NA		NA		NA		317		117	J	14	U	14	U	677	
Antimony	3	20	U	20	U	20	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Arsenic	25	40	U	64.4		40	U	3	J	146		1.6	U	1.6	U	1.6	U
Barium	1,000	NA		NA		NA		39.1	J	52.3	J	46	J	39.1	J	41.7	J
Beryllium	3	5	U	5	U	5	U	0.15	υ	0.15	U	0.15	U	0.15	U	0.15	U
Cadmium	5	10	U	2.9	J	10	U	0.23	J	15.4	J	0.42	J	0.36	J	0.38	J
Calcium	NC	NA		NA		NA		156,000		278,000		192,000		138,000		76,900	
Chromium (Total)	50	15		10	υ	108		1.4	J	0.38	U	1.9	J	0.9	J	2.2	J
Cobalt	NC	NA		NA		NA		1.9	J	10.8	J	0.52	J	0.32	J	2.5	J
Copper	200	2.4	J	4	J	4.8	J	6.3	υ	6.4	J	6.3	U	6.3	U	9	J
Cyanide (Total)	200	10	U	9.4	J	10	J	9.1	υ	20.6		9.1	U	9.1	U	9.1	U
Iron	300	NA		NA		NA		19,900		109	J	468		19	U	904	
Lead	25	10	U	4.9	J	10	U	0.46	υ	18.4		0.46	U	0.46	U	0.46	U
Magnesium	35,000	NA		NA		NA		45,900	J	43,300	J	71,700	J	49,200	J	10,600	J
Manganese	300	NA		NA		NA		4,450	J	2,900	J	2.7	J	76	J	72.8	J
Mercury (Total)	0.7	0.2	U	0.2	υ	0.2	U	0.047	U	0.047	U	0.047	U	0.047	U	0.047	U
Nickel	100	3.3	J	41.6		3.1	J	3.9	J	223	J	1.5	J	0.59	UJ	23	J
Potassium	NC	NA		NA		NA		7,010		12,400		7,990		4,040		20,900	
Selenium	10	30	U	30	υ	30	J	0.98	υ	0.98	U	0.98	U	0.98	U	0.98	U
Silver	50	6	U	3.2	J	6	U	0.91	U	3.6	J	0.91	U	0.91	U	5.8	J
Sodium	20,000	NA		NA		NA		74,600		222,000		222,000		89,900		273,000	
Thallium	0.5	40	U	40	U	40	U	13	J	11.4	J	1.2	U	1.2	U	1.2	U
Vanadium	NC	NA		NA		NA		1.9	J	0.99	J	0.47	U	0.47	U	0.99	J
Zinc	2,000	50	U	38,800		27.9		42.5	J	35,700	J	35.9	J	25.5	J	65.3	J

Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the

MDL and the concentration is an approximate value.

U - Analyte was not detected.

R - Nondetect sample result rejected after QC review.

NA - Not Analyzed.

NC - No Criterion.

TABLE 18 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR METALS AND CYANIDE

Sampl	e ID	DUP-00)1	MW-1		MW-1		MW-1/	A	MW-1/	4	MW-2	2	MW-2	>
Lab Sam	nple ID	E1250-0)4	460-2549)2-1	460-2549	2-1	460-2549	2-2	460-2549	2-2	460-2549	2-3	460-2549	92-3
Samplin	g Date	08-16-20	06	04-18-1	1	04-18-1	1	04-18-1	1	04-18-1	1	04-18-1	1	04-18-1	11
Mati	rix	Water		Water		Water		Water		Water		Water	•	Water	r
Dilution	Factor	1		1		1		1		1		1		1	
Unit	ts	μg/L		μg/L		μg/L		μg/L		μg/L		μg/L		μg/L	
		Unfiltere	ed	Filtere	d	Unfiltere	ed	Filtere	b	Unfiltere	ed	Filtere	d	Unfilter	ed
METALS AND CYANIDE	Class GA Values (µg/L)	Result		Result	t	Result	t	Result	t	Result	t	Result	t	Resul	t
Aluminum	NC	611		200	U	200	U	200	U	200	U	200	U	200	U
Antimony	3	1.2	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Arsenic	25	1.6	U	5.0	U	4.9	J	5.0	U	5.0	U	6.2		6.0	
Barium	1,000	41	J	11.8	J	9.8	J	11.8	J	9.6	J	11.0	J	9.5	J
Beryllium	3	0.15	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Cadmium	5	0.41	J	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	NC	75,200		64,000		67,000		63,000		66,100		34,200		37,200	
Chromium (Total)	50	2	J	10.0	U	10.0	υ	10.0	U	10.0	U	10.0	U	10.0	U
Cobalt	NC	2.5	J	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Copper	200	7.2	J	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U
Cyanide (Total)	200	9.1	U	10	U	10	U	10	U	10	U	10	U	10	U
Iron	300	824		150	U	4,750		150	U	3,990		150	U	64.9	J
Lead	25	0.46	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Magnesium	35,000	10,400	J	14,300		13,900		14,300		13,700		6,610		6,640	
Manganese	300	69.7	J	119		141		120		136		109		140	
Mercury (Total)	0.7	0.047	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel	100	26.8	J	40.0	U	40.0	U	40.0	U	40.0	U	16.4	J	21.1	J
Potassium	NC	20,900		3,360	J	5,000	U	3,110	J	5,000	U	2,160	J	5,000	U
Selenium	10	0.98	U	10.0	UJ	10	UR	10.0	UJ	10	UR	10.0	UJ	10	UR
Silver	50	5.7	J	10.0	U	10	U	10.0	U	10.0	U	10.8		13.1	
Sodium	20,000	255,000		72,000		64,800		66,800		63,900		88,600		86,400	
Thallium	0.5	1.2	U	10.0	U	10	UR	10.0	U	10	UR	10.0	U	10	UR
Vanadium	NC	0.92	J	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Zinc	2,000	39.6	J	30.0	U	30.0	U	30.0	U	30.0	U	2,210		2,920	

Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the

MDL and the concentration is an approximate value.

U - Analyte was not detected.

R - Nondetect sample result rejected after QC review.

NA - Not Analyzed.

NC - No Criterion.

TABLE 18 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR METALS AND CYANIDE

Sampl	e ID	MW-3		MW-3		MW-4		MW-4		MW-5		MW-5		GW EQUIP BLAN	√K 1
Lab Sam	ple ID	460-2552	4-1	460-2552	4-1	460-2542	26-1	460-2542	6-1	460-2552	4-2	460-2552	4-2	460-25426-2	
Sampling	g Date	04-19-1	1	04-19-1	1	04-15-1	1	04-15-1	1	04-19-1	1	04-19-1	1	04-15-11	
Matr	ix	Water		Water		Water	•	Water		Water		Water		Water	
Dilution I	Factor	1		1		1		1		1		1		1	
Unit	S	μg/L		μg/L		μg/L		μg/L		μg/L		μg/L		μg/L	
		Filtered	b	Unfiltere	ed	Filtere	d	Unfiltere	ed	Filtered	b	Unfiltere	ed	Unfiltered	
METALS AND CYANIDE	Class GA Values (µg/L)	Result	:	Result		Result	t	Result	t	Result	t	Result	t	Result	
Aluminum	NC	200	U	200	U	200	U	153	J	200	U	200	U	200	U
Antimony	3	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Arsenic	25	5.0	UJ	5.0	UJ	5.0	U	4.2	J	5.0	U	5.0	UJ	5.0	U
Barium	1,000	10.2	J	11.3	J	41.7	J	39.7	J	6.2	J	6.3	J	200	U
Beryllium	3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Cadmium	5	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	NC	60,600		60,800		155,000		137,000		27,200		27,100		5,000	U
Chromium (Total)	50	10.0	U	10.0	U	10.0	U	10.0	U	10.0	υ	10.0	U	10.0	U
Cobalt	NC	50.0	U	50.0	U	50.0	U	50.0	U	50.0	υ	50.0	U	50.0	U
Copper	200	25.0	U	25.0	U	7.9	J	25.0	U	25.0	υ	25.0	U	25.0	U
Cyanide (Total)	200	10	U	10	U	10	U	10	U	10	υ	10	U	10	U
Iron	300	384		3,470		150	U	150	U	150	υ	59.8	J	150	U
Lead	25	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Magnesium	35,000	32,300		33,400		49,300		45,500		3,290	J	3,340	J	5,000	U
Manganese	300	361		403		292		275		15.0	U	15.0	U	15.0	U
Mercury (Total)	0.7	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel	100	40.0	U	40.0	U	40.0	U	40.0	U	40.0	U	40.0	U	40.0	U
Potassium	NC	6,090		6,050		4,200	J	3,990	J	2,390	J	2,370	J	5,000	U
Selenium	10	10.0	UJ	10.0	U	10	UR	10.0	U	10.0	U	10.0	U	10.0	UJ
Silver	50	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sodium	20,000	113,000		112,000		126,000		115,000		16,100		14,900		5,000	U
Thallium	0.5	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Vanadium	NC	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Zinc	2,000	30.0	U	30.0	U	30.0	U	30.0	U	30.0	U	30.0	U	30.0	U

Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the

MDL and the concentration is an approximate value.

U - Analyte was not detected.

R - Nondetect sample result rejected after QC review.

NA - Not Analyzed.

NC - No Criterion.

TABLE 19 STEWART EFI NEW YORK, LLC FORMER STEWART STAMPING SITE, YONKERS, NEW YORK SOIL MANAGEMENT PLAN SUMMARY OF RESULTS OF ANALYSIS OF GROUNDWATER SAMPLES FOR POLYCHLORINATED BIPHENYLS

	MW-1		MW-1/	A	MW-2		MW-3	_	MW-4		MW-5	5	GW EQUIP BLA	NK 1	
La	b Sample ID	460-2549	2-1	460-2549	92-2	460-2549	2-3	460-2552	4-1	460-2542	26-1	460-2552	24-2	460-25426-2	2
Sa	Impling Date	04-18-1	1	04-18-1	11	04-18-1	1	04-19-1	1	04-15-1	1	04-19-1	11	04-15-11	
	Matrix	Water		Water	r	Water		Water		Water	•	Wate	r	Water	
Di	lution Factor	1		1		1		1		1		1		1	
	Units	μg/L		μg/L		μg/L		μg/L		μg/L		μg/L		μg/L	
		Unfiltere	ed	Unfiltered		Unfiltered		Unfiltere	ed	Unfiltere	ed	Unfilter	ed	Unfiltered	
POLYCHLORINATED															
BIPHENYLS (PCBs)	Class GA Values (µg/L)	Result	t	Result	Result		Result		Result		t	Resul	t	Result	
Aroclor 1016	NC	0.51	U	0.51	U	0.52	U	0.51	U	0.51	U	0.53	U	0.64	U
Aroclor 1221	NC	0.51	U	0.51	U	0.52	U	0.51	U	0.51	U	0.53	U	0.64	U
Aroclor 1232	NC	0.51	U	0.51	U	0.52	U	0.51	U	0.51	U	0.53	U	0.64	U
Aroclor 1242	NC	0.51	U	0.51	U	0.52	U	0.51	UJ	0.51	U	0.53	UJ	0.64	U
Aroclor 1248	NC	0.51	U	0.51	U	0.52	U	0.51	UJ	0.51	U	0.53	UJ	0.64	U
Aroclor 1254	NC	0.51	U	0.51	U	0.52	U	0.51	UJ	0.51	U	0.53	UJ	0.64	U
Aroclor 1260	NC	0.51	0.51 U		U	0.52	U	0.51	UJ	0.51	U	0.53	UJ	0.64	U
Aroclor 1262	NC	0.51 U		0.51	U	0.52	U	0.51	UJ	0.51	U	0.53	UJ	0.64	U
Aroclor 1268	NC	0.51	U	0.51	U	0.52	υ	0.51	UJ	0.51	U	0.53	UJ	0.64	U
Total PCBs	s 0.09			0		0		0		0		0		0	

Notes:

µg/L - micrograms per liter

U - Analyte was not detected.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NC - No Criterion.

San	nple ID	MW-1		MW-1A		MW-2		MW-3		MW-4		MW-5		GW EQUIP BLA	ANK 1
Lab S	ample ID	460-2549	92-1	460-2549	92-2	460-2549	92-3	460-2552	24-1	460-2542	26-1	460-2552	24-2	460-25426-	2
Samp	ling Date	04-18-	11	04-18-	11	04-18-1	11	04-19-	11	04-15-1	11	04-19-	11	04-15-11	
N	latrix	Wate	r	Wate	r	Wate	r	Wate	r	Wate	r	Wate	r	Water	
Dilutio	on Factor	1		1		1		1		1		1		1	
l	Jnits	μg/L		μg/L		μg/L		μg/L		μg/L		μg/L		μg/L	
		Unfilter	ed	Unfilter	ed	Unfilter	ed	Unfilter	ed	Unfilter	ed	Unfilter	ed	Unfiltered	
PESTICIDES	Class GA Values (µg/L)	Resu	lt	Resu	Result		t	Resu	lt	Resul	t	Resu	t	Result	
4,4'-DDD	0.3	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
4,4'-DDE	0.2	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
4,4'-DDT	0.2	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Aldrin	>ND	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
alpha-BHC	0.01	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
alpha-Chlordane	NC	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	υ	0.064	U
beta-BHC	0.04	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Chlordane	0.05	0.51	U	0.51	U	0.54	U	0.53	U	0.51	U	0.52	U	0.64	U
delta-BHC	0.04	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Dieldrin	0.004	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Endosulfan I	NC	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Endosulfan II	NC	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Endosulfan sulfate	NC	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Endrin	>ND	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Endrin aldehyde	5	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Endrin ketone	5	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
gamma-BHC (Lindane)	0.05	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
gamma-Chlordane	NC	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Heptachlor	0.04	0.051 U		0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Heptachlor epoxide	0.03	0.051 U		0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Methoxychlor	35	0.051	U	0.051	U	0.054	U	0.053	U	0.051	U	0.052	U	0.064	U
Silvex (2,4,5-TP)	0.26	0.52	U	0.52	U	0.54	U	0.52	U	0.51	U	0.56	U	0.57	U
Toxaphene	0.06	0.51	U	0.51	U	0.54	U	0.53	U	0.51	U	0.52	U	0.64	U

Notes:

µg/L - micrograms per liter

U - Analyte was not detected.

NC - No Criterion.

>ND - Class GA Value is any detected concentration.

Shading indicates result above Class GA Values.

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Sample ID Lab ID		SS-01 C0707006-009	SS-02 C0707006-010	SS-03 C0707006-011	SS-05 C0709007-002	SV-01 681007	SV-02 681009	SV-03 681010	SV-4 681008	SV-05 681011	SV-05 681012	SV-06 C0707006-006	SV-07 C0707006-005	SV-08 C0707006-004	SV-09 C0707006-003	SV-10 C0707006-00	SV-11 2 C0707006-001	SV-12 C0707006-012
Date Sampled		07-10-2007	07-10-2007	07-10-2007	09-6-2007	08-17-2006	08-17-2006	08-17-2006	09-6-2008	08-17-2006	08-17-2006	07-10-2007	07-10-2007	07-10-2007 or Off-Site Soil Vapor	07-10-2007	07-10-2007	07-10-2007	07-10-2007
Land Use		Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Commercial	Perimeter/Indust	ial Perimeter/Industria	Perimeter/Industria	al Perimeter/Indus	trial Perimeter/Residentia	Residential
Volatile Organic Compound	NYSDOH AGV ⁽¹⁾	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1,1-Trichloroethane		31 J	680 J	620 J	7.0 J	600 L	16,000	600	9,800	710	600	29 .	42	J 5.2 J	2.1 J	J 0.83		1.4 J
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		1.2 U	J 1.0 U.	J 1.2 UJ	1.0 U	840 U	J 160	U 7.7 U	150 U	11 U	7.7 U	1.0 U	J 1.2	U 1.2 U	1.2 U	J 1.2	U 1.2 U	J 1.2 UJ
1,1,2-Trichloroethane		0.83 U.	J 0.83 U	J 0.83 UJ	0.83 UJ	600 L	J 110	U 5.5 U	110 U	8.7 U	5.5 U	0.83 U	J 0.83	UJ 0.83 U.	J 0.83 U	J 0.83	U 0.83 U	j 0.83 U.
1,1-Dichloroethane		4.3 J	0.62 U	J 270	0.62 U	450 L	1,300	4.0 U	160	6.5 U	4.0 U	0.62 U	J 0.62	U 0.62 U	0.62 U	J 0.62	U 0.62 L	0.62 UJ
1,1-Dichloroethylene		4.4 J	0.60 U.	J 0.60 UJ	0.60 U	2 000	J 750	4.0 U	140 I 370 II	6.3 U	4.0 U	0.60 U	J 0.60		0.60 U	J 0.60	U U.60 U	0.60 UJ
1,2,4-Trimethylbenzene		330	9.1 J	390	15.0 J	540 L	J 100	U 4.9 U	98 U	7.9 U	4.9 U	24	100	J 27 J	31 J	J 20	J 20	28 J
1,2-Dibromoethane (EDB)		1.2 U.	J 1.2 U.	J 1.2 UJ	1.2 U	850 L	J 160	U 7.7 U	150 U	12 U	7.7 U	1.2 U	J 1.2	UJ 1.2 U.	J 1.2 U.	J 1.2	UJ 1.2 U	J 1.2 UJ
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)		1.1 U.	J 1.1 U.	J 1.1 UJ	1.1 U	770 L	J 150	U 7.0 U	140 U	11 U	7.0 U	1.1 U	J 1.1	U 1.1 U	1.1 U	J 1.1	U 1.1 U	1.1 UJ
1,2-Dichloroethane		0.62 U	0.92 0.	0.92 UJ	0.92 U	440 L	J 85	U 4.0 U	81 U	9.6 U	4.0 U	0.92 0	J 0.92	U 0.62 U	0.62	J 0.92	U 0.62 U	J 0.92 UJ
1,2-Dichloroethene		NA	NA	NA	NA	440 L	J 83	U 4.0 U	79 U	6.3 U	4.0 U	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane		0.70 U.	J 0.70 U	J 0.70 UJ	0.70 UJ	510 U	J 97	U 4.6 U	92 U	7.4 U	4.6 U	0.70 U	J 0.70	UJ 0.70 U.	J 0.70 U	J 0.70	U 0.70 L) 0.70 UJ
1,3,5- I rimethylbenzene		180 J	3.1 J	280 J	5.1 J	540 L	100	U 4.9 U	98 U	7.9 U	4.9 U	9.6	37	J 19 J	8.9 J	J 7.8	J 7.9	16 J
1,3-Dichlorobenzene		0.92 U	J 0.92 U	J 0.92 UJ	0.92 UJ	660 U	J 130	U 6.0 U	120 U	9.6 U	6.0 U	0.92 U	J 0.92	UJ 0.92 U	J 0.92 U	J 0.92	UJ 0.92 U	J 0.92 UJ
1,4-Dichlorobenzene		0.92 U.	J 0.92 U.	J 0.92 UJ	22 J	660 U.	J 130	U 6.0 U	120 U	31	27	0.92 U	J 1.7	J 2.1 J	1.3 J	J 1.3	J 1.5 .	3.0 J
1,4-Dioxane		89 J	5.9 J	1.1 UJ	14 J	9,700 U	J 1,900 U	JJ 90 UJ	2,700 J	140 UJ	J 90 U.	J 1.1 U	J 1.1	UJ 1.1 U.	J 1.1 U	J 1.1	U 1.1 U	1.1 U.
2,2,4-1 rimethylpentane		0.71 U. 67 I	7.5	37 UJ	0.71 U 14 I	510 L 8.600	1 98	U 4./ U 7.4 II	93 U 1 700	1.5 U	4./ U	0./1 U	J U./1 1.400	UJ U./1 U. J 2.600 I	1 200	0./1	U U./1 L	23 J
2-Chlorotoluene		NA J	NA S	NA	NA	570 L	J 110	U 5.2 U	100 U	8.3 U	5.2 U	NA	NA	NA NA	NA 1,200	NA	NA	NA
2-Hexanone (MBK)		33 J	0.67 J	1.2 UJ	1.5 J	1,100 L	J 210	U 10 U	200 U	16 U	10 U	160	58	J 77 J	34 J	J 30	J 61	62 J
4-Ethyltoluene		67 J	1.4 J	190 J	1.9 J	540 L	100	U 4.9 U	98 U	7.9 U	4.9 U	3.3	45	J 5.1 J	5.2 J	5.5	J 3.6	5.5 J
Acetone		0.0 J 200 I	110	340 J	610 J	6.400 1	J 1.200	U 59 II	1.200	95 11	59 11	4.0	1.5	J 3.3 J	580 J	340	J 1.1	1.∠ UJ 1200 I
Allyl Chloride		0.48 U.	J 0.48 U	J 0.48 UJ	0.48 UJ	850 L	J <u>160</u>	U 7.8 U	160 U	13 U	7.8 U	0.48 U	J 0.48	UJ 0.48 U.	J 0.48 U	J 0.48	U 0.48 U	J 0.48 UJ
Benzene		7.5 J	3.6 J	16 J	1.3 J	350 L	J 67	U 3.2 U	64 U	3.8 J	5.1 U.	J 1.8 .	76	J 150 J	2.1 J	l 1.8	J 4.6	3.4 J
Benzyl chloride		0.88 U.	J 0.88 U.	J 0.88 UJ	0.88 U	NA 740 I	NA 140	NA 6.7 U	NA 120	NA 11 11	NA 6.7 U	0.88 U	J 0.88	UJ 0.88 U.	J 0.88 U.	J 0.88	UJ 0.88 U	J 0.88 UJ
Bromoform		1.6 U	J 1.6 U	J 1.6 UJ	1.6 U	1.100	J 220	U 10 U	210 U	11 U	10 U	1.6 U	J 1.6	UJ 1.6 U.	J 1.6 U	J 1.6	UJ 1.6 U	J 1.6 UJ
Bromomethane		0.59 U.	J 0.59 U.	J 0.59 UJ	0.59 U	430 L	J 82	U 3.9 U	78 U	6.2 U	3.9 U	0.59 U	J 0.59	UJ 0.59 U	0.59 U	J 0.59	U 0.59 l	J 0.59 UJ
Carbon Disulfide		24 J	4.2 J	18 J	1.2 J	840 L	J 160	U 7.8 U	160 U	12 U	7.8 U	0.66	7.3	J 12 J	1.9 J	0.79	J 1.4	2.0 J
Carbon Letrachloride		0.96 U.	0.96 U	J 0.96 UJ	0.96 U	690 L	J 130	U 6.3 U	130 U	10 U	6.3 U	0.96 U	J 0.96	UJ 0.96 U.	0.96 0	0.96	U 0.96 U	0.96 UJ
Chloroethane	-	0.40 U	J 0.40 U	J 1.20 J	0.40 U	710 L	J 140	U 6.6 U	130 U	11 U	6.6 U	0.40 U	J 0.40	U 0.54 J	0.40 U	J 0.40	U 0.40 U	J 0.40 UJ
Chloroform		7.4 J	1.7 J	51 J	1.7 J	1,000	200	16	270	36	30	5.1	2.1	J 19 J	1.3 J	J 0.74	U 0.55 .	1.0 J
Chloromethane		0.31 U.	J 0.31 U.	J 0.86 J	0.31 U	560 L	J 110	U 5.2 U	100 U	8.3 U	5.2 U	1.1	0.57	J 0.69 J	0.29 J	J 0.27	J 0.38	0.69 J
cis-1,2-Dichloropropene		0.48 J	0.60 0.	J 7.90 J	0.60 U	440 L	95	U 4.0 U	79 U 91 U	6.3 U	4.0 U	0.60 0	J 0.60	0 0.60 0	0.60 0	0.60	U 0.60	0.60 00
Cyclohexane		9.8 J	0.52 U.	J 14 J	0.52 U	380 L	J 72	U 3.4 U	69 U	5.5 U	3.4 U	0.52 U	J 6.3	J 130 J	2.4 J	2.7	J 4.0	0.52 UJ
Dibromochloromethane		1.3 U.	J 1.3 U	J 1.3 UJ	1.3 U	940 L	J 180	U 8.5 U	170 U	14 U	8.5 U	1.3 U	J 1.3	UJ 1.3 U.	J 1.3 U.	J 1.3	UJ 1.3 U	J 1.3 UJ
Dichlorodifluoromethane (Freon 12)		410 J	30 J	24 J	6,000 NA	100,000 NA	260 NA	U 12 U	250 U	120 NA	100 NA	42 J	3.5 NA	J 110 J	420 J	J 8.6	J 2.6 ΝΔ	44 J
Ethyl Acetate		0.92 U.	J 0.92 U	J 0.92 UJ	0.92 U	NA	NA	NA	NA	NA	NA	540	2.5	J 600 J	120 J	J 6.7	J 2.6	42 J
Ethylbenzene		8.7 J	6.8 J	35 J	0.75 J	480 L	J 91	U 4.3 U	87 U	6.9 U	4.3 U	44 、	1,200	J 2,200 J	980 J	l 16	J 20	32 J
Heptane		0.62 U	J 2.2 J	84 J	1.6	NA 1 200	NA 220	NA 11	82 U	6.6 U	4.1 U	0.62 U	J 0.62	UJ 0.62 U.	J 0.62 U	J 0.62	U 0.62 l	0.62 UJ
Hexace		0.54 U	0.54 U	1.6 UJ	0.54 U	950	J 180	U 8.8 U	180 U	17 U	8.8 U	0.54 U	J 0.54	U 0.54 U	0.54	J 0.54	U 0.54 U	J 1.6 UJ
Isopropanol		190 J	47 J	130 J	84	6,600 L	J 1,300	U 61 U	1,200 U	98 U	61 U	0.37 U	J 0.37	UJ 0.37 U.	J 0.37 U.	J 0.37	UJ 0.37 U	J 0.37 UJ
m&p-Xylene		20 J	9.3 J	75 J	1.3 J	1,200 L	230	U 11 U	220 U	17 U	11 U	100	2,100	J 3,800 J	1,800 J	52	J 54	83
Methylene chloride		0.55 U.	U 0.55 U	0.55 UJ	0.55 U	970 L	190	U 9.0 U	180 U	14 U	9.0 U	0.55 U	J 0.55	U 2.4 J	0.55 U	0.55	U 0.55 l	0.55 UJ
o-Xylene		26 J	4.2 J	56 J	0.88 J	480 L	J 91	U 4.3 U	87 U	6.9 U	4.3 U	32	350	J 610 J	280 J	J 23	J 23	35 J
Propene		0.26 U.	J 0.26 U	J 0.26 UJ	0.26 U	NA	NA	NA	NA	NA	NA	0.26 U	J 0.26	U 0.26 U	0.26 U	J 0.26	U 0.26 l	0.26 UJ
Styrene		5.7 J	0.74 J	0.65 UJ	0.82 J	470 L	89	U 4.3 U	85 U	6.8 U	4.3 U	0.65 U	J 3.7	J 6.7 J	7.1 J	7.2	J 5.6	7.8 J
Tetrachloroethylene (PCE)		10 .I	1,300 .I	1NA 87 .1	5.2 .I	0,200 U 750 I	J 1,800	31	11.000	120 0	150	61 ·	440	J 1.8 .I	1,5 .I	INA 1.3	J 1.5 .	2,5 .I
Tetrahydrofuran		2.2 J	0.45 U	J 0.72 J	0.45 U	8,000 L	J 1,500	U 74 U	1,500 U	120 U	74 U	0.45 U	J 0.45	UJ 0.45 U	0.45 U	J 0.45	U 0.45 l	J 0.45 UJ
Toluene		11 J	6.9 J	32 J	7.2 J	640	140	3.8 U	110	6.0 U	3.8 U	57	1,700	J 3,400 J	1,600 J	17	J 20	45 J
trans-1,2-Dichloroethylene		0.60 U	U.60 U.	J 1.90 J	0.60 U	440 L	83	U 4.0 U	79 U	6.3 U	4.0 U	0.60 U	J 0.60		0.60 U	0.60	U 0.60 L	0.60 UJ
Trichloroethylene (TCE)	5	43.000 J	980 J	14.000 J	7.100	590 L	20.000	100	5.900	810	700	63	390	J 120 J	8.4 J	15	J 80	7.6 J
Trichlorofluoromethane (Freon 11)		5.5 J	6.3 J	7.4 J	2.5 J	620 L	J 120	U 5.6 U	110 U	9.6	8.4	4.0	4.3	J 3.4 J	87 J	J 1.5	J 1.5	3.7 J
Vinyl Acetate		0.54 U.	J 0.54 U.	J 0.54 UJ	0.54 U	NA	NA	NA	NA	NA	NA	0.54 U	J 0.54	U 0.54 U	0.54 U	J 0.54	U 0.54 U) 0.54 UJ
Vinyi Bromide		0.67 U.	U.67 U.	U.67 UJ	0.67 U	480 L 280 I	92 54	U 4.4 U U 2.6 II	<u>8/</u> U	7.0 U 4.1 U	4.4 U 2.6 U	0.67 U	J U.67 J 0.39	UJ 0.67 U	0.67 U	0.67	U 0.67 U	U.67 U. 0.39 U
Xylenes (total)		NA	NA	NA	NA	480 L	J 91	U 4.3 U	87 U	6.9 U	4.3 U	NA	NA	NA	NA	NA	NA NA	NA
Notes:	-	-																
µg/m ⁻ = micrograms per cubic meter																		
I - Estimated Value	n AGVS.																	
U -The compound was not detected at the indicated conce	entration.																	
NA - Not analyzed																		
= Not Available	0																	
NYSDUH AGV- New York State Department of Health Air	Guideline Values																	
	ourrollt.																	

Sample ID		SV-13	SV-14	SS-04	IA-01	IA-02	OA-1	KETTELL-21-SS	KETTELL-21-IA	KETTELL-21-IA	KETTELL-21-0A	KETTELL-21-SS	KETTELL-35-SS	KETTELL-35-IA	KETTELL-35-OA	KETTELL-43-SS	KETTELL-43-IA	KETTE	ELL-45-SS	KETTELL-45-IA	KETTELL-45-SS	KETTELL-45-IA
Lab ID		C0707006-008	C0707006-007	C0709006-001	C0709007-003	C0709007-004	C0709007-005	C0803027-001	C0803027-002	JA34267-2	JA34267-3	JA34267-3	C0803027-013	C0803027-012	C0803027-0014	C0803027-004	C0803027-003	C0803	3027-009	C0803027-008	JA42434-2	JA42434-1
Date Sampled		07-10-2007	07-10-2007	09-6-2007	09-6-2007	09-6-2007	09-6-2007	03-17-2008	03-17-2008	12-1-2009	12-1-2009	12-1-2009	03-14-2008	03-14-2008	03-14-2008	03-15-2008	03-15-2008	03-14	14-2008	03-14-2008	03-18-2010	03-18-2010
Matrix		Off-Site Soil Vapo	r Off-Site Soil Vapo	or Off-Site Sub Slab	Indoor Air	Indoor Air	Outdoor Air	Off-Site Sub Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Off-Site Sub Slab	Indoor Air	Outdoor Air	Off-Site Sub Slab	Indoor Air	Off-Site	e Sub Slab	Indoor Air	Off-Site Sub Slab	Indoor Air
Land Use		Industrial	Industrial	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Resi	sidential	Residential	Residential	Residential
Volatile Organic Compound	NYSDOH AGV	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Re	Result	Result	Result	Result
1,1,1-I richloroethane		1.9	2.9 J	0.67 J	0.832 U	0.832 U	0.832 U	0.83 U	0.832 U	0.22 U	0.22 U	0.22 U	0.55 J	0.832 U	0.832 U	0.94	0.832 U	0.78	/8 J	1.05 J	1.3	0.22 U
1,1,2,2-Tetrachioroethane		1.0 0	J 1.0 0.		1.05 0	1.05 0	1.05 0	0.75	1.05 0	0.27 0	2.1	0.27 0	1.0 0	1.05 0	1.05 0	1.0 0	1.05 0	1.0	2 11	1.05 0	0.27 0	0.27 0
1 1 2-Trichloroethane		0.83 U	J 0.83 U	1 0.83 U	0.832	0.832	0.832	0.83 U	0.832	0.22 11	0.22	0.22	0.83 U	0.832 U	0.832	0.83 U	0.832 U	0.8	2 U	0.832 U	0.22	0.22 U
1.1-Dichloroethane		0.62 U	J 0.62 U.	J 0.62 U	0.617 U	0.617 U	0.617 U	0.62 U	0.617 U	0.81 U	0.81 U	0.81 U	0.62 U	0.617 U	0.617 U	0.62 U	0.617 U	0.6	52 U	0.617 U	0.81 U	0.81 U
1,1-Dichloroethylene		0.60 U	J 0.60 UJ	J 0.60 U	0.605 U	0.605 U	0.605 U	0.60 U	0.605 U	0.79 U	0.79 U	0.79 U	0.60 U	0.605 U	0.605 U	0.60 U	0.605 U	0.60	60 U	0.605 U	0.79 U	0.79 U
1,2,4-Trichlorobenzene		1.1 U	J 1.1 UJ	J 1.1 U	1.13 U	1.13 U	1.13 U	1.1 U	1.13 U	0.74 U	0.74 U	0.74 U	1.1 U	1.13 U	1.13 U	1.1 U	1.13 U	1.1	1 U	1.13 U	0.74 U	0.74 U
1,2,4-Trimethylbenzene		28 .	29 J	1.0 J	1.95 J	1.2 J	4.25 J	0.75 U	0.55 J	0.98 U	0.59 J	0.98 U	0.70 J	1.55	0.75 U	0.75 U	1.4	0.75	75 U	0.50 J	0.59 J	0.69 J
1,2-Dibromoethane (EDB)		1.2 U	J 1.2 UJ	J 1.2 U	1.17 U	1.17 U	1.17 U	1.2 U	1.17 U	0.31 U	0.31 U	0.31 U	1.2 U	1.17 U	1.17 U	1.2 U	1.17 U	1.2	2 U	1.17 U	0.31 U	0.31 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)		1.1 U	J 1.1 UJ	J 1.1 U	1.07 U	1.07 U	1.07 U	0.78 J	1.07 U	0.28 U	0.28 U	0.28 U	1.2 U	1.07 U	1.07 U	1.2 U	1.07 U	1.2	2 U	1.07 U	0.28 U	0.28 U
1,2-Dichlorobenzene		0.92 0	J 0.92 UJ	J 0.92 U	0.917 U	0.917 U	0.917 U	0.92 U	0.917 U	0.24 U	0.24 U	0.24 U	0.92 U	0.917 U	0.917 U	0.92 U	0.917 U	0.9	92 U	0.917 U	0.24 U	0.24 U
1,2-Dichloroethene		0.62 U	J 0.62 0J	J 0.62 U	0.617 U	0.617 U	0.617 U	U.60	0.617 U	0.81 U	0.81 U	0.81 U	3.3 NA	0.617 U	0.617 U	0.62 U	0.617 U	0.6	Δ 0	0.617 U	0.61 U	0.81 U
1.2-Dichloropropane		0.70 U	1 0.70 11	1 0.70 11	0.705 U.I	0.705 U	0.705 U.I	0.70 U	0.705 U	0.92 11	0.92 11	0.92 11	0.70 U	0.705 U	0.705 U	0.70 U	0.705 U	0.70	70 U	0.705 U	0.92 U	0.92 U
1.3.5-Trimethylbenzene		8.5	9.3 J	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.98 U	0.98 U	0.98 U	0.55 J	0.60 J	0.75 U	0.75 U	0.70 J	0.7	75 U	0.75 U	0.98 U	0.98 U
1,3-Butadiene		0.34 U	J 0.34 UJ	J 0.34 U	0.337 U	0.337 U	0.337 U	0.34 U	0.337 U	0.44 U	0.44 U	0.44 U	0.34 U	0.337 U	0.337 U	0.34 U	0.337 U	0.34	34 U	0.337 U	0.44 U	0.44 U
1,3-Dichlorobenzene		13 .	0.92 UJ	J 0.92 U	0.917 U	0.917 U	0.917 U	0.92 U	0.917 U	0.60 U	0.60 U	0.60 U	0.92 U	0.917 U	0.917 U	0.92 U	0.917 U	0.92	92 U	0.917 U	0.60 U	0.60 U
1,4-Dichlorobenzene		1.4 .	1.2 J	8.3 J	298	1,840	5.01 J	0.92 U	0.917 U	0.60 U	0.60 U	0.60 U	0.92 U	2.14	0.917 U	0.92 U	0.917 U	0.92	92 U	0.917 U	0.60 U	0.60 U
1,4-Dioxane		1.1 U	J 1.1 UJ	J 1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 U	1.1 UJ	0.72 U	0.72 U	0.72 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1	1 U	1.1 U	0.72 U	0.72 U
2,2,4- I rimethylpentane		0.71 U	J 0.71 UJ	J 0.71 U	0.712	0.712 U	0.712 U	0.62 J	0.475 J	0.93 U	0.93 U	0.93 U	0.71 U	1.19	39.4	0.71 U	1.71	0.7	/1 U	1.28	0.93 U	0.61 J
2-Butanone (MEK)		130 .	140 J	0.99	1.83	0.719 J	0.899 0	1.1	0.899 0	0.59 0	0.59 0	1.4	1.0	1.95	0.899 0	2.4	9.59	1.9	9	1.02	1.7	3.8
2-Hexanone (MBK)		30	47 1	1.2 11	1.25	1.25	1.25	1.2 11	1.25	0.82 11	0.82 11	0.82 11	1.2 11	1.25	1.25	1.2 11	1.25	1 2	2 11	1.25	0.82 11	0.82 11
4-Ethyltoluene		5.5	4.6 J	0.75 U	0.75 U	0.75 U	0.55 J	0.75 U	0.75 U	0.98 U	0.98 U	0.98 U	0.75 U	0.75 U	0.75 U	0.75 U	0.85	0.7	- U	0.75 U	0.98 U	0.98 U
4-Methyl-2-pentanone (MIBK)		1.6	1.0 J	1.2 U	1.25 U	1.25 U	1.25 U	1.2 U	1.25 U	0.82 U	0.82 U	0.82 U	1.2 U	1.25 U	1.25 U	1.2 U	1.25 U	1.2	2 U	1.25 U	0.82 U	0.82 U
Acetone		350	440 J	8.7	31.6	19.1	22.2	21	7.48	5.7	3.6	20	18	20.8	17.9	15	103	21	1	8.31	14	25.4
Allyl Chloride		0.48 U	J 0.48 UJ	J 0.48 UJ	0.477 UJ	0.477 UJ	0.477 UJ	0.48 U	0.477 UJ	0.63 U	0.63 U	0.63 U	0.48 U	0.477 U	0.477 U	0.48 U	0.477 U	0.48	48 U	0.477 U	0.63 U	0.63 U
Benzene		3.2 .	1.7 J	0.49 UJ	1.27 J	0.552 J	0.779 J	0.62	0.487	0.7	0.67	0.64 U	0.62	1.36	0.877	0.58	1.17	0.52	52	1.49	0.77	1.6
Benzyl chloride		0.88 U	J 0.88 UJ	J 0.88 U	0.877 U	0.877 U	0.877 U	0.88 U	0.877 U	1.0 U	1.0 U	1.0 U	0.88 U	0.877 U	0.877 U	0.88 U	0.877 U	0.88	38 U	0.877 U	1.0 U	1.0 U
Bromodichioromethane		1.0 0	J 1.0 UJ	J U.68 J	1.02 U	1.02 U	1.02 U	1.0 0	1.02 U	0.27 0	0.27 0	0.27 U	1.0 0	1.02 U	1.02 U	1.0 0	1.02 U	1.0		1.02 U	0.27 0	0.27 0
Bromomethane		0.59	J 0.59 U	1 0.59 11	0.592 11	0.592	0.592	0.59 11	0.592	0.41 0	0.41 0	0.41 0	0.59 11	0.592	0.592	0.59 11	0.592	0.59	59 11	0.592	0.41 0	0.41 0
Carbon Disulfide		1.6	1.2 J	0.51 J	0.38 J	0.475 U	0.475 U	1.1	0.475 U	0.62 U	0.62 U	1.2	1.1	0.475 U	0.475 U	0.54	0.475 U	5.2	2	0.475 U	3.4	0.62 U
Carbon Tetrachloride		0.96 U	J 0.96 UJ	J 0.96 U	0.384	0.384	0.32	0.96 U	0.576	0.25 U	0.25 U	0.25 U	0.96 U	0.512	0.256 U	0.96 U	0.576	0.96	96 U	0.576	0.94	0.25 U
Chlorobenzene		0.70 U	J 0.70 UJ	J 0.70 U	0.702 U	0.702 U	0.702 U	0.70 U	0.702 U	0.92 U	0.92 U	0.92 U	0.70 U	0.702 U	0.702 U	0.70 U	0.702 U	0.70	70 U	0.702 U	0.92 U	0.92 U
Chloroethane		0.40 U	J 0.40 UJ	J 0.40 U	0.402 U	0.402 U	0.402 U	0.40 U	0.402 U	0.53 U	0.53 U	0.53 U	0.40 U	0.402 U	0.402 U	0.40 U	0.402 U	0.40	40 U	0.402 U	0.53 U	0.53 U
Chloroform		0.99 .	0.50 J	13	1.44	0.943	0.744 U	0.99	0.744	0.98 U	0.98 U	0.98 U	0.60 J	4.07	0.744 U	0.74 U	0.744 U	0.6	65 J	0.744 U	0.98 U	0.98 U
Chloromethane		0.63	0.46 J	0.31 U	0.798	0.945	0.672	0.92	0.525	1.1	1.1	0.41 U	0.52	1.05	0.504	0.27 J	0.63	0.30	36	0.651	0.41 U	1.2
cis-1,2-Dichloroethylene		0.60 U	J 0.89 J	0.60 U	0.604 U	0.604 U	0.604 U	0.60 U	0.604 U	0.79 U	0.79 U	0.79 U	0.60 U	0.604 U	0.604 U	0.56 J	0.604 U	0.60	50 U	0.604 U	0.79 U	0.79 U
Civelobexane		2.1	J 0.69 0J	0.52	0.692 0	0.692 0	0.692 U	0.69 0	0.692 0	0.91 0	0.91 0	0.91 0	0.69 0	0.692 0	0.692 0	0.69 0	2.03	0.0	5	2.4	0.91 0	1.0 11
Dibromochloromethane		1.3 U	J 1.3 U.	J 1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.34 U	0.34 U	0.34 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3	3 U	1.3 U	0.34 U	0.34 U
Dichlorodifluoromethane (Freon 12)		2.1	2.0 J	4.8	2.36	2.36	2.01	4.0	2.5	2.5	2.5	5.9	2.6	2.97	2.3	3.3 J	2.41	2.4	4	2.6	158.0	3.1
Ethanol		NA	NA	NA	NA	NA	NA	NA	NA	6.2	6.8	4.9	NA	NA	NA	NA	NA	NA	A	NA	60.7	36.6
Ethyl Acetate		4.8	25 J	0.92 U	0.916	0.916 U	0.659 J	7.5	1.83	0.97	0.72 U	2.7	4.1	7.33	5.09	0.92 U	3.85	5.2	2	3.99	0.72 U	0.72 U
Ethylbenzene		60 .	38 J	0.49 J	1.99	0.574 J	0.927	0.66 U	0.662 U	0.87 U	0.87 U	0.87 U	0.44	6.49	0.662 U	0.66 U	31.6	0.66	66 U	0.53 J	0.87 U	0.43 J
Heptane		0.62 U	J 0.62 UJ	J 0.62 U	0.625 U	0.625 U	0.625	0.50 J	0.625 U	0.82 U	0.82 U	0.82 U	1.5	1.42	8.5	0.62 U	1.29	0.7	/1	1.04	0.82 U	1.2
Hexachiorobuladiene		0.54	J 1.6 UJ	J 1.6 U	1.03 0	0.537 11	2.08	0.70	0.609	0.96 0	0.96 0	0.96 0	1.0 U	3.4	34.7	0.54 11	1.03 0	1.0	0 0	2.60	0.96 0	2.7
Isopropanol		0.34 0	J 0.37 U.	0.34 0	8.49 .1	0.375 U	10.7 .1	0.73	0.375	1.2	11	1.4	0.37 U	20.7	0.375 U	0.34 0	0.375 U	1.4	0	0.375 U	3.4	0.49 U
m&p-Xylene		130	100 J	0.97 J	1.81	1.15 J	2.16	0.53 J	0.485 J	0.87 U	0.91	0.87 U	0.93 J	13.2	0.883 J	0.75 J	94.5	0.53	53 J	1.37	0.78 J	1.4
Methyl tert-butyl ether (MTBE)		0.55 U	J 0.55 UJ	J 0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.72 U	0.72 U	0.72 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.5	55 U	0.55 U	0.72 U	0.72 U
Methylene chloride	60	0.64	0.53 U.	J 0.53 U	0.989 J	0.53 U	0.494 J	2.8	0.424 J	0.69 U	0.59 J	0.69 U	25	22.6	0.494 J	1.4	0.388 J	1.2	2	0.742	0.45 J	1.8
o-Xylene		41	39 J	0.44 J	0.927 J	0.574 J	1.24 J	0.66 U	0.662 U	0.87 U	0.87 U	0.87 U	0.66 U	5.83	0.662 U	0.66 U	16.6	0.60	66 U	0.485 J	0.87 U	0.48 J
Propene		0.26 U	J U.26 U.	J U.26 U	0.262 U	0.262 U	0.262 U	0.26 U	0.262 U	1.3	1.2	0.38 J	0.26 U	0.262 U	0.262 U	0.26 U	0.262 U	0.20	20 U	0.262 U	U.86 U	0.86 U
Tertiany butyl alcohol		0./ C	0.3 J	0.05 NA	1.13 NA	0.006 J	1.73 NA	0.05 U	0.049 U	0.60 U	0.60 U	0.61	0.00 U	0.049 U	0.049 U	0.05 U	1.50 NA	0.6	Δ 0	0.049 U	0.00 U	0.61
Tetrachloroethylene (PCF)	100	1.4	56 1	6.9	1.03	1.03	1.03	1.0	1.03	0.27 11	0.26 1	0.95	0.97 1	1.03 11	1.03 11	3.0	1.03 11	1.0	0 11	1.1	0.81	0.75
Tetrahydrofuran		1.5	0.45 U.	J 0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.59 U	0.59 U	0.59 U	0.45 U	0.45 U	0.45 U	1.0	14.4	0.4	45 U	0.45 U	0.59 U	0.59 U
Toluene		95	45 J	2.6	6.89	3.52	6.09	1.5	2.11	1.4	1.7	0.68 J	2.2	8.81	3.68	2.3	15.7	2.9	9	4.02	3.2	4.9
trans-1,2-Dichloroethylene		0.60 U	J 0.60 UJ	J 0.60 U	0.604 U	0.604 U	0.604 U	0.60 U	0.604 U	0.79 U	0.79 U	0.79 U	0.60 U	0.604 U	0.604 U	0.60 U	0.604 U	0.60	60 U	0.604 U	0.79 U	0.79 U
trans-1,3-Dichloropropene		0.69 U	J 0.69 UJ	J 0.69 U	0.692 U	0.692 U	0.692 U	0.69 U	0.692 U	0.91 U	0.91 U	0.91 U	0.69 U	0.692 U	0.692 U	0.69 U	0.692 U	0.69	69 U	0.692 U	0.91 U	0.91 U
Trichloroethylene (TCE)	5	70	7.1 J	1.5 J	21.3 J	17.5 J	21.3	8.1	17.8	0.21 U	0.21 U	0.21 U	2.2	12.6	0.218 U	2.0	0.874	9.2	2	0.655	3.3	0.21 U
Trichlorofluoromethane (Freon 11)		1.5	1.5 J	2.7	1.54	1.54	1.48	1.7	1.14	1.3	1.3	1.7	1.6	1.43	1.14	1.8	1.2	1.2	2	1.31	1.6	2.7
Vinyl Acetate		0.54 0	J 0.54 UJ	J 0.54 U	0.537 U	0.537 U	0.537 U	0.54 U	0.537 U	0.70 U	0.70 U	0.70 U	0.54 U	0.537 U	0.537 U	0.54 U	0.537 U	0.54	54 U	0.537 U	0.70 U	0.70 U
Vinyl Chloride		0.07 0	J 0.37 U.	0.07 0	0.39 11	0.39 11	0.007 0	0.39 11	0.007 0	0.57 0	0.57 0	0.57 0	0.39 11	0.007 0	0.007 0	0.39 11	0.007 0	0.0	39 []	0.007 0	0.57 0	0.57 0
Xylenes (total)		NA	NA	NA	NA	NA	NA	NA	NA	0.87 U	0.91	0.87 U	NA	NA	NA	NA	NA	NA	A	NA 0	0.78 J	1.9
Notes:				1 1	· ·																	<u> </u>
µg/m ³ = micrograms per cubic meter Items shaded and in bold font equal or exceed NYSDOH	AGVs.																					
J - Estimated Value		-																				
U -The compound was not detected at the indicated concer	ntration.																					
NA - Not analyzed																						
= Not Available																						
NYSDOH AGV- New York State Department of Health Air C ⁽¹⁾ - As per Appendix C of the Final NYSDOH Guidance doc	Guideline Values ument.																					

Sample ID		KETTELL-45-OA	WHITTIER-11-IA	WHITTIER-11-SS	WHITTIER-11-OA	WHITTIER-32-SS	WHITTIER-32-I	A WHITTIER-33-SS	WHITTIER-33-IA	WHITTIER-33-OA	WHITTIER-33-SS	WHITTIER-33-IA	WHITTIER-33-0	DA STEW-IA-01	STEW-IA-01-0916	10 STEW-IA-02	STEW-IA-02-091610	STEW-IA-03	STEW-IA-03-091610	0 STEW-IA-04
Lab ID Date Sampled		JA42434-3 03-18-2010	03-15-2008	03-17-2008	03-15-2008	03-14-2008	03-14-2008	03-17-2008	03-17-2008	03-17-2008	JA42434-2 03-24-2010	JA42434-1 03-24-2010	JA42434-3 03-24-2010	JA34267-4 12-1-2009	1010605-01 09-16-2010	JA34267-5 12-1-2009	09-16-2010	JA34267-6 12-1-2009	09-16-2010	JA34267-7 12-1-2009
Matrix		Outdoor Air	Indoor Air	Outdoor Air	Outdoor Air	Off-Site Sub Slab	Indoor Air	Off-Site Sub Slab	Indoor Air	Outdoor Air	Off-Site Sub Slab	Indoor Air	Outdoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Land Use		Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
1.1.1-Trichloroethane		0.22 U	0.832 U	1.6	0.832 U	0.83 U	0.832	J 0.61 J	0.832	0.832	1.4	3.0	0.22	U 0.22 U	0.27	0.65	0.32	0.22 U	<0.27 U	0.22 U
1,1,2,2-Tetrachloroethane		0.27 U	1.05 U	1.0 U	1.05 U	1.0 U	1.05 L	J 1.0 U	1.05 U	1.05 U	0.27 U	0.27 U	0.27	U 0.27 U	0.34	U 0.27 U	0.34 U	0.27 U	<0.34 U	0.27 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		0.31 U	1.17 U	1.2 U	1.17 U	1.2 U	1.17 L	J 1.2 U	1.17 U	1.17 U	0.31 U	0.31 U	0.31	U 2.5	0.5	2.4	0.62	2.7	0.64	2.4
1,1,2-1 richloroethane		0.22 U	0.832 U	0.83 U	0.832 U	0.83 UJ	0.832	0.83 0	0.832 0	0.832 0	0.22 U	0.22 U 0.81 U	0.22	U 0.22 U	0.27	U 0.22 U	0.27 0	0.22 0	<0.27 U	0.22 0
1,1-Dichloroethylene		0.79 U	0.605 U	0.60 U	0.605 U	0.60 U	0.605 L	J 0.60 U	0.605 U	0.605 U	0.79 U	0.79 U	0.79	U 0.79 U	0.2	U 0.79 U	0.2 U	0.79 U	<0.20 U	0.79 U
1,2,4-Trichlorobenzene		0.74 U	1.13 U	1.1 U	1.13 U	1.1 U	1.13 L	J 1.1 U	1.13 U	1.13 U	0.74 U	0.74 U	0.74	U 0.74 U	0.37	U 0.74 U	0.37 U	0.74 U	<0.37 U	0.74 U
1,2,4-Trimethylbenzene		0.98 U	0.799	0.75 U	2.25	0.65 J	0.846		0.50 J	0.749 U	0.74 J	0.69 J	0.98	U 2.3	1.3	2.7	1.4	1.6	1.2	1.2
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)		0.28 U	1.07 U	1.1 U	1.07 U	1.1 U	1.07 L	J 1.1 U	1.07 U	1.07 U	0.28 U	0.28 U	0.28	U 0.28 U	0.35	U 0.28 U	0.35 U	0.28 U	<0.35 U	0.28 U
1,2-Dichlorobenzene		0.24 U	0.917 U	0.92 U	0.917 U	0.92 U	0.917 L	J 0.92 U	0.917 U	0.917 U	0.24 U	0.24 U	0.24	U 0.24 U	0.3	U 0.24 U	0.3 U	0.24 U	<0.30 U	0.24 U
1,2-Dichloroethane		0.81 U	0.617 U	0.62 U	4.36	0.62 U	0.617 L	J 0.62 U	0.617 U	0.617 U	0.81 U	0.81 U	0.81	U 0.81 U	0.2	U 0.81 U	0.2 U	0.81 U	<0.20 U	0.81 U
1,2-Dichloropropage		0.92 U	0.705 U	0.70 U	0.705 U	0.70 U	0.705 1	NA 1 0.70 U	0.705 U	0.705 U	0.31 U	0.92 U	0.31	NA U 0.92 U	0.23	0.92 U	0.23 U	0.92 U	NA <0.23 ∐	0.92 U
1,3,5-Trimethylbenzene		0.98 U	0.75 U	0.75 U	1.05	0.75 U	0.75 L	J 1.1 U	0.75 U	0.75 U	0.98 U	0.98 U	0.98	U 0.79 J	0.42	0.88 J	0.38	0.54 J	0.35	0.98 U
1,3-Butadiene		0.44 U	0.337 U	0.34 U	0.337 U	0.34 U	0.337 L	J 0.34 U	0.337 U	0.337 U	0.44 U	0.44 U	0.44	U 0.44 U	0.11	U 0.44 U	0.11 U	0.44 U	<0.11 U	0.44 U
1,3-Dichlorobenzene		0.60 U	0.917 U	0.92 U	0.917 U	0.92 U	0.917	J 0.92 U	0.917 U	0.917 U	0.60 U	0.60 U	0.60	U 0.60 U	0.3	U 0.60 U	0.3 U	0.60 U	<0.30 U	0.60 U
1,4-Dioxane		0.72 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 L	J 1.1 U	1.1 U	1.1 U	0.72 U	0.72 U	0.72	U 0.72 U	NA	0.72 U	NA	0.72 U	NA 0	0.72 U
2,2,4-Trimethylpentane		0.93 U	0.712 U	0.71 U	1.52	0.57 J	9.21	0.71 U	0.712 U	0.712 U	0.93 U	5.1	0.93	U 0.84 J	NA	0.65 J	NA	1.3	NA	0.47 J
2-Butanone (MEK)		0.59 U	3.81	0.99	42	11 N0	45	4.3	0.899 U	0.899 U	1.5	3.8	0.56	J 0.86	5	0.97	4.4	0.94	2.6	1.1
2-Griorototuene 2-Hexanone (MBK)		0.82 11	1.25 11	1.2 U	1.25 11	1,2 U	1.25 I	INA J 1,2 II	1,25 U	1,25 U	0,49 .1	0.82 11	0.82	U 0.82 II	0.79	0,82 11	0.58	0.82 11	0.37	0.82
4-Ethyltoluene		0.98 U	0.75 U	0.75 U	1.1	0.75 U	0.75 L	U 0.75 U	0.75 U	0.75 U	0.98 U	0.98 U	0.98	U 0.49 J	0.31	0.64 J	0.28	0.98 U	0.31	0.98 U
4-Methyl-2-pentanone (MIBK)		0.82 U	1.25 U	1.2 U	1.25 U	1.2 U	1.25 L	J 1.2 U	1.25 U	1.25 U	0.82 U	0.82 U	0.82	U 0.82 U	0.45	0.82 U	0.39	0.82 U	<0.20 U	0.82 U
Acetone Allyl Chloride		10	9.05	13	21.4	60	295	39	12.9	13.5	19	31.8	5.5	7.6	40 NA	8.3	36 NA	9.3	<0.48 U	6.7
Benzene		0.64 U	0.812	0.48 U	3.93	1.2	1.56	1.3	0.487	0.455 J	0.64	0.03 0	0.38	J 1.4	1.6	1.3	1.5	1.9	2.2	0.93
Benzyl chloride		1.0 U	0.877 U	0.88 U	0.877 U	0.88 U	0.877 L	J 0.88 U	0.877 U	0.877 U	1.0 U	1.0 U	1.0	U 1.0 U	0.26	U 1.0 U	0.26 U	1.0 U	<0.26 U	1.0 U
Bromodichloromethane		0.27 U	1.02 U	1.0 U	1.02 U	1.0 U	1.02 L	J 1.0 U	1.02 U	1.02 U	0.27 U	0.27 U	0.27	U 0.27 U	0.34	U 0.27 U	0.34 U	0.27 U	<0.34 U	0.27 U
Bromomethane		0.41 U	0.592 U	0.59 U	0.592 U	0.59 U	0.592	J 0.59 U	0.592 U	0.592	0.41 U	0.41 U	0.41	U 0.78 U	0.52	U 0.78 U	0.52 0	0.41 U	<0.52 U	0.41 U
Carbon Disulfide		0.62 U	0.475 U	0.79	1.27	0.98	0.317 J	12	0.475 U	0.475 U	1.6	0.62 U	0.62	U 0.62 U	0.16	U 0.62 U	0.16 U	0.62 U	<0.16 U	0.62 U
Carbon Tetrachloride		0.25 U	0.64	0.960 U	0.576	0.96 U	0.256 L	J 0.96 U	0.384	0.576	0.25 U	0.25 U	0.25	U 0.25 U	0.48	0.25 U	0.53	0.25 U	0.52	0.25 U
Chloroethane		0.92 U	0.702 U	0.70 U	0.702 U	0.70 U	0.702	0.70 0	0.702 U	0.702 0	0.92 U	0.92 U	0.92	0 0.92 0	0.23	0 0.92 0	0.23 0	0.92 U	<0.23 U	0.92 0
Chloroform		0.98 U	0.744 U	0.74 U	0.943	3.0	3.77	1.20	0.744 U	0.744 U	0.54 J	0.98 U	0.98	U 0.98 U	0.24	U 0.49 J	0.24 U	0.98 U	<0.24 U	0.98 U
Chloromethane		1.3	0.63	0.25 J	0.861	0.63	0.567	0.86	0.672	0.441	0.41 U	1.3	1.2	1.1	1.5	1.1	1.5	1.1	1.1	1.1
cis-1,2-Dichloroethylene		0.79 U	0.604 U	0.60 U	0.484 J	0.60 U	0.604	J 0.56 J	0.604 U	0.604 U	0.79 U	0.79 U	0.79	U 0.79 U	0.2	U 0.79 U	0.2 U	0.79 U	<0.20 U	0.79 U
Cyclohexane		0.69 U	2.59	0.52 U	112	2.8	4.41	3.9	0.525 U	0.665	1.7	14	0.69	U 0.69 U	0.99	0.69 U	0.79	0.69 U	1.6	0.69 U
Dibromochloromethane		0.34 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 L	J 1.3 U	1.3 U	1.3 U	0.34 U	0.34 U	0.34	U 0.34 U	0.43	U 0.34 U	0.43 U	0.34 U	<0.43 U	0.34 U
Dichlorodifluoromethane (Freon 12)		2.7	2.66	3.2 J	2.92	2.1	2.21	2.5	2.21 J	2.21	2.8	2.4	2.6	6.4	3.7	11	6	3.4	2.2	2.5
Ethyl Acetate		0.72 U	3.7	6.4	305	6.6 J	13.4	4.4	1.17	1.1	19	0.72 U	0.72	U 1.3	0.18	U 2.0	0.18 U	0.72 U	<0.18 U	1.2
Ethylbenzene		0.87 U	0.794	0.66 U	5.16	0.75	1.15	28	0.662 U	0.662 U	0.31 J	0.65 J	0.87	U 1.2	0.78	1.5	0.74	1.1	1.1	0.56 J
Heptane		0.82 U	1.21	1	10.6	3.3	5.83	1.3	0.625 U	0.625 U	1.1	13	0.82	U 1.5	1.1	1.8	1.1	1.5	1.6	0.57 J
Hexachiorobutadiene		0.96 0	1.04	1.0 0	8.06	9.3	22.7	2.2	0.752	0.573	1.3	53.6	0.96	1.6	6.1	1.4	4.8	2.5	<0.53 U 9.2	0.96 0
Isopropanol		1.5	0.375 U	0.37 U	0.375 U	6,000	7,200	0.37 U	0.375 U	0.375 U	2.9	9.8	2.5	256 J	10	332 J	6.5	195 J	4.1	25.6
m&p-Xylene		0.87 U	1.85	1.3 U	9.27	2.2	3.31	1.7	0.618 J	1.32 U	1.1	1.0	0.87	U 4.8	2.4	5.6	2.3	4.0	3.2	2.0
Methyl tert-butyl ether (MTBE)	60	2.1	0.55 U	0.55 0	20.8	0.55 U	0.55 C	7.8	0.55 0	0.55 0	0.72 U	0.72 U 1.9	0.72	28	0.18	0 0.72 0	0.18 U	0.72 U	<0.18 0	3.8
o-Xylene		0.87 U	0.706	0.66 U	3.35	0.75	1.06	0.71	0.662 U	0.662 U	0.40 J	0.52 J	0.87	U 1.7	0.87	2.1	0.82	1.4	1.1	0.74 J
Propene		0.86 U	0.262 U	0.26 U	0.262 U	0.26 U	0.262	J 0.26 U	0.262 U	0.262 U	0.86 U	0.86 U	0.86	U 1.9	1.9	1.7	2.4	2.4	1.6	0.86 U
Styrene Tertiary butyl alcohol		0.85 U	0.649 U NA	0.65 U	1.99 NA	0.65 U	0.476 J	1.3 NA	0.649 U NA	0.649 U NA	0.85 U	0.85 U 3.3 I	0.85	U 0.85 U	0.21 NA	U U.85 U	0.21 U NA	0.85 U	<0.21 U	0.85 U
Tetrachloroethylene (PCE)	100	0.27 U	1.1	1.2	2.48	4.0	8.55	0.69 J	0.896 J	1.03 U	0.54	0.27 U	0.27	U 0.68	1.3	0.64	1.8	0.68	1.2	1.3
Tetrahydrofuran		0.59 U	0.45 U	0.45 U	2.52	0.45 U	0.45 L	J 0.45 U	0.45 U	0.45 U	0.59 U	2.3	0.59	U 0.59 U	2.4	0.59 U	1.6	0.59 U	0.52	0.59 U
rouene trans-1 2-Dichloroethylene		0.49 J	9.38	2.2	293 9.07	24	59 0.604 I	6.1 L 0.60 LL	1.19	0.881	2.8	3.2	0.57	J 4.5	5.9	5.3	5.0	5.3	8.4 <0.20	2.6
trans-1,3-Dichloropropene		0.91 U	0.692 U	0.69 U	0.692 U	0.69 U	0.692 L	J 0.69 U	0.692 U	0.692 U	0.91 U	0.91 U	0.91	U 0.91 U	0.23	U 0.91 U	0.23 U	0.91 U	<0.20 U	0.91 U
Trichloroethylene (TCE)	5	0.21 U	0.273	0.82 U	3.06	0.82 U	0.874	9.4	0.437	0.983	12	0.21 U	0.21	U 17	1.0	35	2.1	7.5	0.68	7.5
I richlorofluoromethane (Freon 11)		2.0	1.26	1.5	1.83	1.3	1.54	1.4	1.09	1.09	1.5	1.3	1.5	1.9	2.6	2.4	3.0	1.4	2.4	1.2
Vinyi Acetale		0.87 U	0.667 U	0.54 U	0.667 U	0.54 U	0.667 L	J 0.67 U	0.667 U	0.667 U	0.87 U	0.70 U	0.87	U 0.87 U	NA	0.70 U	0.18 0	0.87 U	×0.18 0	0.87 U
Vinyl Chloride		0.51 U	0.104 U	0.39 U	0.104 U	0.39 U	0.104 L	J 0.39 U	0.104 U	0.104 U	0.51 U	0.51 U	0.51	U 0.51 U	0.13	U 0.51 U	0.13 U	0.51 U	<0.13 U	0.51 U
Xylenes (total)		0.87 U	NA	NA	NA	NA	NA	NA	NA	NA	1.5	2.5	0.87	U 6.5	NA	7.8	NA	5.6	NA	2.8
yg/m ³ = micrograms per cubic meter Items shaded and in bold font equal or exceed NYSDOH J - Estimated Value U - The compound was not detected at the indicated concer NA - Not analyzed → = Not Available NYSDOH AGV- New York State Department of Health Air O	I AGVs. ntration. Suideline Values																			
(1) - As per Appendix C of the Final NYSDOH Guidance doct	ument.																			

Sample ID		STEW-IA-04-09	1610	STEW-IA-	05	STEW-IA-05-091	610	STEW-IA-06	STEW-IA-	07	STEW-IA-0)8 1	STEW-IA-0)9	STEW-IA-	10	STEW-IA-11-0916	610	STEW-IA-12-0916	510	STEW-IA-13-091	610
Lab ID Date Sampled		09-16-2010	•	12-1-200	9	09-16-2010		12-1-2009	12-1-200	9	12-1-2009	ן א	12-1-2009	2	12-1-200	9	09-16-2010	-+	09-16-2010		09-16-2010	
Matrix		Indoor Air	,	Indoor Ai	ir	Indoor Air		Indoor Air	Indoor Ai	ir	Indoor Air		Indoor Air	r	Indoor Ai	r	Indoor Air	-	Indoor Air		Indoor Air	
Land Use		Residential	1	Residenti	al	Residential		Residential	Residentia	al	Residentia	al	Residentia	al	Residentia	al	Residential	-	Residential		Residential	
olatile Organic Compound	NYSDOH AGV ⁽¹⁾	Result		Result		Result		Result	Result		Result		Result		Result		Result	_	Result		Result	
,1,1-Trichloroethane	-	0.27	U	0.22	U	0.27	U	0.22 U	0.22	U	0.22	U	0.22	U	0.22	U	<0.27	U	1.2		<0.27	U
1,2,2-Tetrachloroethane	-	0.34	U	0.27	U	0.34	U	0.27 U	0.27	U	0.27	U	0.27	U	0.27	U	< 0.34	U	< 0.34	U	<0.34	U
1,2-1 richloro-1,2,2-trifluoroethane (Freon 113)	-	0.5		2.3		0.63		2.1	2.1		2.4		2.5		2.1		0.63		0.61	<u>⊢.</u> ,	0.55	<u>.</u>
1-Dichloroethane		0.27	11	0.22		0.27	0	0.22 0	0.22		0.22	11	0.22	11	0.22		<0.27		<0.27		<0.27	
1-Dichloroethylene		0.2	Ŭ	0.79	Ŭ	0.2	Ŭ	0.79 U	0.79	Ŭ	0.79	Ŭ	0.79	Ŭ	0.79	Ŭ	<0.20	Ŭ	<0.20	Ŭ	<0.20	Ū
2,4-Trichlorobenzene		0.37	U	0.74	U	0.37	U	0.74 U	0.74	U	0.74	U	0.74	U	0.74	U	< 0.37	U	< 0.37	U	< 0.37	U
,2,4-Trimethylbenzene	-	1.3		1.2		0.95		1.9	1.3		1.1		1.1		0.84	J	0.53		0.81		0.36	
,2-Dibromoethane (EDB)		0.38	U	0.31	U	0.38	U	0.31 U	0.31	U	0.31	U	0.31	U	0.31	U	<0.38	U	<0.38	U	<0.38	U
2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)		0.35	U	0.28	U	0.35	U	0.28 U	0.28	U	0.28	U	0.28	U	0.28	U	< 0.35	<u>U</u>	< 0.35		<0.35	U
2-Dichloroethape		0.3	11	0.24		0.3	U	0.24 0	0.24		0.24	0	0.24	0	0.24		<0.30		<0.30		<0.30	
2-Dichloroethene		NA	0	0.81 NA	0	NA	0	NA 0	NA	U	NA NA	0	NA	0	0.81 NA	0	<0.20 NA		×0.20		×0.20	
2-Dichloropropane		0.23	U	0.92	U	0.23	U	0.92 U	0.92	U	0.92	U	0.92	U	0.92	U	<0.23	U	<0.23	U	<0.23	U
3,5-Trimethylbenzene		0.42		0.98	U	0.3		0.64 J	0.98	U	0.98	U	0.98	U	0.98	U	<0.25	U	<0.25	U	<0.25	U
,3-Butadiene		0.11	U	0.44	U	0.11	U	0.44 U	0.44	U	0.44	U	0.44	U	0.44	U	<0.11	U	<0.11	U	<0.11	U
,3-Dichlorobenzene	-	0.3	U	0.60	U	0.3	U	0.60 U	0.60	U	0.60	U	0.60	U	0.60	U	<0.30	U	<0.30	U	<0.30	U
4-Dichlorobenzene	-	0.3	U	0.60	U	0.31		0.60 U	0.60	0	0.60	U	0.60	U	0.60	0	<0.30	U	<0.30	U	<0.30	U
2 4-Trimethylpentane		NA NA	+	0.12	11	NA NA		0.02 0	0.72	11	0.72	11	0.72	11	0.72	11	NA NA		NA NA	⊢−┤	ΝΔ	⊢
-Butanone (MEK)		5		1.2		2.8		1.2	1.3		1.2	5	1.0	5	1.5	5	2.4	1	3.1	<u> </u>	2.2	⊢
Chlorotoluene	-	NA		1.0	U	NA		1.0 U	1.0	U	1.0	U	1.0	U	1.0	U	NA		NA		NA	E
-Hexanone (MBK)		0.79		0.82	U	0.43		0.82 U	0.82	U	0.82	U	0.82	U	0.82	U	0.45		0.51		0.39	
Ethyltoluene		0.31		0.98	U	0.25	U	0.98 U	0.98	U	0.98	U	0.98	U	0.98	U	<0.25	U	<0.25	U	<0.25	Ū
-Methyl-2-pentanone (MIBK)		0.45		0.82	U	0.28	\vdash	0.82 U	0.82	U	0.82	U	0.82	U	0.82	U	0.27	\dashv	0.27	⊢	0.23	⊢
Celone		40 NA		1.1	11	18 NA		<u>8.8</u>	9.5	11	9.5	11	8.3 0.63		0.63		18 NA	\rightarrow	∠1 NA	┢──╂	13 NA	⊢
enzene	-	16		1.0	0	0.94		0.03 0	0.03	U	0.67	0	0.03	0	0.80	0	0.69	\rightarrow	0.74	\vdash	0.38	-
enzyl chloride		0.26	U	1.0	U	0.26	U	1.0 U	1.0	U	1.0	U	1.0	U	1.0	U	<0.26	U	<0.26	U	<0.26	U
romodichloromethane		0.34	U	0.27	U	0.34	U	0.27 U	0.27	U	0.27	U	0.27	U	0.27	U	<0.34	U	<0.34	U	< 0.34	U
romoform		0.52	U	0.41	U	0.52	U	0.41 U	0.41	U	0.41	U	0.41	U	0.41	U	<0.52	U	<0.52	U	<0.52	U
romomethane		0.19	U	0.78	U	0.19	U	0.78 U	0.78	U	0.78	U	0.78	U	0.78	U	<0.19	U	<0.19	U	<0.19	U
arbon Disulfide		0.16	U	0.62	U	0.16	U	0.62 U	0.62	U	0.62	U	0.62	U	0.62	0	<0.16	U	<0.16	U	<0.16	U
blorobenzene		0.46		0.25		0.52		0.25 0	0.25	0	0.25	11	0.25	0	0.25		0.53		0.56	\vdash	-0.23	
hloroethane		0.13	U	0.53	U	0.13	U	0.53 U	0.52	U	0.53	U	0.53	U	0.53	U	<0.13	U	<0.13	U	<0.13	U
hloroform		0.24	Ū	0.98	Ŭ	0.28		0.98 U	0.98	Ū	0.98	Ŭ	0.98	Ū	0.98	Ū	0.63		<0.24	Ū	<0.24	Ū
hloromethane		1.5		1.1		1.2		0.99	1.1		1.1		1.1		1.1		1.1		1.1		1.1	
is-1,2-Dichloroethylene		0.2	U	0.79	U	0.2	U	0.79 U	0.79	U	0.79	U	0.79	U	0.79	U	<0.20	U	<0.20	U	<0.20	U
is-1,3-Dichloropropene		0.23	U	0.91	U	0.23	U	0.91 U	0.91	U	0.91	U	0.91	U	0.91	U	<0.23	U	<0.23	U	<0.23	U
ycionexane		0.99		0.69		0.26	11	0.69 0	0.69		0.69	0	0.69	U 11	0.69		0.18		0.33	\vdash	<0.17	
ichlorodifluoromethane (Freon 12)		3.7	0	2.7	0	2.0	0	2.6	5.9	0	6.9	0	5.9	0	2.8	0	1.6		2.2		1.9	0
thanol		31		10		12		7.5	7.0		7.3		7.5		7.3		9		14		5.7	
thyl Acetate		0.18	U	1.6		0.18	U	17	1.0		1.0		5.8		0.72	U	<0.18	U	0.25		<0.18	U
thylbenzene		0.78		0.61	J	0.54		0.40 J	0.87	U	0.43	J	0.43	J	0.42	J	0.36		0.44	\square	0.24	
eptane		1.1		0.66	J	0.56		0.53 J	0.49	J	0.61	J	0.57	J	0.61	J	0.34		0.49	<u>⊢</u>	0.27	L
exachioroputadiene		0.53	U	0.96	U	0.53	U	0.96 0	0.96	0	0.96	U	0.96	U	0.96	U	<0.53	0	<0.53	0	<0.53	0
opropanol		10		30.5		3.9		20	28.3	J	51.6		54.6		24		2.4		3.4		1.2	-
n&p-Xylene	-	2.4		2.3	L	1.7		1.4	1.5		1.6		1.6		1.3	L	1.1		1.4		0.67	L
lethyl tert-butyl ether (MTBE)		0.18	U	0.72	U	0.18	U	0.72 U	0.72	U	0.72	U	0.72	U	0.72	U	<0.18	U	<0.18	U	<0.18	U
lethylene chloride	60	1.3		3.8		4.1		2.0	1.5	L	1.1		1.2		1.7		1.6	ل	1.8	⊢	0.71	
		0.87	+	0.83	J	0.61		0.56 J	0.56	J	0.61	J	0.56	J	0.52	J	0.37	\dashv	0.48	⊢−−	0.25	
tvrene		0.21	11	0.00	11	0.21	11	0.85 11	0.00	11	0.00	11	0.00	11	0.85	11	1.0 <0.21		r.o <0.21		0.09 <0.21	
ertiary butyl alcohol		NA	0	0.61	U	NA		0.85	0.61	U	0.97	5	0.61	U	1.3	5	NA		NA		NA	
etrachloroethylene (PCE)	100	1.3		1.3	-	2.0		0.64	0.62		0.62		0.46		0.68		1.3		1.0		0.39	
etrahydrofuran		2.4		0.59	U	0.3		0.59 U	0.59	U	0.59	U	0.59	U	0.59	U	0.19		0.37		<0.15	U
oluene		5.9		2.9		2.9		2.7	2.0		2.0		2.3		2.1		2.0		2.6	\square	1.4	
ans-1,2-Dichloroethylene		0.2	U	0.79	U	0.2	U	0.79 U	0.79	U	0.79	U	0.79	U	0.79	<u>U</u>	<0.20	<u>U</u>	<0.20	U	<0.20	U
richlereethylene (TCE)		0.23	U	0.91	U	0.23	U	0.91 0	0.91	U	0.91	U	0.91	U	0.91	U	<0.23	- U	<0.23	- U	<0.23	
richlorofluoromethane (Freon 11)		2.6		1.3		1.4		1.3	2.1		21		4.7		4.9		1.6		22	\vdash	1.3	0
invl Acetate		2.7		0.70	U	0.18	U	0.70 U	0.70	U	0.70	U	0.70	U	0.70	U	2.1		<0.18	U	<0.18	U
inyl Bromide		NA		0.87	U	NA		0.87 U	0.87	U	0.87	U	0.87	U	0.87	U	NA		NA		NA	
inyl Chloride	-	0.13	U	0.51	U	0.13	U	0.51 U	0.51	U	0.51	U	0.51	U	0.51	U	<0.13	U	<0.13	U	<0.13	U
ylenes (total)		NA		3.1		NA		2.0	2.0		2.2		2.2		1.9		NA		NA		NA	
inyl Chloride ylenes (total) otes: ym ³ = micrograms per cubic meter ems shaded and in bold font equal or exceed NYSDOI Estimated Value - The compound was not detected at the indicated conce A - Not analyzed	 H AGVs.	0.13 NA	U	0.51 3.1	U	0.13 NA	U	0.51 U 2.0	0.51 2.0	U	0.51 2.2	U	0.51 2.2	U	0.51 1.9	U	<0.13 NA	U	<0.13 NA	U	<0.13 NA	

Sample ID	TRC-O	L1
Lab Sample ID	J27995	i-1
Sampling Date	4/19/20	11
Matrix	Waste	e
Dilution Factor	1	
Units	μg/kg	1
Land Use	Industr	ial
VOLATILE ORGANIC COMPOUNDS (VOCs) (ug/kg)	Resu	t
1.1.1-Trichloroethane (TCA)	1700	U
1.1.1.2-Tetrachloroethane	1700	Ŭ
1,1,2,2-Tetrachloroethane	1700	Ŭ
1,1,2-Trichloroethane	1700	U
1,1-Dichloroethane	1700	U
1,1-Dichloroethene	1700	U
1,2,3-Trichlorobenzene	1700	U
1,2,4-Trichlorobenzene	NA	
1,2,4-Trimethylbenzene	NA	
1,2-Dibromo-3-Chloropropane	1700	U
1,2-Dibromoethane	1700	U
1,2-Dibromoethene	1700	U
1,2-Dichlorobenzene	1700	U
1,2-Dichloroethane	1700	U
1,2-Dichloroethene	3400	U
1,2-Dichloropropane	1700	U
1,3,5-Trimethylbenzene	NA	
1,3-Dichlorobenzene	1700	U
1,4-Dichlorobenzene	1700	U
1,4-Dioxane	NA	
2-Butanone (MEK)	NA	
2-Chloroethyl vinyl ether	1700	U
2-Hexanone	NA	
4-Methyl-2-pentanone	NA	
Acetone	NA	
Benzene	1700	
Bromobenzene	1700	0
Bromodichloromothano	1700	0
Bromoform	1700 NA	0
Bromomethane	1700	11
	NA	0
Carbon Tetrachloride	1700	11
Chlorobenzene	1700	U U
Chloroethane	NA	0
Chloroform	1700	U
Chloromethane	1700	Ŭ
cis-1.2-Dichloroethene	1700	Ŭ
cis-1,3-Dichloropropene	1700	Ŭ
Cvclohexane	NA	Ű
Dibromomethane	1700	U
Dibromochloromethane	1700	U
Dichlorodifluoromethane	1700	U
Ethylbenzene	NA	
Freon TF ⁽¹⁾	1700	U*
Isopropylbenzene	NA	
m&p-Xylene	NA	
Methyl Acetate	NA	
Methylcyclohexane	NA	
Methylene Chloride	610,000	
Methyl tert-butyl ether (MTBE)	NA	
n-Butylbenzene	NA	
n-Propylbenzene	NA	
o-Xylene	NA	
p-Isopropyltoluene	NA	
sec-Butylbenzene	NA	
Styrene	NA	
tert-Butylbenzene	NA	
Tetrachloroethene (PCE)	1700	U
Toluene	NA	
trans-1,2-Dichloroethene	1700	U
trans-1,3-Dichloropropene	1700	U
Trichloroethene (TCE)	1700	U
I richlorofluoromethane	1700	U
Vinyl Chloride	1700	U
I otal VUCs	610,000	

Notes:

Notes: µg/kg - micrograms per kilogram ⁽¹⁾ - Also known as 1,1,2-trichloro-1,2,2-trifluoroethane and U - Analyte was not detected. * - Recovery or RPD exceeds control limits Sample Ignitability determined to be >160 °F EOX: 66,000 mg/kg

FIGURES







LEGEND (SYMBOLS NOT TO SCALE):

(IN FEET)

MONITORING WELL LOCATION, IDENTIFICATION NUMBER AND BEDROCK SURFACE ELEVATION (NORTH AMERICAN VERTICAL DATUM 1988)

ELEVATION (NORTH AMERICAN VERTICAL DATUM 1988)

SOIL BORING LOCATION, IDENTIFICATION NUMBER AND BEDROCK SURFACE

TRC-SBXXT EL.XXX.XX

216.00 BEDROCK SURFACE ELEVATION CONTOUR

NOTES:

- 1. LOCATIONS AND GROUND SURFACE ELEVATIONS OF POINTS OF INVESTIGATION SURVEYED BY PERFECT POINT LAND SURVEYING ON DRAWING "MONITORING WELLS SURVEY" DATED JUNE 24, 2011.
- 2. ALL ELEVATIONS SHOWN REFER TO THE 1988 NAVD.
- 3. IN GENERATING CONTOURS, TOP OF BEDROCK SURFACE ELEVATIONS WERE NOT USED FOR THE FOLLOWING BORINGS: TRC-SB8, TRC-SB9, TRC-SB17, TRC-SB23, TRC-SB26, TRC-SB27, TRC-SB29, TRC-SB30, MW-01.

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

PROJECT NAME:

DRAWING TITLE:



LEGEND (SYMBOLS NOT TO SCALE):

CONCRETE

NO.

MW-04 MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

TRC-SBX SOIL BORING LOCATION AND IDENTIFICATION NUMBER



		FILL	
		SILTY SAND	
		WEATHERED BEDROCK	
		BEDROCK	
	-	END OF BORING (BOTTOM)	
	*	PROJECTED ONTO CROSS-SECTION	
n Z			
Ш Х			

DESCRIPTION

BY DATE

NOTES:

- 1. LOCATIONS AND GROUND SURFACE ELEVATIONS OF POINTS OF INVESTIGATION SURVEYED BY PERFECT POINT LAND SURVEYING ON DRAWING "MONITORING WELLS SURVEY" DATED JUNE 24, 2011.
- 2. ALL ELEVATIONS SHOWN REFER TO THE 1988 NAVD.
- 3. GEOLOGIC DESCRIPTIONS AND DEPTH AND EXTENT OF LAYERS REPRESENT INTERPRETATION AND EXTRAPOLATION OF FIELD DATA AND ARE APPROXIMATE.







				E	N.
			EN	5//	W
		P	N/		y y
WHITTIER-33-OA WHITTIER-33-14	A WHIT	TIER-33-SS			
7/08 (μg/m³) 3/24/10(μg/m³) 3/17/08 (μg/m³) 3/24/ 0.605 U 0.79 U 0.605 U 0.79	10 (μg/m³) 3/17/08 (μg/m³ U 0.6 U	3/24/10 (μg/m³) 0.79 U	MATRIX A	CTION 1	
0.832 U 0.22 U 0.832 3.0 0.576 0.25 U 0.384 0.25	0.61 J U 0.96 U	1.4 0.25 U	2 1	2 1	
0.604 U 0.79 U 0.604 U 0.79 1.03 U 0.27 U 0.896 J 0.27	U 0.56 J V U 0.69 J	0.79 U 0.54	2 2	1 1	
0.983 0.21 0 0.437 0.21		RE RE		1	
		TUENT Class G	MW-(A Value (µg/L)	05 12/30/02 (μg/L)	8/16/06 (μg/L)
	Cyanide	n	200 7	NS NS	<class ga="" value<br="">230</class>
	Trichloroe SVOCs	thene	5 /arious	NS NS	54 <class ga="" td="" values<=""></class>
R-32-IA WHITTIER-32-SS			ENCE		\sim
	1181		SIDE		
		AIR GUIDELINE VALUES	WHITTIER-32-I	A WHITTIER-32-SS	
RESID	CONSTITUENT 1,1-Dichloroethene	(μg/m ³) NC	3/14/08 (μg/m³ 0.605	3/14/08 (μg/m³) U 0.60 U	MATRIX ACTION
	1,1,1-Trichloroethane Carbon Tetrachloride	NC NC	0.832 0.256	U 0.83 U U 0.96 U	2 1 1 1
	cis-1,2-Dichloroethene Tetrachloroethene	NC 100	0.604 8.55	U 0.60 U 4.0	2 1 2 2
	Trichloroethene	5	0.874	J 0.82 U	
	CONSTITUENT	N Class GA Value (µ	g/L) 12/30/0	2 (µg/L) 8/16/0	<u>6 (μg/L)</u>
SB-03 (2.00')	Cyanide	50 200	Class G	08 <class ga<br="">A Value <class ga<="" td=""><td>A Value</td></class></class>	A Value
TAL Metals <part 375="" industrial="" scos<="" td=""><td>VOCs SVOCs</td><td>Various Various</td><td><class <="" g="" td=""><td>A Values <class ga<br="">A Values <class ga<="" td=""><td>Values Values</td></class></class></td></class></td></part>	VOCs SVOCs	Various Various	<class <="" g="" td=""><td>A Values <class ga<br="">A Values <class ga<="" td=""><td>Values Values</td></class></class></td></class>	A Values <class ga<br="">A Values <class ga<="" td=""><td>Values Values</td></class></class>	Values Values
	LEGEND (SYM	BOLS NO	t to so	CĂLE):	
	INDUS	TRIAL BUILDING	BOUNDARY	,	
			P AGREEMEN	NT SITE BOUND	ARY
KETTELL-43-SS	 SOIL E 		ON WITH NO	RECOVERY	
		GE SAMPLING LO	DCATION		
I I ELL-43-IA	GROU				
RESID	NOT S	HOWN. REFER 1	O TABLE 21	.)	JUSTRIAL BUILDING
		APOR SAMPLE	(RESULTS N	OT SHOWN. REF	FER TO TABLE 21.)
	ERM 2	NDWATER SURF 008	ACE ELEVA	HON CONTOUR	(FEEI)
	BUILD				
AVENUE	LOI B	ET AND SIDEWAI	_K BOUNDAF	RIES	
	μg/L MICRC	OGRAMS PER LIT	ER		
	µg/m³ MICRC	OGRAMS PER CU	IBIC METER		
μg/m ³) 3/14/08 (μg/m ³) 3/14/08 (μg/m ³) MATRIX ACTION	^{mg/kg} MILLIG	RAMS PER KILC	GRAM		
U 0.832 U 0.55 J 2 1 U 0.512 0.96 U 1 2	1. LOCATIONS AND	DIMENSIONS AF		MATE.	
U 0.604 U 0.60 U 2 1 U 1.03 U 0.97 J 2 1	2. BOLD VALUES EX	CEED THE CRIT	ERIA.		
U 12.6 2.2 1 2	3. SAMPLE RESULT U - COMPOU	S QUALIFIERS: ND NOT DETEC ⁻	TED		
	J - ESTIMATI NC - NO CRITE	ED VALUE ERIA			
$\begin{array}{c c} U & 1 & 1 \\ \hline 2 & 1 \\ \hline \end{array}$	NS - NOT SAM			IRON MAGNES	UM MANGANESE
1 1 U 2 1	AND SODIUM ARE	E NOT SHOWN F	OR GROUNE	DWATER RESUL	TS.
2 1 1 1	5. NYSDOH SOIL VA DETECTION LIMIT	POR/INDOOR AI S ARE ABOVE C	R MATRIX AG RITERIA. M	CTION # (IN CER OST RECENT RE	TAIN INSTANCES ESULTS USED.):
	1 - NO FURT 2 - TAKE RE/	HER ACTION	PRACTICAL	ACTIONS TO IDI	ENTIFY
	SOURCE(S) 3 - MONITOF 4 - MITICATE	NU REDUCE E	TUSUKES		
	R STEWART STAMPIN	G SITE			
VCP SITE NO. V00	0691-3, VCA INDEX NO ONKERS, NEW YORK	D. W3-1005-04-	06		FIGURE
DRAWING TITLE:					6
LOCATIONS OF HISTOF	RIC SAMPLING AND S	JMMARY OF R	ESULTS		U





	\					$\mathcal{N}_{\mathbf{v}}$
		<.				e e
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		/ /				
			\ \			
WEN						
EWOODA						
EDGE						
				\sim		
	CE					
RESIDEN		 MW-3				
4/19/11 <class ga="" th="" values<=""><th>CONSTITUE Zinc (Filtered)</th><th>INT Class</th><th>GA Value (μg/L) 2.000</th><th>4/19/11 (μg/L) 2,210</th><th></th><th></th></class>	CONSTITUE Zinc (Filtered)	INT Class	GA Value (μg/L) 2.000	4/19/11 (μg/L) 2,210		
<class ga="" th="" values<=""><th>Zinc (Unfiltered)</th><th></th><th>2,000</th><th>2,210 2,920</th><th></th><th></th></class>	Zinc (Unfiltered)		2,000	2,210 2,920		
<class ga="" values<br=""><class ga="" th="" value<=""><th>TCL SVOCs</th><th>(2)</th><th>Various Various</th><th><class ga="" values<br=""><class ga="" th="" values<=""><th></th><th></th></class></class></th></class></class>	TCL SVOCs	(2)	Various Various	<class ga="" values<br=""><class ga="" th="" values<=""><th></th><th></th></class></class>		
	TAL Metals (Filtered and Unfilt TCL PCBs	tered) and Cyanide ⁽²⁾	Various 0.09	<class ga="" values<br=""><class ga="" th="" value<=""><th></th><th></th></class></class>		
	TCL Pesticides Note ⁽²⁾ - Does not include zind		Various	<class ga="" th="" values<=""><td></td><td></td></class>		
RESIDEN	TRC-SR14	(6-8')				
6B13 (6-8')		6/20/11				
6/20/11 <part 375="" industrial="" scos<="" td=""><td>TCL VOCS <</td><td>Part 375 Industrial SCOs</td><td></td><th></th><td></td><td></td></part>	TCL VOCS <	Part 375 Industrial SCOs				
<part 375="" industrial="" scos<br=""><part 375="" industrial="" scos<="" td=""><td>TCL PCBs</td><td>Part 375 Industrial SCOs Part 375 Industrial SCO</td><td></td><th></th><td></td><td></td></part></part>	TCL PCBs	Part 375 Industrial SCOs Part 375 Industrial SCO				
<part 375="" industrial="" sco<br=""><part 375="" industrial="" scos<="" td=""><td>ICL Pesticides</td><td></td><td></td><th></th><td></td><td></td></part></part>	ICL Pesticides					
	RESIDENC	LEGEND (s	YMBOLS N	OT TO SCALE	=)	
		9 · · • • • • • • • • • •	INDUSTR	RIAL BUILDING	G BOUNDARY	
			VOLUNT	ARY CLEANU	P AGREEMENT SIT	E BOUNDARY
	AVENULE					
	WINFRED.		BUILDING	G FOOTPRINT	-	
			LOT BOU	INDARY		
	$\langle \langle \rangle$		STREET			
			OTTLET			
		201.00		WATER SUR	FACE ELEVATION (CONTOUR (FEET)
				, 2011		
	$\langle \langle \rangle \rangle$		GROUNE	WATER MON		CATION AND
SIDENCE		MW-X 200.62'	ELEVATI	ON (NORTH A		AL DATUM 1988)
	$\langle \rangle$	TRC-SBX	SUIL SAN			
	` \ `	µg/L	MICROG	RAMS PER LI	TER	
	<u>\</u>	mg/ka	MILLIGR	AMS PER KII (OGRAM	
		µg/kg	MICROG	RAMS PER KI	LOGRAM	
		NOTES:				
		1. LOCATIONS	S AND DIME	ENSIONS ARE	APPROXIMATE.	
		2. SOIL AND G	ROUNDWA	ATER SAMPLI	NG PERFORMED B	Y TRC BETWEEN
		APRIL AND	JUNE 2011	•		
		3. BOLD VALU	ES EXCEE	D THE CRITE	RIA.	
		4. EXCEEDAN MANGANES	CES OF NA	DIUM ARE NO	CURRING IRON, M T SHOWN FOR GR	AGNESIUM, OUNDWATER
		RESULTS.		•		-
		5. VERTICAL F	DATUM: NO		CAN VERTICAL DAT	UM 1988
		HORIZONTA	AL COORDI	NATE SYSTE	M: NY STATE PLAN	NE
		ON-SITE PR	ODUCTION	N WELL) WAS	NOT USED TO GEI	
		GROUNDW/	ATER SURI	FACE ELEVAT	TION CONTOURS.	
		7. SAMPLES C	OLLECTED	D FROM TRC-	SB15 WERE NOT A	NALYZED.
PROJECT NAME:				1		
—	FORME VCP SITE NO. V0	K STEWART STAM 0691-3, VCA INDE>	IPING SITE (NO. W3-1	005-04-06		
—	١	ONKERS, NEW YO	DRK			FIGURE
DRAWING TITLE:						
———————————————————————————————————————	SUMMARY OF SUP	PLEMENTAL INVE	STIGATION			V V

SUMMARY OF SUPPLEMENTAL INVESTIGATIOIN SOIL AND
GROUNDWATER SAMPLING RESULTS AND GROUNDWATER SURFACE ELEVATION CONTOURS





SUB-SLAB DEPRESSURIZATION SYSTEM SUCTION FAN SUMMARY						
SUCTION FAN	NAME	MODEL	DESIGN FLOW RATE (CFM)	DESIGN VACUUM (IN. WC)		
1	CINCINNATTI FAN	HPE	250	29		
2	RIETSCHLE	SAH235	90	160		
3	CINCINNATTI FAN	HPE-22	330	27		
4	BUSCH	SB0530D2	230	140		
5	BUSCH	580430D	50	134		
6	BUSCH	5B0710D	275	95		
7	BUSCH	SB0080D	30	50		
8	CINCINNATTI FAN	PB-14A	75	10		
CFM - CUBIC FEET PER MINUTE						
IN. WC - INCHES OF WATER COLUMN						





LEGEND (SYMBOLS NOT TO SCALE):

INDUSTRIAL BUILDING BOUNDARY		
VOLUNTARY CLEANUP AGREEMENT SITE BOUNDAR		
BUILDING FOOTPRINT		
LOT BOUNDARY		
STREET AND SIDEWALK BOUNDARIES		
GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER		
SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER		
HISTORIC SOIL SAMPLING LOCATION AND IDENTIFICATION NUMBER		
CONSTITUENT NOT DETECTED OR DETECTED AT A CONCENTRATION LOWER THAN PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVE (SCC		
MILLIGRAMS PER KILOGRAM		
MICROGRAMS PER KILOGRAM		

NOTES:

- 1. **BOLD** VALUES EXCEED THE CRITERIA.
- 2. DATA QUALIFIERS ARE NOT SHOWN.
- 3. LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

FORMER STEWART STAMPING SITE VCP SITE NO. V00691-3, VCA INDEX NO. W3-1005-04-06 YONKERS, NEW YORK	FIGURE
 DRAWING TITLE: SOIL SAMPLING LOCATIONS AND SUMMARY OF EXCEEDANCES OF PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES	12



Figure 14

Former Stewart Stamping Site 630 Central Park Avenue, Yonkers, New York 10704 Truck Transport Routes



Truck Route Headed South

Truck Route Headed North



Figure 15

Former Stewart Stamping Site 630 Central Park Avenue, Yonkers, New York 10704 Map of Route from Site to Hospital

Mount Vernon Hospital Medical Center Emergency Department Phone: 703-664-7111





Appendix A Excavation Work Plan



FORMER STEWART STAMPING SITE 630 CENTRAL PARK AVENUE YONKERS, NEW YORK 10704

APPENDIX A EXCAVATION WORK PLAN

NYSDEC VCP Site Number: V00691-3 NYSDEC VCA Index Number: W3-1005-04-06

October 21, 2011




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A-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the New York State Department of Environmental Conservation (NYSDEC). Currently, this notification will be made to:

Janet E. Brown, P.E. Project Manager NYSDEC, Region 3 21 South Putt Corners Road New Paltz, NY 12561 (845) 256-3826

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the Site cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this Excavation Work Plan (EWP);
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's Health and Safety Plan (HASP), in electronic format. An outline of the requirements of the HASP are included in Appendix D of the Site Management Plan (SMP);
- Identification of disposal facilities for potential waste streams; and,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

A-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work



performed during development, such as excavations for foundations and utility work, after issuance of the "No Further Action Letter".

Soils will be segregated based on previous environmental data and screening results into material that requires off-Site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

A-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

A-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this EWP.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this EWP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York Stated Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

A truck wash/decontamination area will be operated on-Site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be decontaminated before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site soil tracking.



The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of soil and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

A-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 New York Code of Rules and Regulations (NYCRR) Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loosefitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

Truck transport routes are shown on Figure 14 of the SMP. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive Sites; (b) use of city mapped truck routes; (c) prohibiting off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-Site, if possible, in order to minimize off-Site disturbance.

A-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and/or regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated off-Site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-Site management of materials from this Site will not occur without formal NYSDEC approval.



Off-Site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, construction and demolition debris (C/D) recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

A-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-Site reuse of material have been approved by NYSDEC and are listed in Table 9 of the SMP. Excavated soil designated for on-Site reuse will be sampled for the parameters identified in Table 9 of the SMP and will be sampled at the frequency identified in DER-10 Table 5.4(e) (10). The qualified environmental professional will ensure that procedures defined for materials reuse in this EWP are followed and that unacceptable material does not remain on-Site. Contaminated on-Site material, including historic fill and contaminated soil, that is acceptable for re-use on-Site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-Site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-Site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-Site.

A-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-Site.



Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream or river) will be performed under a State Pollutant Discharge Elimination System (SPDES) permit.

A-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities, the cover system will be restored. A demarcation layer, consisting of orange snow fencing material or equivalent material will be placed to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils. If the portion of the Site that is disturbed will no longer be covered with impervious surface (i.e., concrete, asphalt, building foundation) a minimum of two feet of soil/fill, which meets the criteria described in Section A-10, must be placed above the demarcation layer.

If the type of cover system changes from that which exists prior to the excavation (i.e., a Site cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the 'Remaining Contamination'. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

A-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this EWP prior to receipt at the Site. Prior to acceptance of fill material, the procedures described below will be followed to verify the acceptability of the source. History of fill material source properties will be determined using historical Sanborn Fire Insurance Maps, if available, and by performing a site visit. Other sources of historical information that may be reviewed include aerial photographs, environmental database review, and/or interviews of knowledgeable persons.

Material from industrial Sites, spill Sites, or other environmental remediation Sites or potentially contaminated Sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in Appendix 5 of DER-10. Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 10 of the SMP. Soil designated for import to the Site will be sampled for the parameters identified in



Table 10 of the SMP and will be sampled at the frequency identified in DER-10 Table 5.4(e) (10). The following table summarizes the frequency of the samples to be collected for imported material.

]	Fable A-1					
Number o	Number of Samples to be Collected for Imported Material						
Sampling Parameter	TCL VOCs	TCL SVOCs, TCL PCBs, TCL pesticides/herbicides, and TAL Metals					
Soil Quantity (Cubic Yards)	Grab	Five-point Composite					
0-50	1	1					
50-100	2	1					
100-200	3	1					
200-300	4	1					
300-400	4	2					
400-500	5	2					
500-800	6	2					
800-1,000	7	2					
> 1,000 cubic yards	Add two composite san a lesse	additional VOC grab samples and one five-point nple for each additional 1,000 cubic yards or propose or frequency of testing for NYSDEC approval					

If, based on the initial analytical results, the material is suitable for import, a lesser frequency of testing may be proposed to the NYSDEC for approval on a case-by-case basis.

Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.



A-11 STORMWATER POLLUTION PREVENTION

Excavation and/or construction activities that disturb more than 1 acre of soil will be conducted in accordance with the requirements of the most current version of the applicable NYSDEC SPDES General Permit for Storm Water Discharges from Construction Activity ("General Permit" or "GP"). Disturbance of more than 1 acre will be conducted under a Storm Water Pollution Prevention Plan (SWPPP).

Excavation activities, if necessary, will include the following erosion prevention measures:

- Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.
- Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.
- All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.
- Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.
- Erosion and sediment control measures identified in the EWP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.
- Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

A-12 CONTINGENCY PLAN

If underground storage tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes [Target Analyte List (TAL) metals; Target Compound List (TCL) volatiles and semivolatiles, TCL pesticides and polychlorinated biphenyls (PCBs)], unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.



Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will also be included in the periodic reports prepared pursuant to Section 5 of the SMP.

A-13 COMMUNITY AIR MONITORING PLAN

During soil disturbing activities the generic Community Air Monitoring Plan (CAMP) (Appendix 1A of NYSDEC DER-10 and Appendix D of the SMP) must be implemented. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and New York State Department of Health (NYSDOH) Project Managers.

A-14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-Site. Based on previous investigations, odorous soils are not anticipated. If odorous material is encountered the following procedures will be used. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.



A-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-Site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of an on-Site water truck or other means for road wetting. The truck may be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger Sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

A-16 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

Appendix B Metes and Bounds and Deed Restriction



"Unauthorized alterations or additions to a survey map is a violation of section 7209,

sub-division 2, of the New York State Education Law. "Only copies of the original survey marked with the land surveyor's inked or embossed seal shall be considered a true and volid copy

"Certifications indicated hereon signify that this survey was prepared in accordance with the existing code of practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors. Said certifications shall run to the person for whom the survey is prepared only, and on his behalf to the Title Company, governmental agency and lending institution listed hereon, and to the assignees of the lending institution . CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS . " Copyright (c) 2008–2010 Ward Carpenter Engineers, Inc. All Rights Reserved.



AREA 2 PARCEL

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK. ALL that certain piece or parcel of land situate, lying and being located in the City of Yonkers, County of Westchester, State of New York and being more

particularly bounded and described as follows: Beainning at a point formed by the intersection of the division line between Lots

139, 140 and the southwesterly side of Kettell Avenue (formerly Arlington Avenue) as shown on a map entitled "Map Showing Subdivision of Property Belonging to Nothaniel B., Charles F. and James L. Valentine in the City of Yonkers, N.Y." made by Thomas Stratford, C.E., dated July 29, 1891 and filed in the Westchester County Clerk's Office (Division of Land Records) on Nov. 17, 1891 in Nap Volume 9, Page 55, said point being distont 190.41 feet more or less southeasterly fram the corner formed by the intersection of the southwesterly side of Kettell Avenue (formerly Arlington Avenue) with the southeosterly side of Central Park Avenue;

running thence from said point of beginning along soid division line between Lots 139 and 140, S. 55*45'40" W., a distance of 150.00 feet to a point on the northeasterly side of Huber Place as shown on a man entitled "Map of 44 Lots. Belonging to Glenvue Construction Corporation, Formerly Property of George H. Huber, situated between Yonkers Ave., Arlington Ave., Central Park Ave. and Trenchard St., Yankers, N.Y." made by Earl B. Lovell, Civil Engineer & City Surveyor, dated June 30, 1920 and filed in the Westchester County Clerk's Office (Division of Land Records) on July 24, 1920 as wap No. 2260, said point being distont northwesterly 350.00 feet from the northwest corner of Lot 9 on said Mop No. 2260:

thence along said northeasterly side of Huber Place, N. 34*14'20" W., a distance of 100.00 feet to a point on the southeasterly side of Central Pork Avenue as widened;

thence along the southeasterly side of Central Park Avenue as widened and along the southeasterly side of Parcel 146 as shown on a map entitled "N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 74, Parcel Nos. 146, 147 and 148" dated Feb. 5, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 27, 1953 as Map No. 8358 and along the southeasterly side of Porcel 149 as shown on a map entitled "N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 75, Parcel Nos. 149 and 150" dated Feb. 5, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 27, 1953 as Map No. 8359, N. 5545'40" E, a distance of 150.00 feet to a point on the southwesterly side of Kettell Avenue (formerly Arlington Avenue);

thence along the southwesterly side of Kettell Avenue (formerly Arlington Avenue), S. 3414'20" E, a distance of 100.00 feet to the division line between Lots 139 and 140 as shown on the aforesaid filed Map Volume 9, Page 55, the point and place of BEGINNING.

Containing 15,000 square feet or 0,3443 acres, more or less.

AREA 4 PARCEL

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK.

ALL that certain piece or parcel of land situate, lying and being located in the City of Yonkers, County of Westchester, State of New York and being more particularly bounded and described as follows:

Beginning at a point formed by the intersection of the northeasterly side of Whittier Avenue, the southeasterly side of Centrol Park Avenue and the northwest corner of Lot 12 in Block 19 as shown on a map entitled "Section One, Map Showing Subdivision of Property belonging to Estate of James Cordon Bennett, situated on Central Park Ave,, Seminary Ave., Vredenburgh Ave., Yonkers Avenue, Trenchard St. & Mile Square Road, City of Yonkers, N.Y. made by Mario Lorini, C.E., 34 Warburton Ave.,, Yonkers, N.Y." dated June 29, 1921 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 16, 1921 as

Map No. 2340. thence from said point of beginning along the southeasterly side of Central Park Avenue, N. 59'37'20" E., o distonce of 54.14 feet;

thence northeasterly, a distance of 29.99 feet along a curve to the left having a radius of 869.00 feet and a central angle of 0158'37" to a point on the division line between Lots 9 and 10, Block 19 as shown on the aforesaid filed Wap No.

thence along said division line, S. 30°26'31" E., a distance of 100.23 feet to the northwesterly side of Lot 16, Block 19;

thence along the division line between Lot 16 and Lots 10, 11 and 12, Black 19, S. 59'32'31" W., a distance of 77.43 feet to a point on the northeasterly side of Whittier Avenue:

thence olong sold northeasterly side of Whittier Avenue and the southwesterly side of Lot 12, N. 34°16'40" W., a distance of 100.05 feet to the southeasterly side of Central Park Avenue os shown on the aforesaid filed Map No. 2340, the point ond place of BEGINNING.

Containing 8,064 square feet or 0.1851 acres, more or less.

AREA I PARCEL

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK. ALL that certain piece or parcel of land situate, lying and being located in the City of Yonkers, County of Westchester, State of New York and being more

particularly bounded and described as follows: Beginning at a paint formed by the intersection of the southwesterly side of Whittier Avenue, the southeasterly side of Central Park Avenue and the northeast corner of Lot 1 in Block 20 as shown on a map entitled "Section One, Map Showing Subdivision of Property belonging to Estate of James Cordon Bennett,

situated on Central Park Ave, Seminary Ave., Vredenburgh Ave., Yonkers Avenue, Trenchard St. & Mile Square Road, City of Yonkers, N.Y. made by Mario Lorini, C.E., 34 Warburton Ave.,, Yonkers, N.Y. dated June 29, 1921 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 16, 1921 as Map No. 2340;

running thence from said point of beginning along the southwesterly side of Whittier Avenue, and along the northeasterly side of Lots 1, 9 through 12 inclusive, S. 34°16'40" E, a distance of 280,98 feet to a point on the division line between the southerly end of the herein described Map No. 2350 and the northerly side of Lot 37 as shown on a map entilled "Map "B" of Property of Ormond Realty Company situated in the City of Yankers, Westchester County, New Yark" dated June 22, 1927 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 12, 1927 as Map No. 3193;

thence continuing along the southwesterly side of Whittier Avenue and along the northeosterly side of Lots 33 through 37 inclusive the following two courses ond distances

N. 74°42'00" W., a distance of 0.63 feet;

thence S. 34°14'20" E., a distance of 235.60 feet to a point on the division line between Lots 32 and 33 as shown on the aforesaid filed Map No, 3193;

thence along said division line, S. 55'45'40" W., o dislonce of 150.00 feet lo o point on the division line between Lots 8 and 9; thence along the northerly side of Lots 5 through 8, N. 34*14'20" W., a distance

of 150.00 feet to a point on the division line between Lots 5 and 6; thence along said division line, S. 55°45′40" W., a distance of 150.00 feet to a point on the northeaslerly side of Kettel Avenue;

thence along the northeasterly side of Kettel Avenue and the southwesterly side of Lots 5 and 182 as shown on Map Volume 9 Page 55, N. 34'14'20" W., a distance of 100.00 feet to a point on the division line between Lot 182 and Lot 4 as shown on Map No. 3193;

thence along said division line N. 55°45′40" E., a distance of 150.00 feet to a point on the division line between Lot 4 and Lot 38;

thence along sold division line between Lot 4 and Lot 38, S. 34°14'20" W., a distance of 36 feet to a point;

thence over and across Lot 4, S. 55°45'40" W., a distance of 150.00 feet to a point on the northerly side of Kettell Avenue;

thence along said northerly side of Kettel Avenue, N. 34°14'20" W., a distance of 197.86 feet to a point on the southeosterly side of Central Pork Avenue os

thence along the southeasterly side of Central Park Avenue as widened and along the southeasterly side of Parcel 153 as shown on a map entitled "N.Y. S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 76, Parcel Nos. 152 and 153" dated May 25, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on June 8, 1954 as Map Na. 9115 northeasterly, a distance of 83.49 feet along a non-tangent curve to the right of which the radius point lies S. 47'31'51" E. a radius of 1,807.00 feet, and having a central angle of 02*38'50";

thence N. 41°29'16" E., a distance of 39.01 feet;

thence northeasterly along the southeasterly side of Central Park Avenue as widened and along the southeasterly side of Parcel 156 as shawn on a map entitled "N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 77, Parcel Nos. 155 and 156" dated Jan. 6, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on VUly 20, 1954 as Map No. 9220, a distance of 57.72 feet along a non tangent curve to the right of which the radius point lies S. 51'21'05" E. a radius of 495.00 feet, and having a central angle of 06°40'53";

thence along the southeasterly side of Central Park Avenue and along the northwesterly side of Lots 1 through 5 inclusive as shown on the aforesaid filed Map No 2350, N. 59'37'20" E., a distance of 125.00 feet to the southwesterly side of Whittier Avenue, the point and place of BECINNING.

Contoining 125,381 square feet or 2.8784 acres, more or less.

ALTA/ACSM Land Title Survey prepared for

Stewart EFI NY LLC

in the City of

Yonkers

Westchester County, N.Y. Scale 1"=40' July 3, 2008

Survey brought to date and certification added Sept. 19, 2009. Survey brought to date and certification added Oct. 6, 2010.

The premises being Block 20, Lots 1 through 5, 9 through 12 and part of Lots 6 through 8, Block 19 Lots 10 through 12 as shown on a map entitled "Section One Map Showing Subdivision of Property belonging to Estate of James Gordon Bennett" filed Aug. 16, 1921 as County Clerk wap No. 2340; Lots 1 through 5 and 33 through 40 as shown on a map entitled "Map B of Property of Ormond Realty Company" dated June 22, 1927 and filed Aug. 12, 1927 as County Clerk Map No. 3193; together with Lot 182 as shown in Volume 9 Page 55 of Maps filed in the County Clerk's Office; Lot 152 as shown on a map entitled "N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11 Map No. 76 Parcel No. 152 & 153" dated May 25, 1953 and filed June 8, 1954 as County Clerk Map No. 9115 and Lot 155 as shown on a map entitled "N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11 Map No. 77 Parcel No. 155 & 156" dated Jan. 6, 1953 and filed July 20, 1954 as County Clerk Map No. 9220; together with Tax Lot 5, Block 6342, Section 6 as shown on the official Tax Assessment Maps of the City of Yonkers.

Certified to Lowyers Title Insurance Corporation, Keppler Title Agency LLC and to 630 Noom LLC.

To: Stewart EFI NY, LLC, 630 Noam LLC, New York State;

This is to certify that this map or plat and the survey on which it is based were made in accordance with "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by ALTA/ACSM and NSPS in 2005, and includes Items 4, 8, 9, 10, 13 and 14 of Table A Thereof. Pursuant to the Accuracy Standards as adopted by ALTA, NSPS and ACSM and in effect on the date of this certification, undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of New York, the Relative Positional Accuracy of this survey does not exceed that which is specified therein.

Dote _____

William H. Free Jr., Senior Vice President New York State License No. 049970 MardCarpenterEngineersInc. 76 Mamaroneck Avenue White Plains, N.Y. 10601 Tel. No. 914–949–6000



The Office of the Westchester County Clerk. This page is part of the instrument, the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.



511873387DLR0017

	Westo	hester C	ounty Reco	ordir	ng & Endorse	ement	Page Prepare	ed: 7/6/2011 3:03:42 PM
			Submitter	Infor	mation			
Name:	Ralph Celone				Phone:		860-283-8213	
Address 1:	45 Old Waterbury Road				Fax:		860-283-2526	
Address 2:					Email:		rcelone@stewar	efi.com
City/State/Zip:	Thomaston CT 06787				Reference for S	ubmitter:	630 Central Park	Ave Deed Restrictions
			Docume	nt De	etails			
Control Number	511873387		Document	Туре	Declaration (DLR)		
Package ID:	2011070100067001001		Document	Page	Count: 12		Total Page Cour	nt: 14
	1st PARTY		Part	ies		2nd	Additional Parties	s on Continuation page
1: DANIEL STO	OKES		- Other	1:	DANIEL STOKES			- Other
2:				2:				
			Prop	erty			Additional Proper	ties on Continuation page
Street Address:	630 CENTRAL PARK AV	ENUE		·	Tax Designation:	6-6343-1		
City/Town:	YONKERS				Village:			
			Cross- Re	efere	nces	Ľ	Additional Cross-	Refs on Continuation page
1	2			3:			4:	
			Supporting	Docı	uments			
	Recording Fee	es		1		Morto	gage Taxes	
Statutory Record	ling Fee:	\$40.00		Do	cument Date:			
Page Fee:		\$65.00		Mo	ortgage Amount:		\$0.00	
Cross-Reference	e Fee:	\$0.00						
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TP-584 Filing Fe	e:	\$0.00		Ad	ditional:		\$0.00	
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Transfer Tax	\$0.00)			tal Mortgage Tax:		\$0.00	
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Package ID: 201107010006700100)1 Documer	nt Page Count: 12	Total Page Count: 14
	Properties	Addendum	
34 WHITTIER AVENUE 10704	YONKERS	6 6343 25	
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27 KETTEL AVENUE 10704	YONKERS	6 6343 47	
27 KETTEL AVENUE 10704	YONKERS	6 6343 49	
21 KETTEL AVENUE 10704	YONKERS	6 6343 51	
10 KETTEL AVENUE 10704	YONKERS	6 6342 5	
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640-642 CENTRAL PARK AVENUE 10704	YONKERS	6 6344 2	





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	Pa	ayment Cover Pa	age		
		ubmitter Information	on		
Name:	Ralph Celone	Pho	ne:	860-283-8213	
Address 1:	45 Old Waterbury Road	Fax		860-283-2526	
Address 2:		Ema	ail:	rcelone@stewartefi.con	n
City/State/Zip:	Thomaston CT 06787	Refe	erence for Submitter:	630 Central Park Ave D	eed Restrictions
		Payment Due			
Control Number	Document Type	Fees	Transfer Tax	Mortgage Tax	Total
511873387	Declaration (DLR)	\$105.00	\$0.00	\$0.00	\$105.00
			Tota	Due :	\$105.00
-		Payment Details			
Fees	CHECK # 10550960 (Che	ck, Uncertified)	PENDING		\$105.00
			Total Amount :		\$105.00







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		Payment Cov	er Page			
		Submitter Info	mation			
Name:	Ralph Celone		Phone:		860-283-8213	
Address 1:	45 Old Waterbury Road		Fax:		860-283-2526	
Address 2:			Email:		rcelone@stewar	tefi.com
City/State/Zip:	Thomaston CT 06787		Reference for Su	ubmitter:	630 Central Park	Ave Deed Restrictions
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DECLARATION OF COVENANTS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS AND RESTRICTIONS is made the $3\underline{a'}^{I'}$ day of $\underline{\cancel{a}}^{\prime}\underline{\cancel{a}}$, 2011, by Stewart EFI New York, LLC ("Stewart EFI"), a Connecticut limited liability company, having an office at 45 Old Waterbury Road, Thomaston, CT 06787.

WHEREAS, Stewart EFI is the owner of the parcels of real property located at 630 Central Park Avenue, more specifically described as Tax Map Section 6, Block 6343 Lot 1; 34 Whittier Avenue, more specifically described as Tax Map Section 6, Block 6343 Lots 25 and 27: 27 Kettel Avenue, more specifically described as Tax Map Section 6, Block 6343 Lots 47 and 49; 21 Kettel Avenue, more specifically described as Tax Map Section 6, Block 6343 Lots 6343, Lot 51; 10 Kettel Avenue, more specifically described as Tax Map Section 6, Block 6342, Lot 5; and 640-642 Central Park Avenue, more specifically described as Tax Map Section 6, Block 6344, Lots 1 and 2, all being in Yonkers, Westchester County, New York (the "Site" or the "Property"), and shown on the survey map attached hereto as Exhibit A;

WHEREAS, Stewart EFI is participating in the New York State Department of Environmental Conservation's (the "Department's") Voluntary Cleanup Program with respect to the Property; and

WHEREAS, the Property, designated as Site No. V-00691-3, is the subject of Voluntary Cleanup Agreement, Index No.W3-1005-04-06, effective date July 6, 2004 and any amendments thereto (the "Agreement"); and

WHEREAS, Stewart EFI's investigative and remedial activities on the Site are subject to the Agreement; and

WHEREAS, Stewart EFI has committed to complete its obligations under the Agreement to address the environmental contamination at the Site, including but not limited to, the submission of reports, the development and implementation of required work plans, submission of revisions of such documents to satisfactorily address the Department's comments, and implementation of additional sampling of environmental media on the Property as may be required; and

WHEREAS, Site investigation activities to date have indicated elevated sub-slab vapor concentrations such that building mitigation is warranted in the former manufacturing facility located at 630 Central Park Avenue, 34 Whittier Avenue and 27 Kettel Avenue (Tax Map section 6, Block 6343, Lots 1, 25, 27, 47, and 49) to prevent potential exposures via soil vapor intrusion in the building; and

WHEREAS, Stewart EFI has installed and is operating a sub-slab depressurization system ("SSDS") in the building located on Block 6343 Lots 1, 25, 27, 47, and 49 pursuant to a Department approved Interim Remedial Measure ("IRM") work plan dated June 18, 2010, in order to mitigate potential exposure via soil vapor intrusion; and

WHEREAS, upon completion of the Remedial Investigation/Remedial Action Selection Report, Stewart EFI pursuant to the Agreement will propose a remedy for the Department's approval that eliminates or mitigates all significant threats to human health and the environment presented by the contamination disposed at the Property and which will allow for the restricted uses of the Property as set forth below (the "Departmentapproved remedy"); and

WHEREAS, Stewart EFI will implement the Department-approved remedy pursuant to the Agreement and in accordance with Department-approved Remedial Action Work Plan; and

NOW, THEREFORE, Stewart EFI New York, LLC, for itself and its successor and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions, is as shown on the survey map attached hereto as Exhibit "A" and made part hereof, and consists of the parcels of land, in the City of Yonkers, County of Westchester, State of New York, together with the building and improvements thereon or hereafter erected, identified as Tax Map Section 6, Block 6342 Lot 5, Block 6343 Lots I, 25, 27, 47, 49 and 51, and Block 6344, Lots I and 2, and is more particularly bounded and described in the Metes and Bounds attached hereto as Exhibit "B".

Second, unless prior approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as the "Relevant Agency," is first obtained:

- The use of the portion of the Site identified as Block 6343, Lots 1, 25, 27, 47, and 49 may not be used for a less restricted use than "Industrial Use" which is defined as the land use category which shall only be considered for the primary purpose of manufacturing, production, fabrication or assembly processes and ancillary services and does not include any recreational component; and the owner of the Site shall not seek to remove the zoning variance for industrial use granted on July 6, 1982 for lots 27 and 47; and
- The use of the portion of the Site identified as Block 6344, Lots 1 and 2 may not be used for a less restricted use than "Commercial Use" which is defined as a land use category which shall only be considered for the primary purpose of buying, selling or trading of merchandise or services and includes passive recreational uses which are public uses with limited potential for soil contact; and
- The use of the portion of the Site identified as Block 6342, Lot 5 and Block 6343, Lot 51 may not be used for a less restricted use than "Residential Use" which is the land use category which allows a site to be used for any use other than raising live stock or producing animal products for human consumption. Restrictions on the use of groundwater are allowed, but no other institutional or engineering controls are

allowed relative to the residential use soil cleanup objectives. This is the land use category which will be considered for single family housing; and

- The owner of the Site shall continue in full force and effect any institutional and engineering controls required under the Agreement, including the SSDS, and shall maintain such controls unless the owner first obtains permission to discontinue such controls from the Relevant Agency. These required institutional and engineering controls will be embodied in the Department-approved Site Management Plan for the Site, including modifications as approved by the Department or Relevant Agency (the "SMP"); and
- All future activities on the portion of the Site that (i) results in the disturbance or excavation, which threatens the integrity of the existing cap which consists of the asphalt covered parking areas, the concrete covered sidewalks, demonstrated clean fill cover in non-paved areas and concrete building slabs, or (ii) results in disturbance of material containing residual contamination are prohibited unless such activities are conducted in accordance with the soil management provisions of the SMP; and
- All future activities on the Site that results in unacceptable human exposure to residual contamination are prohibited; and
- All groundwater, soil vapor and other environmental or public health monitoring related to the Site must be performed as required in the SMP; and
- All environmental monitoring devices, including but not limited to, groundwater monitoring wells and soil vapor probes, must be protected and replaced as necessary or as directed by the Department to ensure continued functioning as specified in the SMP; and
- Any new structures constructed on the Site must be evaluated for potential soil vapor intrusion and mitigated as necessary in accordance with the building mitigation provisions of the SMP; and
- The owner of the Site shall prohibit the use of the groundwater underlying the Site without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency; and
- All data and information pertinent to site management for the Property must be reported at the frequency and in a manner specified in the SMP; and
- The owner of the Site shall annually (or such other period specified in the SMP), following the recording of this Declaration of Covenants and Restrictions in the Westchester County Clerk's Office, submit to the Department or Relevant Agency a written statement by an expert the Department may find acceptable certifying under penalty of perjury that the institutional and engineering controls employed at the Site are unchanged from the previous certification or that any changes to the controls

employed at the Site were approved by the Department, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Site to evaluate continued maintenance of such controls.

Third, the Department or Relevant Agency may enter and inspect the Site in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions and the SMP.

Fourth, this declaration is and shall be deemed a covenant and shall run with the land and shall be binding on all future owners of the Site, and provides that the owner, and its successors and assigns consent to the enforcement by the Department or the Relevant Agency of the covenants and restrictions that Paragraph X of the Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or the Relevant Agency to seek enforcement.

Fifth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

Sixth, the SMP for the Site, as approved and subject to modifications as approved by the Department or Relevant Agency, is incorporated by reference and made enforceable hereto. To the extent that the provisions of the SMP for the Site are inconsistent with this Declaration of Covenants and Restrictions, the provisions of the SMP for the Site shall control.

[Signatures on Following Page]

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

Stewart EFI New York, LLC By: Drug 2 Title: <u>Chairman &</u> <u>Chief Executive Officer</u> Date: June 30, 2011

STATE OF CONNECTICUT)) ss: COUNTY OF HARTFORD)

On the <u>3</u>, day of <u>5</u>, in the year 2011 before me the undersigned, personally appeared Daniel D. Stokes personally known to me who, being duly sworn, did depose and say that he/she/they reside at 45 Old Waterbury Road, Thomaston, Connecticut 06782 and that he is the Chairman and Chief Executive Officer of Stewart EFI New York, LLC, the limited liability company described in and which executed the above instrument; and that he signed his name thereto by the authority of the members of said limited company and that such individual made such appearance before the undersigned in the City of Hartford and State of Connecticut.

Potheunem leagane

EXHIBIT A Survey Map of Property (See Attached)

EXHIBIT B

Property Description

<u>Area 1 – Industrial Use</u>

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK.

All that certain piece or parcel of land situate, lying and being located in the City of Yonkers, County of Westchester, State of New York and being more particularly bounded and described as follows:

Beginning at a point formed by the intersection of the southwesterly side of Whittier Avenue, the southeasterly side of Central Park Avenue and the northeast corner of Lot 1 in Block 20 as shown on a map entitled "Section One, Map Showing Subdivision of Property belonging to Estate of James Gordon Bennett, situated on Central Park Ave., Seminary Ave., Vredenburgh Ave., Yonkers Avenue, Trenchard St. & Mile Square Road, City of Yonkers, N.Y. made by Mario Lorini, C.E., 34 Warburton Ave., Yonkers, N.Y. dated June 29, 1921 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 16, 1921 as Map No. 2340;

running thence from said point of beginning along the southwesterly side of Whittier Avenue, and along the northeasterly side of Lots 1, 9 through 12 inclusive, S. 34°16'40" E., a distance of 280.98 feet to a point on the division line between the southerly end of the herein described Map No. 2350 and the northerly side of Lot 37 as shown on a map entitled "Map B" of Property of Ormond Realty Company situated in the City of Yonkers, Westchester County, New York" dated June 22, 1927 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 12, 1927 as Map No. 3193;

thence continuing along the southwesterly side of Whittier Avenue and along the northeasterly side of Lots 33 through 37 inclusive the following two courses and distances:

N. 74°42'00" W., a distance of 0.63 feet;

thence S. 34°14'20" E., a distance of 235.60 feet to a point on the division line between Lots 32 and 33 as shown on the aforesaid filed Map No. 3193;

thence along said division line, S. 55°45'40" W., a distance of 150.00 feet to a point on the division line between Lots 8 and 9;

thence along the northerly side of Lots 6 through 8, N. 34°14'20" W., a distance of 150.00 feet to a point on the division line between Lots 5 and 6;

thence along said division line, S. 55°45'40" W., a distance of 150.00 feet to a point on the northeasterly side of Kettel Avenue;

thence along the northeasterly side of Kettel Avenue and the southeasterly side of Lots 5 and 182 as shown on Map Volume 9 Page 55, N. 34°14'20" W., a distance of 100.00 feet to a point on the division line between Lot 182 and Lot 4 as shown on Map No. 3193;

thence along said division line N. 55°45'40" E., a distance of 150.00 feet to a point on the division line between Lot 4 and Lot 38;

thence along said division line between Lot 4 and Lot 38, S. 34°14'20" W., a distance of 36 feet to a point;

thence over and across Lot 4, S. 55°45'40" W., a distance of 150.00 feet to a point on the northerly side of Kettel Avenue;

thence along said northerly side of Kettel Avenue, N. 34°14'20" W., a distance of 197.86 feet to a point on the southeasterly side of Central Park Avenue as widened;

thence along the southeasterly side of Central Park Avenue as widened and along the southeasterly side of Parcel 153 as shown on a map entitled "*N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, map No. 76, Parcel Nos. 152 and 153*" dated May 25, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on June 8, 1954 as Map No. 9115 northeasterly, a distance of 83.56 feet along a non-tangent curve to the right of which the radius point lies S. 47°31'51" E. a radius of 1,807.00 feet, and having a central angle of 02°38'50";

thence N. 41°29'16" E., a distance of 39.01 feet;

thence northeasterly along the southeasterly side of Central Park Avenue as widened and along the southeasterly side of Parcel 156 as shown on a map entitled "*N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 77, Parcel Nos. 155 and 156*" dated Jan. 6, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on July 20, 1954 as Map No. 9220, a distance of 57.72 feet along a non tangent curve to the right of which the radius point lies S. 51°21'05" E. a radius of 495.00 feet, and having a central angle of 06°40'43";

thence along the southeasterly side of Central Park Avenue and along the northwesterly side of Lots 1 through 5 inclusive as shown on the aforesaid filed Map No. 2350, N. 59°37'20" E., a distance of 125.00 feet to the southwesterly side of Whittier Avenue, the point and place of BEGINNING.

Containing 125,381 square feet or 2.8784 acres, more or less.

Area 2 – Commercial & Residential Use

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK.

ALL that certain piece or parcel of land situate, lying and being located in the City of Yonkers, County of Westchester, State of New York and being more particularly bounded and described as follows:

Beginning at a point formed by the Intersection of the division line between Lots 139, 140 and the southwesterly side of Kettel Avenue (formerly Arlington Avenue) as shown on a map entitled "*Map Showing Subdivision of Property Belonging to Nathanial B., Charles F. and James L. Valentine in the City of Yonkers, N.Y.*" made by Thomas Stratford, C.E., dated July 29, 1891 and filed in the Westchester County Clerk's Office (Division of Land Records) on Nov. 17, 1891 in Map Volume 9, Page 55, said point being distant 190.41 feet more or less southeasterly from the corner formed by the intersection of the southwesterly side of Kettel Avenue (formerly Arlington Avenue) with the southeasterly side of Central Park Avenue;

running thence from said point of beginning along said division line between Lots 139 and 140, S. 55°45'40" W., a distance of 150.00 feet to a point on the northeasterly side of Huber Place as shown on a map entitled "Map of 44 Lots, Belonging to Glenvue Construction Corporation, Formerly Property of George H. Huber, situated between Yonkers Ave., Arlington Ave., Central Park Ave. and Trenchard St., Yonkers, N.Y." made by Earl B. Lovell, Civil Engineer & City Surveyor, dated June 30, 1920 and filed in the Westchester County Clerk's Office (Division of Land Records) on July 24, 1920 as Map No. 2260, said point being distant northwesterly 350.00 feet from the northwest corner of Lot 9 on said Map No. 2260;

thence along said northeasterly side of Huber Place, N. 34°14'20" W., a distance of 100.00 feet to a point on the southeasterly side of Central Park Avenue as widened;

thence along the southeasterly side of Central Park Avenue as widened and along the southeasterly side of Parcel 146 as shown on a map entitled "*N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 74, Parcel Nos. 146, 147 and 148*" dated Feb. 5, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 27, 1953 as Map No. 8358 and along the southeasterly side of Parcel 149 as shown on a map entitled "*N.Y.S. Thruway Southern Westchester Connection Subdivision No. 11, Map No. 75, Parcel Nos. 149 and 150*" dated Feb. 5, 1953 and filed in the Westchester County Clerk's Office (Division *No. 11, Map No. 75, Parcel Nos. 149 and 150*" dated Feb. 5, 1953 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 27, 1953 as Map No. 8359, N. 55°45'40" E., a distance of 150.00 feet to a point on the southwesterly side of Kettel Avenue (formerly Arlington Avenue);

thence along the southwesterly side of Kettel Avenue (formerly Arlington Avenue), S. 34°14'20" E., a distance of 100.00 feet to the division line between Lots 139 and 140 as shown on the aforesaid filed Map Volume 9, Page 55, the point and place of BEGINNING.

Containing 15,000 square feet or 0.3443 acres, more or less.

<u>Area 3 – Residential Use</u>

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK.

ALL that certain piece or parcel of land situate, lying and being located in the City of Yonkers, County of Westchester, State of New York and being more particularly bounded and described as follows:

Beginning at a point formed by the intersection of the northeasterly side of Kettel Avenue and the southwest corner of Church parcel as shown on a map entitled "*Map* "B" of *Property of Ormond Realty Company situated in the City of Yonkers, Westchester County, New York*" dated June 22, 1927 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 12, 1927 as Map No. 3193, said point being distant 233.86 feet from the southeasterly side of Central Park Avenue as widened;

thence from said point of beginning along said northeasterly side of Kettel Avenue, N. 34°14'20" W., a distance of 36 feet to a point on the southwesterly side of Lot 4;

thence over and across Lot 4, N. 55°45'40" E., a distance of 150.00 feet to a point on the division line between Lots 4 and 38;

thence along the division line between Lots 4 and 38, S. 34°14'20" E., a distance of 36 feet to a point on the division line between Lot 4 and Lot 182 (Volume 9, Page 55);

thence along said division line S. 55°45'40" W., a distance of 150.00 feet to a point on the northeasterly side of Kettel Avenue, the point and place of beginning.

Containing 5,400 square feet or 0.1240 acres, more or less.

<u>Area 4 – Commercial Use</u>

DESCRIPTION OF A PARCEL OF PROPERTY LOCATED IN THE CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK.

ALL that certain piece or parcel of land situate, lying and being located in the City of Yonkers. County of Westchester, State of New York and being more particularly bounded and described as follows:

Beginning at a point formed by the intersection of the northeasterly side of Whittier Avenue, the southeasterly side of Central Park Avenue and the northwest corner of Lot 12 in Block 19 as shown on a map entitled "Section One, Map Showing Subdivision of Property belonging to Estate of James Gordon Bennett, situated on Central Park Ave., Seminary Ave., Vredenburgh Ave., Yonkers Avenue, Trenchard St. & Mile Square Road, City of Yonkers, N.Y. made by Mario Lorini, C.E., 34 Warburton Ave., Yonkers, N.Y." dated June 29, 1921 and filed in the Westchester County Clerk's Office (Division of Land Records) on Aug. 16, 1921 as Map No. 2340;

thence from said point of beginning along the southeasterly side of Central Park Avenue, N. 59°37'20" E., a distance of 54.14 feet;

thence northeasterly, a distance of 29.99 feet along a curve to the left having a radius of 869.00 feet and a central angle of 01°58'37" to a point on the division line between Lots 9 and 10, Block 19 as shown on the aforesaid filed Map No. 2340;

thence along said division line, S. 30°26'31" E., a distance of 100.24 feet to the northwesterly side of Lot 16, Block 19;

thence along the division line between Lot 16 and Lots 10, 11 and 12, Block 19, S. 59°32'31" W., a distance of 77.43 feet to a point on the northeasterly side of Whittier Avenue;

thence along said northeasterly side of Whittier Avenue and the southwesterly side of Lot 12, N. 34°16'40" W., a distance of 100.05 feet to the southeasterly side of Central Park Avenue as shown on the aforesaid filed Map No. 2340, the point and place of BEGINNING.

Containing 8,064 square feet or 0.1851 acres, more or less.

Appendix C Electronic Documents (DVD) Appendix D Health and Safety Plan (Outline) and Community Air Monitoring Plan

SAMPLE

HEALTH AND SAFETY PLAN OUTLINE (TO BE PREPARED BY CONTRACTORS PERFORMING WORK BELOW THE BARRIER LAYER OR FINAL SITE DEVELOPMENT COVERS)

- 1.0 Introduction
 - 1.1 Objectives and Applicability
 - 1.2 General Site Description
- 2.0 Hazard Evaluation
- 3.0 Health and Safety Personnel
 - 3.1 Organizational Structure
 - 3.2 Key Personnel/Responsibilities
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Appendix 1A New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the

work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix E Certification Form



Enclosure 1 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site	e No. V00691	Box 1	
Sit	e Name Stewart EFI-NY LLC		
Site City Cor Site	e Address: 630 Central Park Avenue Zip Code: 10704-2000 //Town: Yonkers unty: Westchester e Acreage: 3.4		
Re	porting Period:		
		YES	NO
1.	Is the information above correct?		
	If NO, include handwritten above or on a separate sheet.		
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		
	If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5.	Is the site currently undergoing development?		
		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Industrial		
6. 7.	Is the current site use consistent with the use(s) listed below? Industrial Are all ICs/ECs in place and functioning as designed?		
6. 7.	Is the current site use consistent with the use(s) listed below? Industrial Are all ICs/ECs in place and functioning as designed? IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below a DO NOT COMPLETE THE REST OF THIS FORM.	nd	
6. 7. A C	Is the current site use consistent with the use(s) listed below? Industrial Are all ICs/ECs in place and functioning as designed? IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below a DO NOT COMPLETE THE REST OF THIS FORM. Corrective Measures Work Plan must be submitted along with this form to address the	nd nese issu	ues.
SITE NO. V00691		Box 3	
-------------------------	--------------------------------	-------------------------------	
Description of Insti	itutional Controls		
Parcel	Owner	Institutional Control	
6-6342-5	Stewart EFI New York, LLC		
		Ground Water Use Restriction	
		Landuse Restriction	
0.0040.4	Otowart EEL New York, LLO	Site Management Plan	
6-6343-1	Stewart EFI New York, LLC	Ground Water Use Restriction	
		Landuse Restriction	
		Site Management Plan	
		Soil Management Plan	
6-6343-25, 6-6343-27	Stewart EFI New York, LLC		
		Ground Water Use Restriction	
		Landuse Restriction	
		Soil Management Plan	
6-6343-47 6-6343-49	Stewart EEI New York 11 C	oon management han	
0-00+0-47, 0-00+0-40	otowart Er Hitew Fork, EEO	Ground Water Use Restriction	
		Landuse Restriction	
		Site Management Plan	
		Soil Management Plan	
6-6343-51	Stewart EFI New York, LLC	Cround Water Lles Destriction	
		Landuse Restriction	
		Site Management Plan	
6-6344-1. 6-6344-2	Stewart EFI New York, LLC		
		Ground Water Use Restriction	
		Landuse Restriction	
		Site Management Plan	
		Soil Management Plan	
		Box 4	
Description of Eng	ineering Controls		
Parcel	Engineering Control		
6-6343-1			
	Cover System		
	Vapor Mitigation		
6-6343-25, 6-6343-27	Cover System		
	Vapor Mitigation		
6-6343-47, 6-6343-49			
	Cover System		
6 6944 4 6 6944 9	Vapor Mitigation		
0-0344-1, 0-0344-2	Cover System		
	Control Description for Site N	lo V00691	
Dawa a 1 0 0040 5			
Parcel: 6-6342-5	- C C242 E1		
See controls for parcel	. 0-0343-31		

Control Description for Site No. V00691

Parcel: 6-6343-1

1. a. This parcel may not be used for a less restrictued use than "industrial use."

b. The owner of the Site shall continue any institutional and engineering controls (IC/EC) required under the Agreement (Voluntary Cleanup Agreement), including the sub-slab depressurization system (SSDS), as outlined in the Department-approved Site Management Plan (SMP).

c. All future activities that disturb the existing site existing cap (asphalt, concrete, clean fill cover or the material containing residual contamination are prohibited unless such activities are conducted in accordance with the soil managment provisions of the SMP.

d. All future activities on the Site that results in unacceptable human exposure to residual contamination are prohibited.

e. All groundwater, soil vapor and other environmental or public health monitoring related to the Site must be performed as required in the SMP.

f. All environmental monitoring devices, including but not limited to, groundwater monitoring wells and soil vapor probes, must be protected and replaced as necessary or as directed by the Department to ensure continued functioning as specified in the SMP.

g. Any new structures constructed on the Site must be evaluated for potential soil vapor intrusion and mitigated as necessary in accordance with the building mitigation provisions of the SMP.

h. Use of the groundwater underlying the Site is prohibited without treatment rendering it safe for drinking water or industrial purposes.

i. All data and information pertinent to site management for the Property must be reported at the frequency and in a manner specified in the SMP.

j. The owner of the Site shall annually (or such other period specified in the SMP), submit to the Department a written statement by an acceptable expert that the IC/ECs are unchanged or any changes to them were approved by the Department

2. The Department or Relevant Agency may enter and inspect the Site in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions and the SMP.

3. This deed restriction shall run with the land and shall be binding on all future owners of the Site.

4. Any deed or conveyance of the Property, or any portion thereof, shall recite, unless the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

5. To the extent that the provisions of the SMP are inconsistent with the deed restricitons, the provisions of the SMP shall control.

Parcel: 6-6343-25, 6-6343-27 See controls for parcel: 6-6343-1

Parcel: 6-6343-47, 6-6343-49 See controls 1-5 for parcel: 6-6343-1

Parcel: 6-6343-51 This parcel may not be used for a less restricted use than "residential use."

See also controls 2-5 for parcel: 6-6343-1

Parcel: 6-6344-1, 6-6344-2

These parcels may not be used for a less restricted use than "Commercial Use."

See also controls 1b-5 for parcel: 6-6343-1, with the exception that no SSDS exists on these parcels.

			Box 5
	Periodic Review Report (PRR) Certification Statements		
1.	I certify by checking "YES" below that:		
	 a) the Periodic Review report and all attachments were prepared under the direct reviewed by, the party making the certification; 	ction of,	and
	b) to the best of my knowledge and belief, the work and conclusions described in are in accordance with the requirements of the site remedial program, and gener	n this ce ally acc	ertification epted
	engineering practices, and the information presented is accurate and compete.	YES	NO
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below tha following statements are true:	each In t all of tl	stitutional ne
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is the date that the Control was put in-place, or was last approved by the Department	s uncha ent;	nged since
	(b) nothing has occurred that would impair the ability of such Control, to protect the environment;	public h	ealth and
	(c) access to the site will continue to be provided to the Department, to evaluate including access to evaluate the continued maintenance of this Control;	the ren	nedy,
	(d) nothing has occurred that would constitute a violation or failure to comply wit Management Plan for this Control; and	h the Si	te
	(e) if a financial assurance mechanism is required by the oversight document for mechanism remains valid and sufficient for its intended purpose established in the	r the site	e, the ment.
		YES	NO
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM.		
	A Corrective Measures Work Plan must be submitted along with this form to address th	nese iss	ues.
-	Signature of Owner, Remedial Party or Designated Representative Date		
1			

IC CERTIFICATIONS						
SITE NO. V00691						

Box 6

statement made herein is punishable Penal Law.	ments in Boxes 2 and/or 3 are true. In e as a Class "A" misdemeanor, pursua	understand that a false nt to Section 210.45 of the
I	at	
print name	print business addres	S
am certifying as		(Owner or Remedial Party)
for the Site named in the Site Details	s Section of this form.	
Signature of Owner or Remedial Pa	rty Rendering Certification	Date
	IC/EC CERTIFICATIONS	
	Signature	Box 7
certify that all information in Boxes ounishable as a Class "A" misdemea	4 and 5 are true. I understand that a f anor, pursuant to Section 210.45 of the	alse statement made herein is Penal Law.
	at	,
print name	print business addres	S
print name		
am certifying as a for the	(Owner o	r Remedial Party)
am certifying as a for the	(Owner o	r Remedial Party)

Enclosure 2

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional / Engineering Controls (Boxes 3, 4, and 5)

1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- Where the only control is an Institutional Control on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner.
- Where the site has Institutional and Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Appendix F SSDS Operating Manuals



SERIES V8 FLOTECT® FLOW SWITCH

Specifications - Installation and Operating Instructions



INSTALLATION

1. The Model V8 Flow Switch is intended for use in clean, compatible process media free from scale, debris and other foreign matter which might collect on the vane and impede its movement. Buildup from such materials will prevent proper operation.

2. Carefully unpack the switch being certain to remove any packing material which might have become lodged between the switch housing and the vane assembly. Note the pipe size indicators molded into the vane. By trimming at the mark corresponding to the pipe size being used, approximate actuation/deactuation flows will be as shown in the charts at right. These values apply to installations with a thred-o-let, branch connection or plastic fitting. If using standard 125-250 lb. bronze, iron or steel fittings, trim the vane 0.125" above the mark. Due to variations in fittings and amount of thread engagement, vane must be checked for proper operation.

The flow switch must be properly indexed during installation. The arrow on the side must point in the direction of flow.

SPECIFICATIONS

Maximum Temperature: 212°F (100°C) Maximum Pressure: 150 psig (10.3 bar) Process Connection: 1" NPTM Switch Type: SPDT snap acting Electrical Rating: 5A @ 125/250 VAC Wire Leads: 18 AWG × 18" (45.7 cm) Overall Length: 9.375 in. (23.8 cm) Switch Body: Polyphenylene sulphide (PPS) Wetted Materials: Polyphenylene sulphide, ceramic 8 magnet, 316 stainless steel

Vane: Field trimmable

Installation: Install with index arrow pointing in direction of flow Weight: 4.5 ounces (128 grams)

Cold Water Flow Rates Approx. Actuation/Deactuation GPM Upper, LPM Lower		Air Flow Rates Approx. Actuation/Deactuation SCFM Upper, NM ⁹ /H Lower					
Pipe Size		Pipe Size					
1*	10.8/9.1 40.9/34.6	1*	39/32.6 66.3/55.4				
1½"	9.8/8.3 37.2/31.4	11/4"	37.5/32.2 63.7/54.7				
1½*	8.6/6.8 32.4/25.7	11/2"	33.4/26.7 56.7/45.4				
2"	10.9/8.8 41.2/33,4	2"	43/36.8 73.1/62.5				
3"	12.9/8.9 48.8/33.5	3"	52.7/38.9 89.6/66				
4"	21.1/13.8 79.7/52.2	4"	87.6/63.6 148.9/108.1				
6"	45/33 170.2/124.7	6"	168.6/137.4 286.5/233.4				

4. Use Teflon® thread tape or other suitable pipe joint compound to seal the 1" NPT mounting connection. Avoid excess sealant which could interfere with vane movement and prevent proper operation. Do not exceed 50 ft/lbs. (40 n/m) torque on the switch housing. Damage can result.

 Wire in accordance with local electrical codes. Lead wire colors are as follows: Black – Common, Red – Normally Open, Blue – Normally Closed. Normal is the contact condition with no flow in the system. Closed contacts open and open contacts close when increasing flow reaches the actuation point.

6. Switch electrical components must be protected from moisture at all times. If necessary, install a lightweight waterproof junction box over the 1/2" NPT threaded stem. Do not place mechanical loading on the switch housing. Permanent damage can occur. Use flexible Romex sheathing or equivalent.

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W.E. ANDERSON DIVISION, DWYER INSTRUMENTS, INC. P.O. Box 358 • Michigan City, Indiana 46361 • U.S.A.

Telephone 219/879-8000 Fax 219/872-9057

Installation and Operating Instructions

Side Channel Blowers

Samos SB 0080 - 1100 D/D2

CE

Busch Produktions GmbH Schauinslandstr. 1 79689 Maulburg Germany

0871131685 / 030407 / Modifications reserved

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Preface

Congratulations on your purchase of the Busch side channel blower. With watchful observation of the field's requirements, innovation and steady development Busch delivers modern vacuum and pressure solutions worldwide.

These operating instructions contain information for

- product description,
- transport,
- storage,
- installation and commissioning,
- maintenance,
- overhaul,
- troubleshooting and
- spare parts

of the side channel blower.

For the purpose of these instructions, "handling" the side channel blower means the transport, storage, installation, commissioning, influence on operating conditions, maintenance, troubleshooting and overhaul of the side channel blower.

Prior to handling the side channel blower these operating instructions shall be read and understood. If anything remains to be clarified please contact your Busch representative!

a Directional arrow

b Terminal box

- c Nameplate
- d Outlet
- e Inlet





Product Description

Use

The side channel blower is intended for

- the suction
- the compression
- of
- air and other non-aggressive, non-toxic and non-explosive gases

The gas shall be free from vapours that would condensate under the temperature and pressure conditions inside the side channel blower.

The side channel blower is suitable for continuous operation, provided that the housing can transmit heat to the environment unobstructedly and a certain minimum gas transfer is warranted. If there is a danger of operation against a closed inlet or outlet for more than a few seconds, a vacuum or pressure relief valve, respectively, shall be provided. In case of doubt seek advice from your Busch representative!

The maximum allowed back pressure of the side channel blower is 1 bar (g). By means of process control and/or pressure relief valves it must be made sure that the maximum allowed back pressure will not be exceeded.

Principle of Operation

The side channel blower works on the impulse principle, i.e. kinetic energy is transferred from the rotor to the medium agent be pumped and then is converted into pressure.

For the two stage version:

2 stages, both working on the principle described above, are installed in line in order to achieve a better ultimate/differential pressure.

The side channel blower compresses the inlet gas absolutely oil-free. A lubrication of the pump chamber is neither necessary nor allowed.

Cooling

The side channel blower is cooled by

- radiation of heat from the surface of the side channel blower
- the air flow from the fan wheel of the drive motor
- the conveyed gas

On/off Switch

The side channel blower comes without on/off switch. The control of the side channel blower is to be provided in the course of installation.

Safety Intended Use

DEFINITION: For the purpose of these instructions, "handling" the side channel blower means the transport, storage, installation, commissioning, influence on operating conditions, maintenance, troubleshooting and overhaul of the side channel blower.

The side channel blower is intended for industrial use. It shall be handled only by qualified personnel.

The allowed media and operational limits according to the "Product Description" and the "Installation Prerequisites" of the side channel blower shall be observed both by the manufacturer of the machinery into which the side channel blower is to be incorporated and by the operator.

The maintenance instructions shall be observed.

Prior to handling the side channel blower these operating instructions shall be read and understood. If anything remains to be clarified please contact your Busch representative!

Safety Notes

The side channel blower has been designed and manufactured according to the state-of-the-art. Nevertheless, residual risks may remain. These operating instructions inform about potential hazards where appropriate. Safety notes are tagged with one of the keywords DANGER, WARNING and CAUTION as follows:

Anger danger

Disregard of this safety note will always lead to accidents with fatal or serious injuries.

Disregard of this safety note may lead to accidents with fatal or serious injuries.



Disregard of this safety note may lead to accidents with minor injuries or property damage.

Noise Emission

For the sound pressure level in free field according to DIN 45635, part 13 see "Technical Data".



Depending on the construction size the side channel blower can emit noise of high intensity.

Depending on the operating state the side channel blower can emit noise in a narrow band.

Risk of damage to the hearing.

Persons staying in the vicinity of the side channel blower over extended periods shall wear ear protection.

Transport Transport in Packaging

Side channel blowers individually packed in cardboard boxes can be carried by hand.

Packed on a pallet the side channel blower is to be transported with a forklift.

Transport without Packaging

In case the side channel blower is packed in a cardboard box with inflated cushions:

• Remove the inflated cushions from the box

In case the side channel blower is in a cardboard box cushioned with rolled corrugated cardboard:

• Remove the corrugated cardboard from the box

In case the side channel blower is layed in foam:

Remove the foam

In case the side channel blower is bolted to a pallet or a base plate:

 Remove the bolting between the side channel blower and the pallet/base plate

In case the side channel blower is fastened to the pallet by means of tightening straps:

• Remove the tightening straps

In case the side channel blower weighs less than 20 kg and comes without eyebolts for the attachment of lifting gear:

Version without handle:

• Grasp the side channel blower with both hands

Version with handle:

• Carry the side channel blower using the handle

In case the side channel blower comes with eyebolts for the attachment of lifting gear:

CAUTION Do not walk, work or stand under suspended loads.

- Attach lifting gear securely to the eyebolt on the cylinder
- Attach the lifting gear to a crane hook with safety latch
- Lift the side channel blower with a crane

In case the side channel blower was bolted to a pallet or a base plate:

• Remove the stud bolts from the rubber feet

Storage

Short-term Storage

- Make sure that the inlet and outlet ports are closed (leave the provided plugs in)
- Store the side channel blower
- if possible in original packaging,
- indoors,
- dry
 - dust free and
 - vibration free

Conservation

In case of adverse ambient conditions (e.g. aggressive atmosphere, frequent temperature changes) conserve the side channel blower immediately. In case of favourable ambient conditions conserve the side channel blower if a storage of more than 3 months is scheduled.

• Make sure that all ports are firmly closed; seal all ports that are not sealed with PTFE-tape, gaskets or o-rings with adhesive tape

NOTE: VCI stands for "volatile corrosion inhibitor". VCI-products (film, paper, cardboard, foam) evaporate a substance that condenses in molecular thickness on the packed good and by its electro-chemical properties effectively suppresses corrosion on metallic surfaces. However, VCI-products may attack the surfaces of plastics and elastomers. Seek advice from your local packaging dealer! Busch uses CORTEC VCI 126 R film for the overseas packaging of large equipment.

- Wrap the side channel blower in VCI film
- Store the side channel blower
- if possible in original packing,
- indoors,
- dry,
- dust free and
- vibration free

For commissioning after conservation:

- Make sure that all remains of adhesive tape are removed from the ports
- Commission the side channel blower as described in the chapter "Installation and Commissioning"

Installation and Commissioning

Installation Prerequisites



In case of non-compliance with the installation prerequisites, particularly in case of insufficient cooling:

Risk of damage or destruction of the side channel blower and adjoining plant components!

Risk of injury!

The installation prerequisites must be complied with.

 Make sure that the integration of the side channel blower is carried out such that the essential safety requirements of the Machine Directive 98/37/EC are complied with (in the responsibility of the designer of the machinery into which the side channel blower is to be incorporated; see also the note in the EC-Declaration of Conformity)

Mounting Position and Space

- Make sure that the following ambient conditions will be complied with:
- Ambient temperature: -5 ... +40 °C
- Ambient pressure: atmospheric
- Make sure that the environmental conditions comply with the protection class of the drive motor (according to the nameplate)

The side channel blower can be operated with horizontal or vertical gas flow (with vertical gas flow the drive motor shall be in the uppermost position)



- Make sure that the mounting base is even
- Make sure that in order to warrant a sufficient cooling there will be a clearance of minimum 0.1 m between the side channel blower and nearby walls

In case of mounting with the drive motor in the uppermost position:

- Make sure that there will be a clearance of minimum 20 mm (up to construction size 200) or 30 mm (as of construction size 310), respectively, between the cover (2.030) and the floor
- Make sure that no temperature sensitive parts (plastics, wood, cardboard, paper, electronics) will touch the surface of the side channel blower
- Make sure that the installation space or location is vented such that a sufficient cooling of the side channel blower is warranted

During operation the surface of the side channel blower may reach temperatures of more than 70 $^{\circ}$ C.

Risk of burns!

 Make sure that the side channel blower will not be touched inadvertently during operation, provide a guard if appropriate

Inlet Connection



Intruding foreign objects or liquids can destroy the side channel blower.

In case the inlet gas can contain dust or other foreign solid particles:

 Make sure that a suitable filter (5 micron or less) is installed upstream the side channel blower

In case of compressor operation:

The following guidelines for the suction line do not apply, if the air to be compressed is taken in right at the side channel blower.

- Make sure that the suction line fits to the inlet connection (e) of the side channel blower
- Make sure that the inlet is connected with a vacuum-tight flexible hose or a pipe

In case of using a pipe:

 Make sure that the pipe will cause no stress on the side channel blower's connection, if necessary use bellows • Make sure that the line size of the suction line over the entire length is at least as large as the side channel blower inlet

In case of very long suction lines it is prudent to use larger line sizes in order to avoid a loss of efficiency. Seek advice from your Busch representative!

In case the vacuum shall be maintained after shut-off of the side channel blower:

 Provide a manual or automatic operated valve (= check valve) in the suction line

In case the side channel blower will be used for vacuum application and is likely to run against a closed inlet or outlet for more than a few seconds:

 Provide a vacuum relief valve and set it to approx. 75 percent of the max. differential pressure

In case of doubt seek advice from your Busch representative!

Discharge Connection

In case of vacuum operation:

The following guidelines for the discharge line do not apply, if the inlet air is discharged to the environment right at the side channel blower.

• Make sure that the discharge line fits to the outlet connection (d) of the side channel blower

In case of using a pipe:

- Make sure that the pipe will cause no stress on the side channel blower's connection, if necessary use bellows
- Make sure that the line size of the discharge line over the entire length is at least as large as the side channel blower outlet

In case of very long discharge lines it is prudent to use larger line sizes in order to avoid a loss of efficiency. Seek advice from your Busch representative!

• Make sure that the discharge line either slopes away from the side channel blower or provide a liquid separator or a drip leg with a drain cock, so that no liquids can back up into the side channel blower

Pressure Connection

- Make sure that the pressure line fits to the outlet connection (d) of the side channel blower
- Make sure that the outlet is connected with a pressure-tight flexible hose or a pipe

In case of using a pipe:

- Make sure that the pipe will cause no stress on the side channel blower's connection, if necessary use bellows
- Make sure that the line size of the pressure line over the entire length is at least as large as the side channel blower outlet

In case of very long pressure lines it is prudent to use larger line sizes in order to avoid a loss of efficiency. Seek advice from your Busch representative!

 Make sure that the pressure line either slopes away from the side channel blower or provide a liquid separator or a drip leg with a drain cock, so that no liquids can back up into the side channel blower

In case the side channel blower will be used for pressure application and is likely to run against a closed inlet or outlet for more than a few seconds:

• Provide a pressure relief valve and set it to approx. 75 percent of the max. differential pressure

In case of doubt seek advice from your Busch representative!

Electrical Connection

Make sure that the stipulations acc. to the EMC-Directive 89/336/EEC and Low-Voltage-Directive 73/23/EEC as well as the EN-standards, electrical and occupational safety directives and the local or national regulations, respectively, are complied with (this is in the responsibility of the designer of the machinery into which the side channel blower is to be incorporated; see also note in the EC-Declaration of Conformity).

- Make sure that the power supply is compatible with the data on the nameplate of the drive motor
- Make sure that an overload protection according to EN 60204-1 is provided for the drive motor
- Make sure that the drive of the side channel blower will not be affected by electric or electromagnetic disturbance from the mains; if necessary seek advice from your Busch representative

In case of mobile installation:

 Provide the electrical connection with grommets that serve as strain-relief

Controlling Pressure/Flow

Vacuum operation:

 In order to relieve excess vacuum or to limit the air flow use vent valves. Do not control the vacuum or the flow by throttling of suction or discharge lines. Conveying bypass air will let the side channel blower run cooler and draw less power.

Pressure operation:

 In order to relieve excess pressure or to limit the air flow use bleed valves. Do not control the pressure or the flow by throttling of suction or pressure lines. Bleeding excess air will let the side channel blower run cooler and draw less power.

Mounting

- Make sure that the "Installation Prerequisites" are complied with
- Fasten the side channel blower at its location

WARNING

Connecting Electrically

Risk of electrical shock, risk of damage to equipment.

Electrical installation works must only be executed by qualified personnel that knows and observes the following regulations: - IEC 364 or CENELEC HD 384 or DIN VDE 0100, respectively,

- IEC-Report 664 or DIN VDE 0110,
- VBG 4 or corresponding national accident prevention regulation.
- Electrically connect the drive motor
- Connect the protective earth conductor

Connection Scheme Alternating Current Motor

Low voltage connection:



High voltage connection:



Connection Scheme Three-Phase Motor

Delta connection (low voltage):



Star connection (high voltage):



Operation in the wrong direction of rotation can destroy the side channel blower in short time.

Prior to starting-up it must be made sure that the side channel blower is operated in the proper direction.

NOTE: If certain applications require reverse operation over short periods, please seek advice from your Busch representative!

Version with three-phase motor:

- Determine the intended direction of rotation with the arrow (stuck on or cast)
- "Bump" the drive motor
- Watch the fan wheel of the drive motor and determine the direction of rotation just before the fan wheel stops

If rotation must be changed:

• Switch any two of the drive motor wires (three-phase motor)

Connecting Lines/Pipes

- Connect the suction line
- Connect the discharge line
- or
 - Connect the pressure line
- Make sure that all provided covers, guards, hoods etc. are mounted

In case the side channel blower comes with an eyebolt for the attachment of lifting gear:

• Make sure that the eyebolt is firmly tightened

As soon as the side channel blower is operated under normal operating conditions:

 Measure the drive motor current and record it as reference for future maintenance and troubleshooting works

Operation Notes

Application



The side channel blower is designed for operation under the conditions described below.

In case of disregard risk of damage or destruction of the side channel blower and adjoining plant components!

Risk of injury!

The side channel blower must only be operated under the conditions described below.

The side channel blower is intended for

- the suction
- the compression
- of

- air and other non-aggressive, non-toxic and non-explosive gases

The gas shall be free from vapours that would condensate under the temperature and pressure conditions inside the side channel blower.

The side channel blower is suitable for continuous operation, provided that the housing can transmit heat to the environment unobstructedly and a certain minimum gas transfer is warranted. If there is a danger of operation against a closed inlet or outlet for more than a few seconds, a vacuum or pressure relief valve, respectively, shall be provided. In case of doubt seek advice from your Busch representative!

The maximum allowed back pressure of the side channel blower is 1 bar (g). By means of process control and/or pressure relief valves it must be made sure that the maximum allowed back pressure will not be exceeded.

During operation the surface of the side channel blower may reach temperatures of more than 70 $^{\circ}\text{C}.$

Risk of burns!!

Secure the side channel blower against contact during operation, let it cool down prior to a required contact or wear heat protection gloves.



Depending on the construction size the side channel blower may emit noise of high intensity.

Depending on the operating state the side channel blower may emit noise in a narrow band.

Risk of damage to the hearing.

Persons staying in the vicinity of the side channel blower over extended periods shall wear ear protection.

- Make sure that all provided covers, guards, hoods etc. remain mounted
- Make sure that protective devices will not be disabled

 Make sure that the "Installation Prerequisites" are complied with and will remain complied with, particularly that a sufficient cooling will be ensured

Maintenance



During operation the surface of the side channel blower may reach temperatures of more than 70 °C.

Risk of burns!!

 Prior to disconnecting lines make sure the lines are vented to atmospheric pressure

Maintenance Schedule

NOTE: The maintenance intervals depend very much on the individual operating conditions. The intervals given below shall be considered as starting values which should be shortened or extended as appropriate.

Every 6 months:

- Make sure that the housing is free from dust and dirt, clean if necessary
- Make sure that the side channel blower is switched off and locked against inadvertent switching on
- Clean the fan cowling, the fan wheel, ventilation grilles and the cooling fins

Every 2000 operating hours:

In case an inlet filter is installed:

- Clean (with pressurised air) or replace the inlet filter
- In case an inlet screen is installed:
 - Clean the inlet screen

Overhaul





In order to achieve best efficiency and a long life the side channel blower was assembled and adjusted with precisely defined tolerances.

This adjustment will be lost during dismantling of the side channel blower.

It is therefore strictly recommended that any dismantling of the side channel blower that is beyond of what is described in this manual shall be done by the Busch service.



In case the side channel blower conveyed gases contaminated with foreign materials which are dangerous to health, harmful material can reside in pores, gaps and internal spaces of the side channel blower.

Danger to health during dismantling of the side channel blower.

Danger to environment.

Prior to shipping the side channel blower shall be decontaminated as good as possible and the contamination status shall be stated in a "Declaration of Contamination" (form downloadable from www.busch-vacuum.com).

Busch service will only accept side channel blowers that come with a completely filled in and legally binding signed "Declaration of Contamination" (form downloadable from www.busch-vacuum.com).

Removal from Service

Temporary Removal from Service

 Prior to disconnecting lines make sure the lines are vented to atmospheric pressure

Recommissioning

• Observe the chapter "Installation and Commissioning"

Dismantling and Disposal



foreign materials which are dangerous to health, harmful material can reside in pores, gaps and internal spaces of the side channel blower.

Danger to health during dismantling of the side channel blower.

Danger to environment.

During dismantling of the side channel blower wear protective clothing.

Decontaminate the side channel blower prior to disposal.

- Make sure that materials and components to be treated as special waste have been separated from the side channel blower
- Make sure that the side channel blower is not polluted with harmful foreign material

According to the best knowledge at the time of printing of this manual the materials used for the manufacture of the side channel blower involve no risk.

• Dispose off the side channel blower as scrap metal

Spare Parts

The bearings (1.007, 6.008) are intended as spare parts. Commercially available standard parts are to be purchased on the open market. If an overhaul requires parts other than bearings or standard parts your Busch representative will clarify whether an overhaul is economic or a replacement side channel blower should be considered.

NOTE: When ordering spare parts or accessories always quote the type and the serial no. of the side channel blower (data on the nameplate).

Troubleshooting

Risk of electrical shock, risk of damage to equipment.

- Electrical installation works must only be executed by qualified personnel that knows and observes the following regulations: - IEC 364 or CENELEC HD 384 or DIN VDE 0100, respectively,
- IEC-Report 664 or DIN VDE 0110,
- VBG 4 or corresponding national accident prevention regulation.



During operation the surface of the side channel blower may reach temperatures of more than 70 °C.

Risk of burns!!

Let the side channel blower cool down prior to a required contact or wear heat protection gloves.

Problem	Possible Cause	Remedy
The side channel blower does not reach the usual pressure The drive motor draws a too high current (compare with initial value after commissio- ning) Vacuum operation: Evacuation of the system takes too long Pressure operation: Filling the system takes too long Building up pressure in the system takes too long	Vacuum operation: The vacuum system or suction line is not leak-tight Pressure operation: The pressure system or pressure line is not leak-tight	Check the hose or pipe connections for possible leak
	In case a vacuum relief valve/regulating system is installed: The vacuum relief valve/regulating system is misadjusted or defective In case a pressure relief valve/regulating system is installed: The pressure relief valve/regulating system is misadjusted or defective	Adjust, repair or replace, respectively
	In case an inlet screen is installed: The inlet screen is partly clogged	Clean the screen If cleaning is required too frequently install a filter upstream
	In case an inlet filter is installed: The inlet filter is partly clogged	Clean or replace the inlet filter, respectively
	Partial clogging in the suction, discharge or pressure line	Remove the clogging
	Long suction, discharge or pressure line with too small diameter	Use larger diameter
	Internal parts worn or damaged	Repair the side channel blower (Busch service)
The gas conveyed by the side channel blower smells displeasing	Process components evaporating under vacu- um	Check the process, if applicable
The side channel blower does not start	The drive motor is not supplied with the cor- rect voltage or is overloaded	Supply the drive motor with the correct volt- age
	The drive motor starter overload protection is too small or trip level is too low	Compare the trip level of the drive motor starter overload protection with the data on the nameplate, correct if necessary In case of high ambient temperature: set the trip level 5 percent above the nominal drive motor current

	One of the fuses has blown	Check the fuses
	Version with alternating current motor: The drive motor capacitor is defective	Repair the drive (Busch service)
	The connection cable is too small or too long causing a voltage drop at the side channel blower	Use sufficiently dimensioned cable
	The side channel blower or the drive motor is blocked	Make sure the drive motor is disconnected from the power supply Remove the fan cover
		Try to turn the drive motor with the side channel blower by hand If the side channel blower is blocked:
		Repair the side channel blower (Busch service)
	The drive motor is defective	Replace the drive motor (Busch service)
The side channel blower is blocked	Solid foreign matter has entered the side channel blower	Repair the side channel blower (Busch service) Make sure the suction line is equipped with a screen If necessary additionally provide a filter
	Version with three-phase motor: The side channel blower was run in the wrong direction	Repair the side channel blower (Busch service) When connecting the side channel blower make sure the side channel blower will run in the correct direction (see "Installation")
The side channel blower starts, but labours or runs noisily or rattles	Loose connection(s) in the drive motor termi- nal box	Check the proper connection of the wires against the connection diagram
The drive motor draws a too high current	Version with three-phase-motor: Not all drive motor coils are properly connec- ted The drive motor operates on two phases only	Tighten or replace loose connections
	Version with three-phase motor: The side channel blower runs in the wrong di- rection	Verification and rectification see "Installation and Commissioning"
	Foreign objects in the side channel blower Stuck bearings	Repair the side channel blower (Busch service)
The side channel blower runs very noisily	Defective bearings	Repair the side channel blower (Busch service)
The side channel blower runs very hot	Insufficient air ventilation	Make sure that the cooling of the side channel blower is not impeded by dust/dirt
		Clean the fan cowling, the fan wheel, ventila- tion grilles and the cooling fins
		Install the side channel blower in a narrow space only if sufficient ventilation is ensured
	Insufficient gas transfer	Vacuum operation:
		Provide a vacuum relief valve
		Pressure operation:
		Provide a pressure relief valve
	Mains frequency or voltage outside tolerance range	Provide a more stable power supply

In case a vacuum relief valve/regulating system is installed:	Adjust, repair or replace, respectively
The vacuum relief valve/regulating system is misadjusted or defective	
In case a pressure relief valve/regulating system is installed:	
The pressure relief valve/regulating system is misadjusted or defective	
Partial clogging of filters or screens	Remove the clogging
Partial Clogging in the suction, discharge or pressure line	
Long suction, discharge or pressure line with too small diameter	Use larger diameter

EC-Declaration of Conformity

NOTE: This Declaration of Conformity and the $C \in$ -mark affixed to the nameplate are valid for the side channel blower within the Busch-scope of delivery. When this side channel blower is integrated into a larger machinery the manufacturer of the larger machinery (this can be operator, too) must conduct the conformity assessment process for the larger machine, issue the Declaration of Conformity for it and affix the $C \in$ -mark.

We

Busch Produktions GmbH Schauinslandstr. 1 79689 Maulburg Germany

declare that side channel blowers SB 0080 - 1100 D/D2

in accordance with the European Directives

"Machinery" 98/37/EC,

"Electrical Equipment Designed for Use within Certain Voltage Limits" (so called "Low Voltage") 73/23/EEC,

"Electromagnetic Compatibility" 89/336/EEC

have been designed and manufactured to the following specifications:

Standard	Title of the Standard
Harmonised Standa	ards
EN 292-1 EN 292-2	Safety of machinery – Basic concepts, general principles of design - Part 1 and 2
EN 294	Safety of machinery - Safety distance to prevent danger zones being reached by the upper limbs
EN 1012-1 EN 1012-2	Compressors and vacuum pumps - Safety requirements - Part 1 and 2
EN 60204-1	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
EN 61000-6-1 EN 61000-6-2	Electromagnetic compatibility (EMC) - Generic immunity standards
EN 61000-6-3 EN 61000-6-4	Electromagnetic compatibility (EMC) - Generic emission standards
EN 60079-10 EN 60079-14	Electrical apparatus for explosive gas atmospheres - Part 10 and 14
National Standard	
DIN 45635-13	Measurement of airborne noise emitted by machines - enveloping surface method - Compressors, vacuum pumps included (displacement-, turbo- and jet-compressors)
EN 610079-10 EN 60079-10 EN 60079-14 National Standard DIN 45635-13	Electrical apparatus for explosive gas atmospheres - Part 10 and 14 Measurement of airborne noise emitted by machines - enveloping surface method - Compressors, vacuum pumps included (displacement-, turbo- and jet-compressors)

Manufacturer

Dr.-Ing. Karl Busch General director Explosionszeichnungen / Exploded Views / Vues éclatées / Sprängskisser / Splitt-tegninger



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A Gardner Denver Product



Side channel vacuum pumps / Side channel compressors





Pump ranges

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These operating instructions concern the following side channel vacuum pumps and compressors: SAH The performance curves showing capacity against vacuum or pressure can be seen in data sheets D 556/1, D 556/2 and D 556/3 or D 656/1, D 656/2 and D 656/3.

Description

All SAH models work according to the dynamic compression principle utilising a non contact rotating impellor. They have a built-in motor. A high efficiency two stage impellor is fitted on to the motorshaft. Models up to SAH / 4.8 kW (picture ①) use the motor fan for cooling. Models SAH / 5.5 kW and larger (picture ②) have an additional cooling fan situated between the motor and blower housing.

Air inlet and outlets have built-in silencers with the addition of a mesh disc on the suction silencer to protect the unit from particles larger than 5 mm. Both the infet and outlet have an inside connection thread corresponding to DIN ISO 228. Versions of the SAH have on the suction side a solenoid valve and on the pressure side different connection flanges. All the parts are made from a special aluminium alloy except for the motor rotor, stator and shaft.

Optional extras: As required, vacuum or pressure limiting valve, non-return valve, suction filter, motor starter, vacuum/ pressure change over valve.

Special versions: anti corrosive internal coating, gas tight version.







Installation (pictures	Ø,	ø	and	(
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/ For operating and installation follow any relevant national standards that are in operation.

1. Please remove transportation lock at (A) and (B).

2. When on vacuum operation connect the suction pipe at (A) and when on pressure operation connect the pressure pipe at (B).

/i Long and/or small bore pipework should be avoided as this tends to reduce the capacity of the blower.

If alternate vacuum or pressure is required, a changeover valve (ZWS) can be fitted (optional extra). In this case there is only one connection for vacuum or pressure operation.

3. The electrical data can be found on the data plate (N) or the motor data plate. The motors correspond to DIN/VDE 0530 and have IP 55 protection and insulation class F. The connection diagram can be found in the motor terminal box (unless a special plug connection is fitted). Check the electrical data of the motor for compatibility with your available supply (voltage, frequency, permissible current etc.).

4. Connect the motor via a motor starter. It is advisable to use thermal overload motor starters to protect the motor and wiring. All cabling used on starters should be secured with good quality cable clamps.

We recommend that motor starters should be used that are fitted with a time delayed trip resulting from running beyond the amperage setting. When the unit is started cold overamperage may occur for a short time.

When using a changeover valve (ZWS) the solenoid must also be connected. The voltage information on the solenoid should also be checked. The electrical installation may only be made by a qualified electrician under the observance of EN 60204. The main switch must be provided by the operator.

Initial Operation (pictures () and (2)

Maximum number of starts per hour: 10

1. Initially switch the pump on and off for a few seconds to check the direction of rotation against the direction arrow (O).

2. When installed on the application and under the highest possible load conditions, the pressure differences of the unit may not be higher than the max. allowable pressure differences shown on the data plate (N).

Note: If these values are exceeded when the unit is running on normal operating temperature an unloading of the unit is required by utilising limitation values ZBS, ZUV or ZBD (optional extra).

A comparison of the measured current amperage with the max. current amperage on the data plate (N) is not advisable, because the current amperage depends on the voltage.

Potential risks for operating personnel

Noise Emission: The worst noise levels considering direction and intensity (sound power), measured according to DIN 45635 part 13 (as per 3. GSGV), are shown in the table at the back. When working permanently in the vicinity of an operating unit we recommend wearing ear protection to avoid any damage to hearing.

Maintenance and Servicing

When maintaining these units and where a situation exists where personnel could be hurt by moving parts or by live electrical parts the blower must be isolated by totally disconnecting the electrical supply. It is imperative that the unit cannot be re-started during the maintenance operation.

Do not maintain a blower that is at its normal operating temperature as there is a danger from hot parts.

In case of capacitor failure (1 ~ drive) replace the capacitor only with one that has identical rated value.

The pressure leading pipes must be ventilated before dismantling.

These side channel vacuum pumps and compressors need no maintenance apart from filtration.

The capacity of the blower can be reduced if the air inlet filters are not maintained correctly.

1. Mesh disc on the silencing housing:

Cleaning of this is possible through the opening (A) and (B).

2. Additional filter (optional extra):

The suction filter (ZAF) should be cleaned every 250 operating hours and changed every 3000 operating hours. Changing the filter; unscrew wing nut (m_1). Remove filter cover (h) and filter cartridge (f_1). The filter cartridge can be cleaned by knocking out by hand or by using compressed air. Replace the filter cartridge if necessary. Re-assemble in reverse order (see picture Θ).

The filter cartridge (f_2) of the vacuum tight suction filter (ZVF) must be cleaned regularly, again depending upon the amount of contamination. Cleaning can be achieved by washing or by blowing out with compressed air. Replace the filter cartridge if necessary. The cartridge (f_2) can be removed completely by undoing the relevant retaining clips (m_2) (see picture **6**).

3. Bearings:

The units have bearings that are greased for life and require no maintenance.

Andling of inflammable or aggressive gases and vapours is only possible with special versions, if the safety instructions XE 1 are noted.



Trouble Shooting:

- 1. Blower does not reach operating speed when starting:
- 1.1 Check that the incoming voltage and frequency corresponds with the motor data plate.
- 1.2 Check the connections on the motor terminal block.
- 2. Motor starter cuts out blower:
- 2.1 Problem as per 1.1 and 1.2.
- 2.2 Incorrect setting on the motor starter.
- 2.3 Motor starter trips too fast.
- Solution: Use a motor starter with a time delay trip (version as per IEC 947-4).
- 2.4 Blower is overloaded, i.e. pressure difference is too high.
 Solution: Increase the inlet or outlet diameter of the application, on pipework increase the diameter of the pipework, avoid restrictions in the line. Limit the pressure difference by limitation valves (optional extra).
 2.5 Motor rating selected was too small.
- Solution: If available use a blower with the next motor size (exchange of the motor only is not possible).
- 3. Required pressure difference cannot be achieved:
- 3.1 Blower or motor rating selected, was too small.
- 3.2 Filters are contaminated.
- 3.3 Pressure loss into pipework too high.
- Solution: Use bigger pipe diameter, avoid restrictions.
- 3.4 Leaks on the system.
- 4. Blower operates at an abnormally high temperature:
- 4.1 Ambient or suction temperature is too hot.
- 4.2 Pressure difference is higher than permitted.
- 4.3 Cooling air flow is restricted.
- Exhaust noise (vacuum pump) or suction noise (compressor) are unacceptable: Solution: Use an additional silencer ZGD (optional extra).
- 6. Change over valve ZWS (accessory) does not work:
- 6.1 Check that the incoming voltage and frequency correspond with the information on the solenoid.
- 6.2 Change over valve is contaminated. Solution: Dismantle and clean.

Appendix:

<u>Repair on Site:</u> For all repairs on site an electrician must disconnect the motor so that an accidental start of the unit cannot happen. All engineers are recommended to consult the original manufacturer or one of the subsidiaries, agents or service agents. The address of the nearest repair workshop can be obtained from the manufacturer on application.

After a repair or before re-installation follow the instructions as shown under the headings "Installation and Initial Operation".

Lifting and Transport: To lift and transport units SAH 95 to SAH 505 the eye bolt on the pump must be used.

The weight of the blowers are shown in the accompanying table.

Storage: SAH units must be stored in dry ambient conditions with normal humidity. We recommend for a relative humidity of over 80% that the pump units should be stored in a closed container with the appropriate drying agents.

Disposal: The wearing parts (as listed in the spare parts lists) should be disposed of with due regard to health and safety regulations.

<u>Spare parts lists</u>:

E 556/1 • SAH 25 --> SAH 155; SAH 215, 235, 275 (4 kW + 4,8 kW) E 556/2 • SAH 215, 235, 275 (5,5 kW -> 9 kW); SAH 355; SAH 505

SAH		25	45	55	75	95	1,55	215	235	275	355	505
Noise level (max.)	dB(A) 50 Hz	74	82	82,5	85	84	77	83,5	89	88	85	89
	60 Hz	74	82	82,5	85	84	77	84	89	89,5	86	92
Sound power	dB(A) 50 Hz	-	-	-	89	-	-	-	99	96	95	100
	60 Hz	-	-	-	89	-	-	-	99	97	97	102
Weight (max.)	kg	16,5	20	24,5	26,5	34	52	65	88	110	136	213,5
Length (max.)	mm	337	348	390	390	417	449	552	620	647	734	777
Width	mm	246	255	286	286	336	392	438	458	471	540	540
Height	mm	269	298	324	324	410	447	489	545	567	620	620



Form: OMM-01-0509 Effective: 5/4/09 Supersedes OMM-01-0207 Part No.: 01218

installation, Salety, Operation & Maintenance instructions and Parts Li

For Models PB, PBS, SPB, LM and LMF.

Arrangement 4 Blowers

NOTE

READ ENTIRE MANUAL, INCLUDING "SECTION IV. INITIAL UNIT STARTUP" BEFORE ATTEMPTING TO INSTALL AND OPERATE THIS EQUIPMENT.

BLOWER SPECIFICATIONS						
BLOWER SERIAL NUMBER:			MFG. DATE:			
NOTE: The serial num	nber above is a required i	reference for any assistan	ce. It is stamped on the blower nameplate.			
BLOWER SPECIFICATIONS:						
Model:	Arrangement:	Rotation:	Discharge:			
Nominal Inlet Siz	e: (in Inches)	Wheel Size and Type	:			
BLOWER PERFORMANCE DATA: (If entered on order)						
CFM:	SP: (Inche	es of Water Gauge)	Motor BHP:			
Density:	Altitude:	(Ft. above S.L.)	Airstream Temperature:°F.			
Fan RPM:	Maximum <u>Sa</u>	afe Fan RPM:	DO NOT EXCEED THIS RPM			
MOTOR DATA: (This section is completed only if the motor was supplied by Cincinnati Fan)						
HP:	RPM:	Voltage:	Phase:			
Hz:	Frame Size:	Enclosure:	Efficiency:			
IF Motor is EXP, Class(es) & Group(s) are:						
Manufacturers M	odel Number:		CFV Part Number:			

ATTENTION: RECEIVING DEPARTMENT

All Cincinnati Fan products are packaged to minimize any damage during shipment. The freight carrier is responsible for delivering all items in their original condition as received from Cincinnati Fan. The individual receiving this equipment is responsible for inspecting this unit for any obvious or concealed damage. If any damage is found, it should be noted on the bill of lading before the freight is accepted and the receiver must file a claim with the freight carrier.

LONG TERM STORAGE NOTICE

If this blower will NOT be installed and put into operation within 30 days, refer to the "Long Term Storage Instructions" on pages 12 and 13. Failure to follow all applicable long term storage instructions, will void your warranty. This blower should be stored indoors in a clean, dry location.

		A DANGER		
	H			
Hazardous voltage can cause electrical shock and death.	High speed rotating equipment can cause severe personal injury.	Lock out/Tag out to prevent personal injury <u>BEFORE</u> starting <u>ANY</u> service or inspection.	Avoid injury. <u>NEVER</u> operate without <u>ALL</u> required safety guards in place.	Avoid injury. You <u>MUST</u> read and understand all instructions in this manual <u>BEFORE</u> installing.

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I. GENERAL

A. Unpacking:

Be careful not to damage or deform any parts of the blower when removing it from the packaging container. All the packaging material should be kept in the event the blower needs to be returned.

Handling:

Handling of the blower should be performed by trained personnel and be consistent with all safe handling practices. Verify that all lifting equipment is in good operating condition and has the proper lifting capacity. The blower should be lifted using well-padded chains, cables or lifting straps with spreader bars. Some blower models have lifting eye locations provided in the blower base. <u>NEVER</u> lift the blower by an inlet or discharge flange, motor shaft, motor eye bolt, or any other part of the blower assembly that could cause distortion of the blower assembly.

B. Safety Instructions & Accessories:

1. Safety Instructions:

All installers, operators and maintenance personnel should read AMCA Publication 410-96, "**Recommended Safety Practices for Users and Installers of Industrial and Commercial Fans**". This manual is included with the blower. Additional copies can be requested by writing us at Cincinnati Fan, 7697 Snider Rd., Mason, OH 45040-9135

2. Sound:

Some blowers can generate sound that could be hazardous to personnel. It is the responsibility of the user to measure the sound levels of the blower and/or system, determine the degree of personnel exposure, and comply with all applicable safety laws and requirements to protect personnel from excessive noise.

3. Air Pressure and Suction:

In addition to the normal dangers of rotating machinery, the blower can present additional hazards from the suction or pressure created at the blower inlet or discharge. Suction at the blower inlet can draw materials into the blower where they become high velocity projectiles at the discharge and cause severe personal injury or death. It can also be extremely dangerous to persons in close proximity to the inlet or discharge as the forces involved can overcome the strength of most individuals.

NEVER OPERATE A BLOWER WITH A NON-DUCTED INLET AND/OR DISCHARGE. IF THE BLOWER INLET AND/OR DISCHARGE IS NON-DUCTED, IT IS THE USERS RESPONSIBILITY TO INSTALL AN INLET AND/OR DISCHARGE GUARD.

4. Temperature:

Many blowers, blower components and all motors operate at temperatures that could burn someone if they come in contact with them. If this potential hazard could exist in your installation, steps must be taken by the user to protect anyone from coming in contact with this equipment.

5. Spark Resistance; (Per AMCA Standard 99-0401-86 and ISO 13499)

NO GUARANTEE OF ANY LEVEL OF SPARK RESISTANCE IS IMPLIED BY SPARK RESISTANT CONSTRUCTION. IT HAS BEEN DEMONSTRATED THAT ALUMINUM IMPELLERS RUBBING ON RUSTY STEEL CAN CAUSE HIGH INTENSITY SPARKS. AIR STREAM MATERIAL AND DEBRIS OR OTHER SYSTEM FACTORS CAN ALSO CAUSE SPARKS.

6. Safety Accessories;

Guards:

All moving parts must be guarded to protect personnel. Safety requirements can vary, so the number and types of guards required to meet company, local, state and OSHA regulations must be determined and specified by the actual user or operator of the equipment.

<u>NEVER</u> start any blower without having all required safety guards properly installed. All blowers should be checked on a regular schedule, for missing or damaged guards. If any required guards are found to be missing or defective, the power to the blower should be <u>immediately</u> turned off and locked out in accordance with OSHA regulations. Power to the blower should <u>NOT</u> be tuned back on until the required guards have been repaired or replaced.

This blower can become dangerous due to a potential "windmill" effect, even though all electrical power has been turned off or disconnected. The blower wheel should be **<u>carefully</u>** secured to prevent any rotational turning **<u>BEFORE</u>** working on any parts of the blower/motor assembly that could move.

7. Access or Inspection Doors:

<u>NEVER</u> OPEN ANY ACCESS OR INSPECTION DOORS WHILE THE BLOWER IS OPERATING. SERIOUS INJURY OR DEATH COULD RESULT FROM THE AFFECTS OF AIR PRESSURE, AIR SUCTION OR MATERIAL THAT IS BEING CONVEYED. DISCONNECT OR LOCK OUT POWER TO THE BLOWER AND LET THE BLOWER WHEEL COME TO A COMPLETE STOP <u>BEFORE</u> OPENING <u>ANY</u> TYPE OF ACCESS OR INSPECTION DOOR.

II. INSTALLATION

A. Vibration:

Before any mounting method is selected, the user should be aware of the effects vibration will have on the blower, motor and other parts. Improper blower installation can cause excessive vibration causing premature wheel and/or motor bearing failure, that is <u>not</u> covered under warranty. Vibration eliminator pads, springs or bases should be properly installed to prevent any blower vibration from transmitting to the foundation, support structure or ducting.

SHUT THE BLOWER DOWN IMMEDIATELY IF THERE IS <u>ANY SUDDEN</u> INCREASE IN VIBRATION.

B. Mounting Methods:

1. Floor Mounted Units;

Centrifugal blowers should be mounted on a flat, level, concrete foundation weighing 2-3 times the weight of the complete blower/motor assembly. It is recommended that the foundation be at least 6 inches larger than the base of the blower. The foundation should include anchor bolts such as shown in **Fig. 1** on page 4. Place the blower over the anchor bolts and shim under each bolt until the blower is level. After shimming, flat washers, lock washers and lock nuts should be tightened at each anchor bolt. Any gaps between the blower base and the foundation should be grouted. If the blower will be sitting on some type of vibration pads or mounts, follow the recommended mounting procedures supplied with the vibration elimination equipment. OMM-01-0509-page 3



2. Elevated Units;

Improper mounting of elevated blowers can cause vibration problems. The structure that the blower/motor assembly will be mounted on must be strong enough to support at least 3 times the weight of the entire blower/motor assembly. **An insufficient support will cause excessive vibration and lead to premature wheel and/or motor bearing failure**. Bracing of the support structure must be sufficient enough to prevent any side sway. The entire structure should be welded at all connection joints to maintain constant alignment of the platform.

THE IMPROPER DESIGN OF AN ELEVATED PLATFORM STRUCTURE COULD RESULT IN A RESONANT CONDITION, AND CONSEQUENTLY, CAUSE A LIFE THREATENING, CATASTROPHIC, STRUCTURAL FAILURE.

C. Duct Work Connections:

All duct connections to the blower should include <u>flexible</u> connectors between the ducting and the blower inlet and/or discharge. This will eliminate distortion, noise and vibration from transmitting to the duct and building. The connectors should be selected to handle the operating conditions for air volume and pressure that the blower will produce. All ducting or accessories, added by the user, should be <u>independently</u> supported. <u>DO NOT</u> use the blower/motor assembly to support any additional weight. Inlet and/or discharge duct elbows should be located a minimum of 2 blower wheel diameters from the blower. Any duct elbows located closer than 2 wheel diameters to the blower inlet or discharge WILL reduce the air performance and blower efficiency. Any duct elbows near the blower discharge should be in the same rotational direction as the blower rotation.

Non-Ducted Blower Inlet:

Any blower with no ducting on the inlet <u>must</u> have an inlet guard. The blower should be located so the blower inlet is, at least, 1 wheel diameter away from any wall or bulkhead to eliminate a reduction in air flow.

Non-Ducted Blower Discharge:

Any blower with no ducting on the discharge **<u>must</u>** have a discharge guard.

D. Safety Guards:

Cincinnati Fan offers guards, as optional, to keep your blower in compliance with OSHA safety regulations. These include inlet or discharge guards. Any blowers built with high temperature construction, a "heat slinger guard" is standard. It is the responsibility of the user to make sure this blower meets all local, state and OSHA safety regulations. If you have a specific guard requirement not covered by OSHA, please contact the local Cincinnati Fan sales office for assistance.

E. Dampers and Valves: (Airflow control devices)

If the blower is supplied with any type of air flow control device, it should be closed before initial start-up of the blower to minimize overloading of the motor. Any airflow control device, with bearings, should be maintained in accordance with the manufacturers instructions. Any air flow control device, with an automatic control mechanism, should be adjusted per the manufacturers recommendations.

F. Set Screw and Taper-lock Bushing Torque Values:

All blower wheel set screws are tightened to the proper torque prior to shipment. Some wheels may have taper-lock hubs and split, taper-lock bushings to secure the wheel to the motor shaft.

NOTE: Check all set screw or taper-lock bushing torques. Forces encountered during shipment, handling, rigging and temperature can affect factory settings. For correct torque values, see **Tables 1** and **2** below.

Table 1				Table 2		
SET SCREW TORQUE VALUES] [TORQUE VALUES FOR		
Diameter & Number	Hex Wrence Size	Required Torque		TAPER-LOCK BUSHINGS		
of Treads/Inch	(Across Flats)	(Inch Pounds)	[Taper-lock	Required Torque	
1/4-20	1/8"	65		Bushing Size	(Inch Pounds)	
5/16-18	5/32"	165		Н	95	
3/8-16	3/16"	228] [В	192	
7/16-14	7/32"	348		Р	192	
1/2-13	1/4"	504		Q	350	
5/8-11	5/16"	1104		R	350	

Set screws should <u>NEVER</u> be used more than once. If the set screws are loosened, they MUST be replaced. Use only knurled, cup-point, set screws with a nylon locking patch.

III. ELECTRICAL

A. Disconnect Switches:

All blower motors should have an independent disconnect switch located in close visual proximity to turn off the electrical service to the blower motor. **Disconnects must be locked out in accordance with OSHA "lock out-tag out" procedures any time inspection or maintenance is being performed on the blower and/or motor assembly. The "lock out-tag out" procedure should be performed by a licensed electrician or authorized personnel.** All disconnects should be sized in accordance with the latest NEC codes (National Electric Codes) and any local codes and should be installed only by a licensed electrician. "Slow blow" or "time delay" fuses or breakers should be used since the initial start-up time for the blower motor, although rare, can be up to 10 seconds.

B. Motors:

ALL WIRING CONNECTIONS, INSPECTION AND MAINTENANCE OF ANY MOTOR MUST BE PERFORMED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH THE MOTOR MANUFACTURERS RECOMMENDATIONS, ALL ELECTRICAL CODES AND OSHA REGULATIONS. FAILURE TO PROPERLY INSTALL, MAKE WIRING CONNECTIONS, INSPECT OR PERFORM ANY MAINTENANCE TO A MOTOR CAN RESULT IN MOTOR FAILURE, PROPERTY DAMAGE, EXPLOSION, ELECTRICAL SHOCK AND DEATH.

- <u>DO NOT</u> connect or operate a motor without reading the motor manufacturers instructions supplied with the blower. The basic principle of motor maintenance is: KEEP THE MOTOR CLEAN AND DRY. This requires periodic inspections of the motor. The frequency of the inspections depends on the type of motor, the service and environment it will be subjected to and the motor manufacturers instructions.
- 2. Cleaning: Cleaning should be limited to exterior surfaces only. Follow motor manufacturers cleaning instructions.
- 3. Lubrication: Most small motors have sealed bearings that are permanently lubricated for the life of the motor. Some larger motors have grease plugs that should be replaced with grease fittings to perform re-lubrication. These motors, or any motor with grease fittings, should be lubricated in accordance with the motor manufacturers recommendations. Lubrication frequency depends on the motor horsepower, speed and service. BE SURE you use compatible grease and DO NOT over grease.
- 4. Location: If the motor will be outside and subjected to the weather, it is recommended that a weather cover be installed to keep rain and snow off of the motor. No motors are guaranteed to be "watertight". Be careful to allow enough openings between the motor and the motor cover to let the motor "breath". If the back end of the motor is covered, the cover should be no closer than 3" to the back of the motor for proper ventilation.

- 5. Wiring Connections: All wiring connections should be made for the proper voltage and phase as shown on the motor nameplate. Connections should follow the motor manufacturers recommendations as shown on the wiring schematic. This wiring diagram will be located on the outside of the motor, inside of the motor conduit box or on the motor nameplate. Reversing some wires might be necessary to get the correct blower rotation.
- 6. Motors with Thermal Overload Protection: If a motor is equipped with thermal overloads, the thermal overload must be wired per the wiring schematic to be operable. *There are 3 types of thermal overloads:*
 - a. Automatic: These will automatically shut the motor down if the internal temperature exceeds the design limits.

MAKE SURE YOU LOCK OUT THE POWER TO THE MOTOR <u>BEFORE</u> INSPECTING ANY MOTOR WITH AUTOMATIC THERMALS. WHEN THE THERMALS COOL DOWN, THEY WILL ALLOW THE MOTOR TO AUTOMATICALLY START UP AGAIN, UNLESS YOU HAVE LOCKED OUT THE POWER TO THE MOTOR.

- b. Manual: These motors will have a button on them. If the motor overheats, it will shut down. After you have inspected the motor and eliminated the over heating problem, you will need to "reset" it by pushing the button. You should still lock out the power <u>BEFORE</u> inspecting the motor.
- c. Thermostats: This type of thermal is a temperature sensing device ONLY. If the motor overheats, the thermostats will open or close (depending on the type) and send a "signal" to the electrical box. THEY <u>WILL NOT</u> TURN THE MOTOR OFF. These are pilot circuit devices that <u>must</u> be connected to the magnetic starter circuit.
- 7. EXPLOSION PROOF Motors: <u>No motor is explosion proof.</u> Explosion proof (EXP) motors are designed so if there is an explosion WITHIN the motor, the explosion will be CONTAINED INSIDE the motor and not allowed to get out to the atmosphere. All explosion proof motors must be selected based on the atmosphere and/or the environment the motor will be operating in. Explosion proof motors are designed, rated, and labeled for their operating conditions based on Classes, Groups and "T" Codes. The Class, Group and "T" Code of an EXP motor <u>MUST</u> be selected based on the atmosphere and/or environmental conditions the motor will be operating in. Consult the NEC (National Electric Code) and the NFPA (National Fire Protection Association) for the proper EXP motor Class, Group and "T" Code required for <u>your specific application and location</u>.

IF AN EXPLOSION PROOF MOTOR IS USED IN AN AREA CONTAINING VOLITILE LIQUIDS, GASES, FUMES OR DUST FOR WHICH THE MOTOR <u>WAS NOT</u> DESIGNED TO OPERATE IN, AN EXPLOSION AND/OR FIRE <u>CAN</u> OCCUR.

NOTICE:

- a. All EXP motors have <u>some</u> type of thermal overload as required by UL (Underwriters Laboratories). Refer to all of Section 6 above.
- b. All EXP motors are required to have the UL (Underwriters Laboratories) and CSA (Canadian Standards Association) listing numbers on the motor name plate or on a separate plate attached to the motor. The Class, Group and "T" Code the motor is designed for must also be listed.

8. Normal Motor Operating Temperatures:

Using your hand to test the normal running temperature of a motor can be a <u>very</u> painful experience; The <u>normal</u> operating temperature of a fully loaded, open type, electric motor operating in a 70°F. (21° C.) ambient temperature is 174°F. (79° C.)

C. Maximum Blower Speed and Motor Speed Controllers:

If you will be using any type of motor speed controller with this blower, **DO NOT** exceed the **maximum safe blower speed**. Installing and using a speed control device requires special training and certification as required by the speed control manufacturer. See the manufacturers instructions for proper use, installation and wiring connections for the maximum speed settings. It may also be necessary to "block out" some speeds to eliminate a resonant vibration problem. The maximum safe blower speed is shown on the data sheet shipped with the blower. If you have lost the data sheet, contact Cincinnati Fan or our sales office for your area. You must have the serial number from the **blower** name plate for us to determine the maximum safe blower speed. Cincinnati Fan will only <u>extend</u> the motor manufacturers warranty, when used with a speed controlling device, if the motor has the words "**Inverter Duty**" marked on the <u>motor</u> name plate. If the motor does not have "**Inverter Duty**" marked on the motor name plate, and you have a motor failure, you will be required to contact the motor manufacturer for any service or warranty claims.

IV. INITIAL UNIT STARTUP

NOTICE: Failure to complete and document all the following pre-startup and both post-startup checks, listed in sections A (below) and B on page 8, could void all warranties. A. Pre-Startup & Post-Startup Checks: (Check blocks as each step is completed. Retain this for your records.) A1. Pre-Startup Checks Completed By: DATE: - A2. 8 Hour, Post-Startup Checks Completed By: DATE: - A3. 3 Day, Post-Startup Checks Completed By: _ DATE: MAKE SURE POWER TO THE MOTOR IS LOCKED OUT BEFORE STARTING PRE-STARTUP OR POST-STARTUP CHECKS. 1. 🗀 🗆 🗆 If possible, CAREFULLY spin the blower wheel by hand to ensure it rotates freely and no rubbing or clicking noise is heard. 2. Check all blower, foundation and duct work hardware to make sure it is tight. 3. Check all blower wheel set screws to make sure they are tight per **Table 1** on page 5. 4. \Box \Box If the wheel has a taper-lock bushing, make sure the bolts are tightened per **Table 2** on page 5. 5. \Box \Box Make certain there is no foreign material in the blower or duct work that can become a projectile. 6. \Box \Box \Box Make sure any inspection doors in the duct work are securely bolted or locked. 7. The state of 8. $\Box \Box \Box$ Check that all required guards are properly secured. 9. \Box \Box Any dampers should be fully opened and closed to make sure there is no binding or interference. 10. If your blower is mounted on an elevated support structure, make sure the structure is welded at all the joint connections and the structure is properly braced to prevent "side sway". 11. Close any dampers to minimize load on motor. Especially on blowers with high temperature construction. Never subject a "cold" blower to a "hot" gas stream. If the blower will be handling "hot gases" greater than 150°F (65°C) it is imperative that the blower be subjected to a gradual rate of temperature increase, not to exceed 15°F/minute (8°C/minute). The same temperature limits are also important when the blower is experiencing a drop in temperature until the temperature drops down to 150°F (65°C). Only, when the entire blower has reached an equilibrium temperature of 150°F (65°C), or less, should the power be turned off. 12. D Make sure the power source connections to the blower motor are per the motor manufacturers instructions.

13. . . Make sure the blower wheel is stationary prior to startup. Starting a blower with a wheel that is rotating back-

wards can cause wheel damage.

14. Apply power to the blower motor momentarily (i.e. "bump start") to check for proper blower wheel rotation. If the blower is rotating in the wrong direction, reconnect the motor leads per the motor manufacturers wiring schematic, Blower rotation is determined by viewing the blower from the motor side of the blower, NOT from the inlet side. After reconnecting the leads, repeat this step. See Fig. 2 below.



- 15. D Apply power to the blower motor and let it come up to full speed. Turn off the power. Look and listen for any unusual noise or mechanical abnormality while the blower wheel is still spinning. If any are noticed, lock out the power, wait for the blower wheel to come to a complete stop, locate the cause and correct it.
- 16. Unlock power and start the blower.
- 17. \Box \Box Measure, record and keep the following motor data for future reference and comparison: (Single phase motors will only have L1 and L2 leads)

L2 Amperage draw on each motor lead: L1 L3 (Running amps SHOULD NOT exceed the motor nameplate amps for the voltage being operated on)

Voltage coming to motor leads: L1 L2 L3 (Should be about the same input voltage on all leads)
B. Vibration:

The blower was balanced at the factory to comply with ANSI/AMCA Standard 204-05, Category BV-2. However, rough handling in shipment and/or erection, weak and/or non-rigid foundations, and misalignment may cause a vibration problem after installation. After installation, the vibration levels should be checked by personnel experienced with vibration analysis and vibration analysis equipment.

NOTE:

The blower SHOULD NOT be operated if the vibration velocity of the fan exceeds 0.50 inches per second, filter out, if the blower is rigidly mounted. If the blower is mounted on isolators or on an isolator base, it <u>SHOULD</u> <u>NOT</u> be operated if the vibration velocity of the blower exceeds 0.75 inches per second, filter out.

Vibration readings for direct driven blowers should be taken on the motor at the top, sides and end as per **Fig. 3** below. After you have taken your vibration readings, write them down in the spaces below and keep for future comparison.

If the blower is going to be conveying material, it is the users responsibility to periodically turn the blower off and lock out the power. The blower wheel should then be checked for material build-up and/or erosion. If material has built up on any parts of the wheel, it <u>MUST</u> be removed and cleaned before it is put back into service. If any parts of the wheel have been eroded, the wheel <u>MUST</u> be replaced. Failure to perform this inspection can cause excessive vibration that will damage the blower and/or motor bearings. When vibration becomes excessive, it will lead to complete blower failure that could cause property damage, severe personal injury and death. The user must determine the frequency of this inspection based on the actual circumstances of their operation, <u>BUT</u> checking the vibration readings should <u>NEVER</u> exceed a 12 month period. For the AMCA/ANSI standard for vibration limits, see Fig. 4 on page 9.

(1)

 \bigcirc

Fig. 3

	VIRR				PINOITI
-	For Arrangement 4 Blowers				
-	1	2	3	4	5
A .					
B					
C					
- A F	Pre-Start	up		Read	ings taken by: _
B 8	Hour Po	ost-Startı	ıpqı	Read	ings taken by: _
C 3	Day Po	st-Startuj	0	Read	ings taken by: _



V. ROUTINE INSPECTION & MAINTENANCE

Periodic inspection of all the blower parts is the key to good maintenance and trouble-free operation. The frequency of inspections must be determined by the user and is dependent upon the severity of the application. **<u>BUT</u>**, it should **<u>NEVER</u>** exceed a 12 month period. The user should prepare an inspection and maintenance schedule and make sure it is adhered to.

BEFORE STARTING ANY INSPECTION OR MAINTENANCE, BE SURE BLOWER IS TURNED OFF, POWER IS LOCKED OUT AND THE BLOWER WHEEL HAS BEEN CAREFULLY SECURED TO PREVENT WIND MILLING. IF THE OPERATING CONDITIONS OF THE BLOWER ARE TO BE CHANGED (SPEED, PRESSURE, TEMPERATURE, ETC.) CONSULT CINCINNATI FAN, OR OUR SALES OFFICE FOR YOUR TERRITORY, TO DETERMINE IF THE UNIT WILL OPERATE SAFELY AT THE NEW CONDITIONS.

A. Hardware:

All blower and foundation hardware should be checked to make sure it is tight. Wheel set screws or taper-lock bushings should be tightened to the torque values shown in **Tables 1 and 2** on page 5.

NOTE: If any set screws have come loose, they must be thrown away and replaced. **NEVER** use set screws more than once. **Replace with knurled, cup-point set screws with a nylon locking patch.**

B. Motor Bearing Lubrication:

1. Motor Bearings:

Most smaller motors have sealed bearings that never require re-lubrication for the life of the motor. For any motors with grease fittings, consult the motor manufacturers recommendations with reference to the lubrication frequency and the type of grease that should be used.

DO NOT over grease the motor bearings. Generally, 1-2 shots should be enough. Use a hand operated grease gun at no more than 40 PSI. *IF POSSIBLE, <u>CAREFULLY</u> lubricate the motor bearings while the motor is running.*

C. Wheel Balance:

All blower wheels are balanced at the factory. It is not uncommon that additional "trim balancing" is required after the blower is assembled. Trim balancing of the blower assembly, in the field, is typically <u>always</u> necessary for all replacement wheels. **After any wheel is installed, the final balance of the entire blower assembly should be checked.** Refer to Section B on page 8 and Fig. 4 on page 9. Air stream material or chemicals can cause abrasion or corrosion of the blower parts. This wear is generally uneven and, over time, will lead to the wheel becoming unbalanced, causing excessive vibration. When that happens, the wheel must be rebalanced or replaced. The other air stream components should also be inspected for wear or structural damage and cleaned or replaced if necessary. **After cleaning any blower wheel, it should be balanced and then "trim balanced"** <u>on the motor shaft</u>.

There are three ways to balance a blower wheel:

1. Add balancing weights for <u>fabricated</u> aluminum, steel or stainless steel wheels:

Balance weights should be rigidly attached to the wheel at a location that will not interfere with the blower housing nor disrupt air flow. They should (if at all possible) be welded to the wheel. When trim balancing the wheel, **on the blower**, be sure to ground the welder **directly** to the blower wheel. Otherwise, the welding current will likely pass through the motor and damage the motor bearings.

2. Grinding off material for cast aluminum wheels:

If you are grinding on the wheel to remove material, be very careful not to grind too much in one area. That could affect the structural integrity of the wheel.

3. Forward curved wheels, Model LM only (also known as squirrel cage or multivane wheels).

These wheels have balancing clips attached to individual blades around the wheel. That is the only proper way to balance this type of wheel.

NOTE:

Removing any forward curve wheel from the blower to clean it, requires special attention when reinstalling the wheel back into the blower housing. Make sure you reinstall the wheel so the proper wheel-to-inlet clearance is maintained. Failure to do this will affect the blowers airflow (CFM), static pressure (SP) capabilities and efficiency. Consult Cincinnati Fan or our local sales office for your area for assistance if necessary.

D. Vibration:

As mentioned previously in this manual, excessive vibration can cause premature motor bearing failure that could lead to catastrophic failure of the blower. After performing any routine maintenance, the vibration readings should be taken again. New readings should be taken (maximum every 12 months) and compared to the readings you recorded in **Figure 3**, on page 8, during the initial startup. **If any major differences are present, the cause should be determined and corrected before the blower is put back into operation.**

The most common causes of vibration problems are:

- 1. Wheel unbalance. 3. Poor blower inlet and/or discharge conditions.
- 2. Mechanical looseness. 4. Foundation stiffness.

E. Dampers and Valves: (Airflow control devices)

Turn off and lock out power to the blower motor. Any dampers or valves should be periodically inspected to make sure all parts are still operable within their full range and there is no interference with any other damper or blower components. Any bearings or seals should be checked for their proper function. The manufacturers maintenance instructions should be followed.

F. Safety Equipment & Accessories:

It is the users responsibility to make sure that all safety guards required by the company, local, state and OSHA regulations are properly attached and fully functional at all times. If any guards become defective or non-functional at any time, **the power to the blower** <u>MUST</u> be turned off and locked out until complete repairs and/or replacements have been made, installed and inspected by authorized personnel. Any accessories used in conjunction with the blower should also be inspected to make sure they are functioning within their intended limits and design specifications. The manufacturers maintenance manuals should be referred to for correct maintenance procedures. These accessories include, but are not limited to, the following: Shaft seals, inspection doors, vibration isolators or vibration bases, air flow or pressure measuring equipment, hoods, controls, special coatings, silencers, expansion joints, valves, flexible connectors and filters.

VI. ORDERING REPLACEMENT PARTS:

Under normal conditions, you should not need any spare or replacement parts for at least 24 months after shipment from Cincinnati Fan. That does not include any wear due to abrasion, corrosion, excessive temperatures, abuse, misuse, accident or any severe conditions the fan was not designed for.

NOTICE:

- 1. If this blower is vital to any process that could cost you lost revenue, we strongly recommend that you keep a replacement blower wheel and motor at your location.
- 2. If this blower is vital for the safety of any people and/or animals, we strongly recommend that you keep a <u>complete</u> blower/motor <u>assembly</u>, as originally ordered, at your location.

To order any parts or complete units, contact us for the name of our sales office for your area. Or you can find them on our website at: **www.cincinnatifan.com**

WE MUST HAVE THE BLOWER SERIAL NUMBER FROM THE BLOWER NAME PLATE TO IDENTIFY PARTS CORRECTLY.

VII. TROUBLESHOOTING

Troubleshooting should only be performed by trained personnel. Any potential electrical problems should only be checked by a licensed electrician. All safety rules, regulations and procedures <u>MUST</u> be followed. Failure to follow proper procedures can cause property damage, severe bodily injury and death.

Potential problems and causes listed below are in no order of importance or priority. The causes are only a list of the most common items to check to correct a problem. If you find the cause of a problem, **DO NOT** assume it is the **ONLY** cause of that problem. Different problems can have the same causes.

PROBLEM	CAUSE			
Excessive Vibration	1. Loose mounting bolts, wheel set screws, taper-lock hubs.			
	2. Worn or corroded blower wheel.			
	Accumulation of foreign material on blower wheel.			
	4. Bent motor shaft.			
	5. Worn motor bearings.			
	6. Motor out of balance.			
	7. Inadequate structural support.			
	Support structure not sufficiently cross braced.			
	9. Weak or resonant foundation.			
	10. Foundation not flat and level.			
Airflow (CFM) Too Low	1. Blower wheel turning in wrong direction (rotation).			
	Actual system static pressure (SP) is higher than expected.			
	3. Motor speed (RPM) too low.			
	Dampers or valves not adjusted properly.			
	5. Leaks or obstructions in duct work.			
	6. Filters dirty.			
	7. Inlet and/or discharge guards are clogged.			
	Duct elbow too close to blower inlet and/or discharge.			
	9. Improperly designed duct work			
	Blower wheel not properly located relative to the inlet bell (LM Model only).			
Airflow (CFM) Too High	1. Actual system static pressure (SP) is lower than expected.			
	2. Motor speed (RPM) too high.			
	3. Filter not in place.			
	Dampers or valves not adjusted properly.			

PROBLEM	CAUSE			
Motor Overheating	NOTE: A normal motor will operate at 174°F. See B-8 on page 6.			
	1. Actual system static pressure (SP) is lower than expected.			
	2. Voltage supplied to motor is too high or too low.			
	Motor speed (RPM) too high or defective motor.			
	4. Air density higher than expected.			
	5. Motor wired incorrectly or loose wiring connections.			
	6. Cooling fan cover on back of motor is clogged. (Fan cooled motors only.)			
Excessive Noise	1. Wheel rubbing inside of housing.			
	2. Worn or corroded blower wheel.			
	3. Accumulation of foreign material on blower wheel.			
	Loose mounting bolts, wheel set screws, or taper-lock hubs.			
	5. Bent motor shaft.			
	6. Worn motor bearings.			
	7. Motor out of balance.			
	8. Motor bearings need lubrication.			
	9. Vibration originating elsewhere in system.			
	10. System resonance or pulsation.			
	11. Inadequate or faulty design of blower support structure.			
	12. Blower operating near "stall" condition due to incorrect system design or			
	installation.			
Fan Doesn't Operate	1. Motor wired incorrectly.			
	2. Incorrect voltage supply.			
	3. Defective fuses or circuit breakers.			
	4. Power turned off elsewhere.			
	5. Motor wired incorrectly or loose wiring connections.			
	6. Defective motor.			

VIII. LONG TERM STORAGE INSTRUCTIONS: (Storage exceeding 30 days after receipt of equipment)

NOTE: Failure to adhere to these instructions voids all warranties in their entirety.

- 1. Storage site selection:
 - a. Level, well-drained, firm surface, in clean, dry and warm location. Minimum temperature of 50°F (10°C).
 - b. Isolated from possibility of physical damage from construction vehicles, erection equipment, etc.
 - c. Accessible for periodical inspection and maintenance.
- 2. The blower should be supported under each corner of its base to allow it to "breath". Supports (2 x 4's, timbers, or railroad ties) should be placed diagonally under each corner.
- 3. If the equipment is to be stored for more than three (3) months, the entire blower assembly must be loosely covered with plastic, **but not tightly wrapped**.
- 4. Storage Maintenance:

A periodic inspection and maintenance log, by date and action taken, must be developed and maintained for each blower. See example below. <u>Each item must be checked monthly</u>.

EXAMPLE:

Storage / Maintenance Schedule Log

ITEM	ACTION	DATES CHECKED
1	Re-inspect units to insure any protective devices used	
	which will allow corrosion or rust to form.	
2	Rotate wheel a minimum of 10 full revolutions to keep	
	the motor bearing grease from separating and drving out.	
	This is a critical step.	

Long Term Storage instructions continued on page 13.

5. General Motor Procedure:

If the motor is not put into service immediately, the motor must be stored in a clean, dry, warm location. Minimum temperature of 50°F. (10°C,). Several precautionary steps must be performed to avoid motor damage during storage.

- a. Use a "Megger" each month to ensure that integrity of the winding insulation has been maintained. Record the Megger readings. Immediately investigate any significant drop in insulation resistance.
- b. **DO NOT** lubricate the motor bearings during storage. Motor bearings are packed with grease at the factory.
- c. If the storage location is damp or humid, the motor windings **must** be protected from moisture. This can be done by applying power to the motor's space heaters, (IF AVAILABLE) while the motor is in storage. If the motor does not have space heaters, storing it in a damp or humid location will, very quickly, cause internal corrosion and motor failure which is not warranted.

NOTE:

For specific storage instructions, for the <u>actual</u> motor and any accessory parts that were supplied, refer to the manufacturer's instructions.

IX. LIMITED WARRANTY:

Cincinnati Fan & Ventilator Company (Seller) warrants products of its own manufacture, against defects of material and workmanship under normal use and service for a period of eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever occurs first. This warranty does not apply to any of Seller's products or any part thereof which has been subject to extraordinary wear and tear, improper installation, accident, abuse, misuse, overloading, negligence or alteration. This warranty does not cover systems or materials not of Seller's manufacture. On products furnished by Seller, but manufactured by others, such as motors, Seller extends the same warranty as Seller received from the manufacturer thereof. Expenses incurred by Purchaser's in repairing or replacing any defective product will not be allowed except where authorized in writing and signed by an officer of the Seller.

The obligation of the Seller under this warranty shall be limited to repairing or replacing F.O.B. the Seller's plant, or allowing credit at Seller's option. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND OF ALL OTHER OBLIGATIONS AND LIABILITIES OF THE SELLER. THE PURCHASER ACKNOWLEDGES THAT NO OTHER REPRESENTA-TIONS WERE MADE TO PURCHASER OR RELIED UPON BY PURCHASER WITH RESPECT TO THE QUALITY OR FUNCTION OF THE PRODUCTS HEREIN SOLD.

Removal of the Sellers nameplate or any generic fan nameplate containing the fan serial number voids all warranties, either written or implied. Failure to complete and document all the pre-startup and post startup checks and perform the suggested routine maintenance checks voids all warranties, either written or implied.

LIMITATION OF LIABILITY:

Notice of any claim, including a claim for defect in material or workmanship, must be given to Seller in writing within 30 days after receipt of the equipment or other products. Seller reserves the right to inspect any alleged defect at Purchaser's facility before any claim can be allowed and before adjustment, credit, allowance replacement or return will be authorized. See **RETURNS** below. Seller's liability with respect to such defects will be limited to the replacement, free of charge, of parts returned at Purchaser's expense F.O.B. Seller's plant and found to be defective by the Seller.

IN NO EVENT WILL SELLER BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING WITHOUT LIMITATION DAMAGES FOR INJURY TO PERSONS OR PROPERTY, LOST PROFITS OR REVENUE, LOST SALES OR LOSS OF USE OF ANY PRODUCT SOLD HEREUNDER. PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST SELLER WILL BE THE REPLACEMENT OF DEFECTIVE PARTS AS PROVIDED HEREIN OR REFUND OF THE PURCHASE PRICE FOR DEFECTIVE PRODUCTS, AT SELL-ER'S SOLE OPTION. SELLER'S LIABILITY ON ANY CLAIM, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILI-TY OR OTHERWISE, FOR ANY LOSS OR DAMAGE ARISING OUT OF OR IN CONNECTION WITH PURCHASER'S ORDER OR THE PRODUCTS OR EQUIPMENT PURCHASED HEREUNDER, SHALL IN NO CASE EXCEED THE PURCHASE PRICE OF THE EQUIPMENT GIVING RISE TO THE CLAIM.

RESPONSIBILITY:

It is the understanding of the Seller that Purchaser and/or User will use this equipment in conjunction with additional equipment or accessories to comply with all Federal, State and local regulations. The Seller assumes no responsibility for the Purchaser's or Users compliance with any Federal, State and local regulations.

RETURNS:

Cincinnati Fan & Ventilator Company assumes no responsibility for any material returned to our plant without our permission. An **RMA** (Return Material Authorization) number must be obtained and clearly shown on the outside of the carton or crate and on a packing slip. Any items returned must be shipped freight prepaid. Failure to comply will result in refusal of the shipment at our receiving department.

DISCLAIMER

This manual, and all its content herein, is based on all applicable known material at the time this manual was created. Any parts of this manual are subject to change at any time and without notice.

If any statements, diagrams and/or instructions contained herein, for components not manufactured by the Seller, conflict with instructions in the manufacturer's manual (i.e.: motors, dampers, etc.), the instructions in the <u>manufacturer's</u> manual, for that component take precedent.

Should you want the latest version of this manual, please contact us or our sales office for your area. Or, you can print a current version by going to our website at: www.cincinnatifan.com



7697 Snider Road, Mason, OH 45040-9135 Phone: (513) 573-0600 Fax: (513) 573-0640 E-Mail: sales@cincinnatifan.com

PLEASE NOTE

Cincinnati Fan manufactures many models and arrangements with special variations. For that reason, the maintenance manuals contained on our website do not include a parts drawing nor the completed blower or fan specifications on page 1. For the parts drawing of all the standard components and specifications for the specific blower or fan that you have, please contact our local Cincinnati Fan sales office for your area.

You will need to give them the serial number shown on the blower or fan nameplate so they can supply you the correct information.

Click on *"Contact a Sales Rep"* on our website for the name and contact information for our local sales office for your area. www.cincinnatifan.com

OPERATING & MAINTENANCE INSTRUCTIONS AND PARTS LIST

for

HDBI - Backward Inclined Blowers HDAF - Airfoil Wheel Blowers RBE - Radial Blade Exhausters HP - High Pressure Blowers

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NOTICE

If fan will not be put into operation within 30 days, obtain long-term storage instructions from our website (www.cincinnatifan.com) or your local Cincinnati Fan Sales Office.

A DANGER

ALL FANS AND BLOWERS SHOWN HAVE ROTATING PARTS AND PINCH POINTS. SEVERE PERSONAL INJURY CAN RESULT IF OPERATED WITHOUT GUARDS. STAY AWAY FROM ROTATING EQUIPMENT UNLESS IT IS DISCONNECTED FROM ITS POWER SOURCE AND ALL ROTATING PARTS HAVE STOPPED MOVING. READ ALL OPERATING INSTRUCTIONS CONTAINED HEREIN BEFORE INSTALLING EQUIPMENT.

A DANGER

NO GUARANTEE OF ANY LEVEL OF SPARK RESISTANCE IS IMPLIED BY SPARK RESISTANT CONSTRUCTION. IT HAS BEEN DEMONSTRATED THAT ALUMINUM IMPELLERS RUBBING ON RUSTY STEEL MAY CAUSE HIGH INTENSITY SPARKS. AIR STREAM MATERIAL AND DEBRIS OR OTHER SYSTEM FACTORS MAY ALSO CAUSE SPARKS.



PART # 01001 CATALOG #PMK-1001 SUPERSEDES: PMK-1293

I. GENERAL SAFETY NOTES

- 1. Rotating parts including shaft and V-belt drives must be properly guarded to prevent personal injury.
- 2. Electrical wiring must be accomplished by a qualified electrician in accordance with all applicable codes.
- 3. Care should be taken:
 - Not to run fan above its safe speed (See Performance Tables in Sales Catalog or call CF sales office).
 - Not to operate in excessive temperatures (See limitations in Sales Catalog or call **CF** sales office).
 - Not to operate in dangerous environments.
 - Read all instructions carefully.

II. RECEIVING

Receiving Inspection

When unit is received, inspect immediately for damaged or missing parts. Even though all units are carefully inspected and prepared for shipment at the factory, rough handling en route may cause concealed damage or cause nuts, set screws, bolts or locking collars to work loose. Be certain all fasteners are tightened securely. Rotate wheel by hand to verify that it rotates freely and that there are no obstructions.

Table #1

TORQUE VALUES FOR SPLIT TAPER BUSHINGS				
Bushing Size	MINIMUM RECOMMENDED TORQUE (INCH-LBS)			
Н	95			
B&P	192			
Q & R	350			

Inspect all shipments carefully for damage. THE RECEIVER MUST NOTE ANY DAMAGE ON THE CARRIER'S BILL OF LADING AND FILE A CLAIM IMMEDIATELY WITH THE FREIGHT COMPANY IN THE CASE OF ANY DAMAGE. Keep a record of all equipment received, including inspection details and date of receipt because of the possibility of partial shipments.

III. HANDLING

Handle your equipment with care. Some fans are provided with lifting lugs or holes for easy handling. Others must be handled using nylon straps or wellpadded chains and cables which protect the fan's coating and housing. Spreader bars should be used when lifting large parts.

Centrifugal fans are best lifted using one strap under the fan's scroll and another strap around the bearing base. DO NOT LIFT CENTRIFUGAL FANS BY THE FAN SHAFT, WHEEL, FLANGES OR INLET SUPPORT OR MOTOR EYE BOLT.

NOTICE

If fan will not be put into operation within 30 days, obtain long-term storage instructions from our website (<u>www.cincinnatifan.com</u>) or your local Cincinnati Fan Sales Office.

IV. GENERAL INSTALLATION INSTRUCTIONS

Foundations

Fan foundation must be flat, level and rigid. Where foundation is not completely flat, shims must be placed under fan support at each anchor bolt as required. Bolting fan to an uneven foundation distorts alignment and causes vibration.

Structural steel foundations should be heavily crossbraced for load support.

	SET SCREW TORQUE VALUES							
	SET SCR	MINIMUM REQUIRED TORQUE (INCH-LBS)						
Diameter & No. of Threads/Inch				Hex Size Across Flats (Allen Wrench)				
1/4-20		1/8"	65					
5/16-18		5/32"	165					
3/8-16		3/16"	228					
7/16-14		7/32"	348					
1/2-13 5/8-11		1/4"	504					
		5/16"	1104					

NOTE: If wheel set screws are loosened and/or wheel is removed from shaft, set screws *must* be replaced. Set screws cannot be used more than once. Use knurled, cup point set screws with a locking patch.

Table #2

V. OPERATION

Before Connecting Power

- 1. Inspect all fasteners and retighten if necessary:
 - a. Foundation bolts.
 - b. Set screws in fan and wheel and V-belt drive (See Tables #1 & #2 on preceding page).
 - c. Housing, bearing and motor mounting.
- 2. Inspection doors should be tight and sealed.
- 3. Bearings should be checked for alignment and lubrication (See Bearing Maintenance, pages 4 & 5).
- 4. Turn rotating assembly by hand to insure that it does not strike housing. If the wheel strikes the housing, the wheel may have moved on the shaft or the bearings may have shifted in transit. Correction *must* be made prior to start up.
- 5. Check motor to insure proper speed and electrical characteristics.
- 6. Check V-belt drive for alignment and correct belt tension.
- 7. After wiring, energize motor for one second to check for proper rotation.

VI. GENERAL MAINTENANCE

- CAUTION -

Before any maintenance or service is performed, assure that unit is disconnected or locked out from power source to prevent accidental starting.

The key to good fan maintenance is a regular and systematic inspection of all fan parts. Severity of the application should determine frequency of inspection. The components requiring service are generally the moving parts which include bearings, fan wheel, belts, sheaves and motor.

Cast Aluminum & Metal Parts

Cast aluminum and steel parts usually do not require maintenance during the life of the unit except painted metal surfaces that may require periodic repainting. In a severe, dirty operation, the wheel should be cleaned with a wire brush to prevent an accumulation of foreign matter that could result in fan unbalance. After cleaning wheel, inspect for possible cracks or excessive wear, which can cause unbalance. **DO NOT** operate a wheel that is cracked, chipped, has broken blades or excessive wear. NOTE: If wheel set screws are loosened and/or wheel is removed from shaft, set screws *must* be replaced. Set screws cannot be used more than once. Belts on V-belt drive units require periodic inspection and replacement when worn. For multiple belt drives, belts should be replaced with matched sets.

Motor Maintenance

- 1. Disconnect or lock out power to motor.
- Removing dust and dirt: Blow out open type motor windings with low pressure air to remove dust or dirt. Air pressure above 50 P.S.I. should not be used as high pressure may damage insulation and blow dirt under loosened tape. Dust accumulation can cause excessive insulation temperatures.
- 3. Lubrication: The motor bearings and the fan bearings on the belt drive fans should be greased at regular intervals. Motor manufacturers' greasing instructions and recommendations should be followed closely. Avoid the use of a pressure greasing system which tends to fill the bearing chamber completely. Do not overgrease. Use only 1 or 2 shots with a hand gun in most cases. Maximum hand gun rating 40 P.S.I. Rotate bearings during lubrication where good safety practice permits. NOTE: On motors with nonregreasable sealed bearings, no lubrication is required for the life of the bearings.

To prevent rusting of bearing parts, the rotor must be rotated at regular intervals (30 days) to assure these parts are well covered with oil or grease.

VII. V-BELT DRIVES

Care should be taken not to overtighten V-belt drive. Excessive belt tension overloads fan and motor bearings. It is much less expensive to replace belts worn from slippage than to replace bearings damaged from excessive loading.

Fans shipped completely assembled have had V-belt drive aligned at the factory. Alignment should be rechecked before operation as a precaution due to handling during shipment.

A WORD OF CAUTION ABOUT MOTORS

Using your hand to test the running temperature of a motor can be a very painful experience:

Normal body temperature98.6° F

Threshold of pain caused by heat......120.0° F

Average temperature of hot tap water.....140.0° F

Average temperature of hot coffee......180.0° F

Normal operating temperature of a fully loaded electric motor open type,

- 1. Be sure sheaves are locked in position.
- 2. Key should be seated firmly in keyway.
- 3. Place straight edge or taut cord across faces of driving and driven sheaves to check alignment. The motor and fan shafts must be parallel with V-belts and at right angles to the shafts.
- 4. Start the fan. Check for proper rotation. Run fan at full speed. A slight bow should appear on slack side of belt. Disconnect power and adjust belt tension by adjusting motor on its sliding base. All belts must have some slack on one side.

- 5. If belts squeal at start up, they may be too loose.
- 6. When belts have had time to seat in the sheave grooves, then readjust belt tension. (2-3 days)

V-belt drive assembly can be mounted as follows:

- 1. Clean motor and fan shafts. Be sure they are free from corrosive material. Clean bore of sheaves and coat with heavy oil for ease of shaft entry. Remove oil, grease, rust or burrs from sheave grooves.
- 2. Place fan sheave on fan shaft and motor sheave on its shaft. **Do not pound sheaves** on as this may damage bearings. Tighten sheaves per Table #1 or #2 on page 2.

Table #3 (See Bearing Maintenance, page 5.)

Conditions Around Bearing	Operating Temperature of Fan	**Greasing Intervals
Fairly Clean	up to 120 °F 120°-160°F 160°-200°F plus*	6-12 months 2-3 months 1-2 months
Moderate to Extremely Dirty	up to 160°F 160°-200°F plus*	1-2 months 2-4 weeks
Cold Storage Room		every defrosting period or no more than 4 months

*For fan applications over 200°F: greasing intervals should be from several days to 2 weeks, depending on the temperature.

**For vertical installations, greasing intervals should be twice as frequent as table values.

The following greases, or one that is equivalent to the general description, are recommended for the following temperatures or excessive moisture applications.

Operating Conditions	Use Grease Equivalent to these Grades		
	Esso-Beacon #325 (-65°F)		
Temperatures -65°F to 0°F	Mobil Grease #28 (-65°F)		
	Shell Oil Aeroshell No. 7 (-100°F)		

General Description: Versatile multipurpose microgel thickened synthetic hydrocarbon grease with corrosion inhibitors, anti-oxidant additives, water resistance tendencies and EP characteristics.

Temperature 0°F to 200°F inclusive (Also use for heavy condensation or direct splash of water) Mobil Oil - Mobilux EP #2 Shell Oil - Shell Alvania EP #2 Chevron - Chevron SRI #2

General Description: Multipurpose NLGI#2 grease from lithium soap with EP characteristics, rust inhibitors, anti-oxidant additives and good water resistance tendencies.

Temperatures over 20	0°F Dow Corning-DC44 (400°F) (Not compatible with non-silicon based greases)
General Description:	Versatile multipurpose microgel thickened synthetic hydrocarbon grease with corrosion inhibitors, anti-oxidant additives, water resistance tendencies and EP characteristics.

- 3. Move motor on slide base so belts can be placed in grooves of both sheaves without forcing. Do not roll belts or use a tool to force belts over the grooves.
- 4. Align fan and motor shafts so they are parallel. The belts should be at right angles to the shafts. A straight edge or taut cord placed across the face of the sheaves will aid in alignment.
- 5. Tighten belts by adjusting motor base. Correct tension gives the best drive efficiency. Excessive tension causes undue bearing pressure.
- 6. Start the fan and run it at full speed. Adjust belt tension until only a slight bow appears on the slack side of the belts. If slippage occurs, a squeal will be heard at start-up. Eliminate this squeal by **disconnecting or locking out motor from power source** and then tightening up the belts.
- 7. Give belts a few days running time to become seated in sheave grooves, then readjust belt tension.

If the shafts become scratched or marked, carefully remove sharp edges and high spots such as burrs with fine emery cloth or honing stone. Avoid getting emery dust in the bearings.

Do not apply any belt dressing unless it is recommended by the drive manufacturer. V-belts are designed for frictional contact between the grooves and sides of the belts. Dressing will reduce this friction.

Belt tension on an adjustable pitch drive is obtained by moving the motor, not by changing the pitch diameter of the adjustable sheave.

VIII. BEARING MAINTENANCE

Sealed Bearings

Sealed for life bearings are pre-lubricated with the correct amount of manufacturer approved ball bearing grease, and are designed for application where relubrication is not required.

Relubricatable Bearings

The motor bearings and fan bearings on belt drive fans should be greased at regular intervals. Motor manufacturers greasing instructions and recommendations should be followed closely. Avoid the use of a pressure greasing system which tends to fill the bearing chamber completely. Do not over grease.

NOTE: On motors with non-regreasable, sealed bearings, no lubrication is required for the life of the bearing.

Table #3 (page 4) lists the time intervals between fan
greasing to insure proper lubrication in adverse
conditions of heat and dust. Use only 1 or 2 shots with a
hand gun in most cases. Maximum handgun rating 40
P.S.I.

IX. WARRANTY

Cincinnati Fan & Ventilator Company warrants products of its own manufacture against defects of material and workmanship under normal use and service for a period of eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever occurs first.

This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, negligence, alteration or systems and/or materials not of Seller's manufacture. Expenses incurred by Buyer(s) in repairing or replacing any defective product will not be allowed except where authorized in writing and signed by an officer of the Seller.

The obligation of Seller under this warranty shall be limited to repairing or replacing F.O.B. Seller's plant, or allowing credit at Seller's option. This warranty is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and of all other obligations and liabilities of the Seller. The Buyer acknowledges that no other representations were made to him or relied upon him with respect to the quality or function of the products herein sold.

On equipment furnished by the Seller, but manufactured by others, such as motors, Seller extends the same warranty as Seller receives from the manufacturer thereof. Repairs for motors should be obtained from nearest authorized motor service station for the make of motor furnished. All motors used are products of wellknown manufacturers with nationwide service facilities. Check the yellow pages of your telephone directory for the location of the nearest service shop.

Cincinnati Fan & Ventilator Company assumes no responsibility for material returned to our plant without our prior written permission.

X. ORDERING REPLACEMENT PARTS

Replacement or spare parts may be ordered through your local Cincinnati Fan representative. (Refer to drawings that begin on page 7.) The following information should accompany parts orders:

- 1. Motor horsepower, frame size, motor speed, voltage, phase, cycle and enclosure. Motor manufacturer's model number from motor nameplate.
- 2. Fan Speed (if V-belt driven).
- 3. Fan serial **and** model numbers from the **fan** nameplate and a complete description of the part.

An adequate stock of repair parts is maintained where possible. If your fan is vital to production or to plant operation, it is advisable to have all spare parts on hand to minimize downtime.

XI. TROUBLE SHOOTING

In the event that trouble is experienced in the field, the following are the most common fan difficulties. These points should be checked in order to prevent needless delay and expense.

1. CAPACITY OR PRESSURE BELOW RATING

- a. Incorrect direction of wheel rotation.
- b. Speed too slow.
- c. Dampers not properly adjusted.
- d. Poor fan inlet or outlet conditions (elbows, restrictions).
- e. Air leaks in system.
- f. Damaged wheel.
- g. Total resistance of system higher than anticipated.
- h. Wheel mounted backwards on shaft.
- i. Fan not properly selected for a high temperature and/or high altitude application.

2. VIBRATION AND NOISE

- a. Misalignment of bearings, coupling, wheel or V-belt drive.
- b. Unstable foundation or supports.
- c. Foreign material in fan causing unbalance.
- d. Worn bearings.
- e. Damaged wheel or motor.
- f. Broken or loose bolts and set screws.
- g. Bent shaft.
- h. Worn coupling.
- i. Fan wheel or drive unbalanced.

- j. 120 cycle magnetic hum due to electrical input. Check for high or unbalanced voltage.
- k. Fan delivering more than rated capacity.
- I. Loose dampers.
- m. Speed too high or fan rotating in wrong direction.
- n. Vibration transmitted to fan from some other source.

3. OVERHEATED BEARINGS

- a. Check bearing lubrication.
- b. Poor alignment.
- c. Damaged wheel or drive.
- d. Bent shaft.
- e. Abnormal end thrust.
- f. Dirt in bearings.
- g. Excessive belt tension.

4. OVERLOAD ON MOTOR

- a. Speed too high.
- b. Fan over capacity due to existing system resistance being lower than original rating.
- c. Specific gravity or density of gas above design value.
- d. Wrong direction of wheel rotation.
- e. Shaft bent.
- f. Poor belt alignment.
- g. Wheel wedging or binding on fan housing.
- h. Bearings improperly lubricated.
- i. Motor improperly wired.
- j. Defective motor. Motor must be tested by motor manufacturer's authorized repair shop.



NOTE: Shaft seal is not shown

MODELS HDBI, HDAF and RBE Arrangement 4





- 1. Housing
- 2. Wheel (HDBI shown)
- 3. Motor
- 4. Inlet bell (HDBI and HDAF only)
- 5. Inlet spool piece (Inlet side plate with optional inlet flange)

MODELS HDBI, HDAF and RBE Arrangements 1 and 9



- 4. Belt(s) (Arr. 9 only)
- 5. Belt guard (Arr. 9 only)
- 6. Inlet side plate

- 10. Motor (Arr. 9 only)*
- 11. Base, fan
- 12. Motor shaft pulley (Arr. 9 only)

* Motor not shown in figure

MODELS HDBI, HDAF and RBE Arrangement 9CB Channel Base



- 1. Housing
- 2. Shaft and bearing assembly
- 3. Fan shaft pulley
- 4. Belt(s)
- 5. Base, fan
- 6. Motor shaft pulley
- 7. Motor
- 8. Inlet side plate
- 9. Inlet bell (on Models HDBI and HDAF only)
- 10. Wheel (HDBI wheel shown)
- 11. Motor slide base
- 12. Belt guard
- 13. Base, Channel

MODELS HDBI, HDAF and RBE Arrangement 10



- 1. Wheel (HDBI wheel shown)
- 2. Housing
- 3. Shaft and bearing assembly
- 4. Fan shaft pulley
- 5. Motor
- 6. Motor shaft pulley
- 7. Belt(s)
- 8. Inlet side plate
- 9. Inlet bell (on Models HDBI and HDAF only)
- 10. Base, fan
- 11. Motor base
- 12. Weather cover



- 1. Inlet side plate
- 2. Wheel
- 3. Housing
- 4. Shaft and bearing assembly
- 5. Fan shaft pulley (Arr. 9 only)
- 6. Belt(s) (Arr. 9 only)
- 7. Belt guard (Arr. 9 only)
- 8. Motor shaft pulley (Arr. 9 only)
- 9. Motor slide base (Arr. 9 only)
- 10. Base, fan
- 11. Motor (Arr. 9 only)

NOTE: Shaft seal is not shown

MODEL HP Arrangement 9CB Channel Base



- 1. Inlet side plate
- 2. Wheel
- 3. Housing
- 4. Shaft and bearing assembly
- 5. Fan shaft pulley
- 6. Base, fan
- 7. Motor
- 8. Motor shaft pulley
- 9. Belt(s)
- 10. Belt guard
- 11. Base, channel
- 12. Motor slide base

Note: Shaft seal is not shown.

Appendix G Routine, Severe Condition and Annual SSDS and Site Cover Inspection Checklists

Form 1 Former Stewart Stamping Site VCP Site No. V-00691-3 Site Management Plan Routine and Severe Condition Inspection Checklist Sub-slab Depressurization System (SSDS) and Site Cover

	Inspector's Name:		Inspection Date/Time	:	
	Inspector's Title and Comp	any:			
	Purpose: (circle one)	Routine Inspection	Severe Condition Inspection	ı	
				Yes / No *	Notified Person / Date
NO	1. Walk the entire first floor	r and lowest level of building a	nd exterior grounds		
ECTI	* Any evidence of soil distu	rbance? How deep? In what are	eas?		
INSP	* Any visible cracks in slab	or sidewalk?			
OVER	* Any other visible opening	s (unintended) in the floors?			
U E C	* Any visible cracks or ope	nings in elevator and sump pits?			
A. SI	* Any construction activities	s affecting foundation/first floor?			
7	1. Walk the entire roof surf	ace.			
СТЮ	* Any rust or other debris (bird nest, etc.) in or on SSDS Ve	nt Stack(s)?		
NSPE	* Are any parts missing on	Vent Stack(s)?			
SDS	* Are any alarm lights out o	on the SSDS Monitoring System	Light panel)? Which one(s)?		
ы м	2. Inspect all monitoring po	ints.			
	 * Are monitoring points acc 	cessible and are the covers intact	and secured?		
				ļ ļ	
z					
TAKE					
SNOI					
ACT					
U U					
	Inspector's Signature:				

Form 2 Former Stewart Stamping Site VCP Site No. V-00691-3 Site Management Plan Sub-Slab Depressurization System (SSDS) and Site Cover Annual Inspection/Monitoring Checklist

Sub-Slab Depressurization System Component	Condition		Yes	Describe Deficiency	Smoke or pressure test or any corrective action performed? If so, describe.	
Discharge location of vent pipe	Any open windows or air intakes near vent?					
Building floor slab	Holes, cracks or other physical deficiencies?					
Sumo pits	Holes, cracks or other physical deficiencies?					
	Debris or obstructions in sump pits?					
Risernines	Holes, cracks or other physical deficiencies?					
	Blockages in riser pipes?					
	Valves at established set points?					
Valves and vacuum gauges	Holes, cracks or other physical deficiencies?					
	Vacuum gauges showing proper readings?					
System alarm	Operational?					
Fans and blowers	Operational?					
HVAC system	Operational and maintained?					
Site Cover	Condition	No	Yes	Describe Deficiency	Any corrective action performed? If so, describe.	
	Any evidence of soil disturbance? How deep? In what areas?					
	Any visible cracks in slab or sidewalk?					
Walk the entire first floor and lowest level of building and exterior grounds.	Any other visible openings (unintended) in the floors?					
	Any visible cracks or openings in elevator and sump pits?					
	Any construction activities affecting foundation/first floor?					
Record Keeping (Site Cover and SSDS)	Are the SMP and inspection records up-to- date at the Site?					

Name of Inspector

Title and Company

Signature of Inspector

Date of Inspection

Appendix H Petroleum Bulk Storage Registration

	- 7	-								сл		4		Co	_
	Petroleum I D Numbe	Acting Com	Ssued by: Chervl Arch										Tank ID	bert P. Asto unty Execut	Westc
	Bulk Storage ar 3-01256-	missioner of	hald MD M							01/1994		01/1994	Date Installed	rino live	hester
	42.0	Health	PH FAAP						saddles,leg cradle	Abovegrou	saddles,leg cradle	Abovegrou	Tank		•]]] Р
	Expiration Da 09/14/2016		09/23/2011						ys,stlits,racks or	nd on	js,stlits,racks or	nd on	Location		VESTCHEST
THIS CERTI	te: Thomasto	Stewart E 45 Old Wa	Raing Ad							No. 4 fuel oil		No. 4 fuel oil	Product		ER COUNTY
IFICATE IS NO	n CT 06787	FI NY, LLC aterbury Road	dress:							5000		5000	Capacity (gallons)		/ DEPARTM RAGE REGI
N-TRANSFER													Last Tested		IENT OF HE
ABLE										NTR		NTR	Next Test Due		CERTIFICA
	Title	Signature of Authorized Representa	Name of Authorized Representative.	 Any person with knowledge of a symmetry report the incident immediately County Department of Health at 914- New York State Department of Envir Conservation at 800-457-7362. 	THIS CERTIFICATE MUST BE PO PREMISES AT ALL TIMES. Posting the entrance of the facility or at the m storage tanks are located.	The Department must be notified v adding, replacing, reconditioning or p stationary tank.	The facility must be re-registered u ownership.	As an authorized representative of th facility, I affirm under penalty of perju displayed on this form is correct to th knowledge. I recognize that I am resp that this facility is in compliance with XXV of the Westchester County Sani	<i>Emergency Contact:</i> Ralph Celone (860) 449-3425	Operator: Ralph Celone (860) 449-3425	Site: Stewart EFI NY, LLC 630 Central Park Avenue Yonkers, NY 10704	Thomaston, CT 06787	Owner: Stewart EFI LLC 45 Old Waterbury Road	2++1001 onnergency tom	Office of Environmental F 145 Huguenot Street New Rochelle, NY 10801 914-813-5161 24 hour emergency curd
Page 1 of 1	Date	tive/Owner	v/Owner (print)	pill, leak or discharge to the Westchester -813-5000 and to the onmental	OSTED ON THE must be at the tank, at nain office where the	within 15 days prior to vermanently closing a	upon a transfer of	te above-named iny that the information le best of my ponsible for assuring all sections of Article lary Code.							Health Risk Control

Appendix I Waste Disposal Manifests

	527907		Ber-	2605	υ		1377	i18					
Ple	ease print or type. (Form desig	gned for use on elite (12-pitch) typewriter.)					Fo	rm Approve	ed. OMB I	No. 2050-0039			
	UNIFORM HAZARDOUS	1. Generator ID Number	2. Page 1 of 3	Emergency Respon	ise Phone 577–266	4. Manifest	Tracking	Number 2 /1 1 (qq	티드			
	5. Generator's Name and Mailin	ing Address	<u>~</u>	enerator's Site Addres	ss (if different t	han mailing addre	<u>4 J (</u> 55)	<u>, T tr</u>	55				
	STEWART EFI, LLC	-	Sĩ	'EMART EFI, LL	<u>C</u>	-							
	45 OLD XESTBURY R	10	63	JO CENTRAL PARK AVE									
	Generator's Phone: THO	INASTON CT 06787 (860)283-8213	70	NKERS NY 1070	ERS NY 10704 (860)283-8213								
	6. Transporter 1 Company Nam		5 10	U.S. EPA ID Number									
	CHEMICAL PUL	LUIIUN CUNIRUL, LLC C	11 247	NYD082785429									
		ne		U.S. EPA ID Number									
	8. Designated Facility Name an	nd Site Address				U.S, EPA ID N	lumber						
	CHEMICAL POLLUTIO	N CONTROL LLC											
	120 SOUTH FOURTH	STREET											
	Facility's Phone: DAY SHOR	E, NY 11706 (631) 586-0333			_	NYDO	32785	429					
	9a. 9b. U.S. DOT Dascriptio	ion (including Proper Shipping Name, Hazard Clas anvi)	s, ID Number,	10. Conta	ainers Trans	11. Total Ouzeliky	12. Unit	1:	13. Waste Codes				
	1. UN1935 WASTE	CYANTOE SOLUTIONS, N.O.S. (LE)	AD. CHROKE.STLVER) 6.1		Туре	Quantity	WITTON.	0007	10058	0011			
6	X PGII	, ,		×11	DM	~11MD	9						
R	Sluge	- from tanks		XXX		X11,000		F007		-7			
	2. UN1935 HASTE	CYANIDE SOLUTIONS, N.O.S. (LE	ND,CADHIUN) 6.1 PGII					D006	0008	F607			
0	X "TOXIC"			XX5	DM	×2500	P						
	1 1181935 HACTE	EVOLTOF COUNTING NO C (150	IN CONTINE CHOOKINN					3006	0508	F007			
	X 6.1 PGII PTOX		in i cunurau i curant fun		DM	-0/	G		2440	1 407			
	LIQUID FRA	n united		XX +		X302		0007	0011				
	4. UN1588 WASTE	CYANIDES, INORGANIC, SOLID, N.	O.S. (SODIUM CYANIDE	.)				F008					
	X 6.1 PEIL "TOX			XXC	MG	~ 2700	P						
	14. Special Handling Instructions	is and Additional Information		· · · · ·									
	(1) 512921-00 -	FREIISTI CVONTRE REORING SI UN	(2) 512922-00 - FRG	(157) CYANTOF	REARTNG	\$1.00 (3) 51	2923-04) - F8G(157)				
	CYANIDE BEARING	SLUD (4) 512920-00 - ERG(157)	FILTER WEDIA CYANIDE	(10// Uthatic	DEREIND								
								_					
ļ	15, GENERATOR'S/OFFEROR marked and labeled/placarc	R'S CERTIFICATION: I hereby declare that the c ded, and are in all respects in proper condition for	ontents of this consignment are fo transport according to applicable	illy and accurately de international and nati	scribed above ional governme	by the proper ship Intal regulations, t	ping name f export shi	, and ere cla pment and l	issified, par om the Pri	skaged, mary			
	Exporter, I certify that the or	contents of this consignment conform to the terms of imization statement identified in 40 CER 262 27(a).	of the attached EPA Acknowledge (if Lem a tame overhity generato	nent of Consert.	ali ruantiki nen	erator) is love							
	Generator's/Offeror's Printed/Typ	ped Name	Signatur					Mo	nih Da	y Year			
ļ	x Kalph,	Cebre						Ø	9 121	1110			
Ę	16. International Shipments	Import to U.S.	Export from US.	Port of en	try/exit:								
<u>₹</u>	Transporter signature (for export	ts only):	/	Date leavi	ing U.S.:								
RTEI	Transporter 1 Printed/Typed Nam		Signature	171	11/1	111		Mai	nth Da	y Year			
NO.	chmes (Ilrich		Alli	///			Ð	9 20				
AN	Transporter 2 Printed/Typed Nam	ne	Signation			V		Moi	sth Da	y Year			
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ACII													
G	Facility's Phone: 18c. Signature of Alternate Facility	ty (or Generalor)						Мо	nth Da	у Үеаг			
NAT	_												
SIG	19. Hazardous Waste Report Mar	nagement Method Codes (i.e., codes for hazardou	s waste treatment, disposal, and	recycling systems)	-								
Ы	1.	2.	3.			4.							
	H141 20 Designated Encility Owner of 1	Nerator: Certification of receipt of becomer and	H141	cept as potent in lices	1Aa - M	H141			_				
	Printed/Typed Name		Signature Signature			_		Mor	nth Day	Year			

Ļ	Printed/Typed Name	6	rance	y Scor	prid
EPA	Form 8700-22 (Rev.	3-05)	Pretiou	s editions ar	e obsolete.

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11		FORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	NYDO85502243	nf 2	23. Mai	4384139F)	F			
	24.0	Generator's Name	11000002210			10011001				
	STE	WART EFT, LLC	06797 (B60)293-9213							
		OLU REGIOURI RU , INGRAJUN GI	00101 (0001503 0513			U.S. EPA ID	Number			
	25.	Fransporter Company Name								
	26. 1	ransporter Company Name				U.S. EPA ID	Number			
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	A	LUP UP PIPINE TANKS		XXI	P	XX150	'	800		1-
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TED	36. Ha	zardous Waste Report Management Method Codes	(i.e., codes for hazardous waste treatment, disposal, a	nd recycling systems)						
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(Carrier)	MEMICAN CNV. ASSESSMENT CORFSCA to the classifications and tarilis in effact on the date of this Bill of Lading:	AC		Carrie	er's No. <u>A</u>	YR 00	0044412				
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the property das (the word compa destination if on	cribed below, it apparent good ordar, except as noted (contents end condition o any being understood throughout this contract as meaning any person or corpo	i contents of pa	ckages unknown	n), marked, con perty under the	signer, and desti contract) agrees	ined as indicat to carry to its	ted below, which said c s usual place of delivery	Ompany v at sald			
portion of said ro law, whether prir	portion of said route to destination, and as to each party at any time Interested in ell or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.										
TO: (Mail o	TO: (Mail or street address of consignee for purposes of notification only.) FROM:										
Consignee	MATTIACE GWTP CO TRC	Ship	per <u>57</u>	EWART	EFI,L	<u> </u>					
Street	GARVIES POINT RD	Street 630 CENTRAL PARK AVE									
Destination	GLEN CONE NY Zip 11542	Origi	n Yow,	liers	NY		Zip				
Route:	Highway										
Delivering Ca	AEAC	Trailer I	nitial/Numb	ber	U.S. DOT	۲ Hazmat ۲ ۲۲۲۲	Reg. Number る子れて	-			
No, of packages HM	Description of articles, special marks, and exceptions	Hazard Class	l.D. Number	Packing Group	*Weight (subject to	Class or rate	Labels required	Check			
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Remit C.O.I Address: City:	D. to: State: Zip:	CO [\$	Subject to Section 7 of conditions, if its relignment is to be delivered to the consignor, it without resource on the consignor, it consignor shall sign the following statument: The carrier shall not make delivery of it injament without payment of freishilt and					₿			
"If the shipment moves between Note. – where the rate is depen The agreed or declared value o	n hen ports by a camfer by water, the law requires that the bill of lading shall state whether it is carrier's or shappen's weig dent on value, shippens are required to state specificatly in writing the agreed or declared value of the property. It be property is hereby	^{mr.} Charge	es Advance	ed	Gianatum of	aori					
This is to config that the a labeled, and are in proper o of Transponation.	exercisely stated by the tripper to be not exceeding per per per to consignor) Prepaid Collect this is to constry that the above-named materials are property classified, described, packaged, marked and pelded, and are in proper condition for transportation according to the applicable regulations of the Department Transpondation.										
SPECIAL INST											
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Permanent post office	a address of shipper	Monilorod	at all times the Ha	izardous Matorial	ls in transponation	including storag	e incidental lo transportation	n (§172.604).			
MARIESHOAL (Hev	0(90)										

CONTAINS HAZABDOUS MATERIALS

¥	NON-HAZARDOUS 1. Generator ID Number 2. Page 1 of 3. Eme	rgency Respons	e Phone 5-2000	4. Waste Tr	racking Nu	mber 6	ō 1 7	32		
	5. Generator's Name and Mailing Address Generator's Name and Mailing Address Generator's Name and Mailing Address	tor's Site Addres	s (if different th	nan mailing addre	1985)	¥, U	• 17	00		
	STEWART EFI, LLC	630 Ce	NTAN	Paule A	JE					
	45 OLD WATERBURY RD, THOMASTON CT 06 tot	YONKE	es my	1070	4					
	Generators Phone: J-60-205-0213 6. Transporter 1 Company Name	0	<u> </u>	U.S. EPA ID	- Number					
	AMERICAN ENVIRONMENTAL ASSESSMENT CORP			NY	(R0000	044412	2			
	7. Transporter 2 Company Name			U.S. EPA ID	Number					
B. Designated Facility Name and Site Address										
	ZORCO VETTOREUM SERVICES 208 REVIE 109									
FALMWG JALE NY 11735										
	9. Waste Shipping Name and Description	10. Cont	ainers	11. Total	11. Total 12. Unit					
		No.	Туре	Quantity	WL/Vol.	frigues and the second				
TOR	NON RCRA, NON DOT REGULATED MATERIAL		اسري ا		_					
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	13. Special Handling Instructions and Additional Information					200 C	Strict Conferences			
								1701		
	14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully an marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable interr	d accurately des tational and natio	cribed above b anal governme	y the proper ship ntal regulations.	ping name,	, and are cli	assilied, pa	ckaged,		
	Generator's/Offeror's Printed/Typed Name Signatule	1	$\overline{(\frown)}$			1	Month D	lay Year		
¥	Kalph Celone //	/		~			7 2	$\mathcal{D}[l]$		
INT'L	Transporter Signature (for exports only):	Port of er Date leav	ntry/exit: vina U.S.:			_				
EB	16. Transporter Acknowledgment of Receipt of Materials									
ORT	Transporter 1 Printed Typed Name Signature		~)	well	to the second se	ľ	Yonth C			
ANSF	Transporter 2 Printed/Typed Name Signature	-au		12000	an	· /	Month D	ay Year		
ТВ										
ł	17. Discrepancy Indication Space	7					<u> </u>			
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D FAC	Facility's Phone: RETURN TO GENERATOR 7-2	7-11	<u>ر</u>	9-28-11						
ATEC	17c. Signature of Alternate Facility (or Generator)				,	n	vionin i.	ay year		
SIGN										
Ö										
	18. Designated Facility Qwner or Operator: Certification of receipt of materials covered by the manifest except as noted	in Item 17a		A Street A Street and			- tanadario			
Ţ	Printed/Typed-Name Signature Signature				,	N	Month D	ay Year		
Ţ	12201-LOC(P.11 - 22	and and a set of the set	The state of the	ni/10			15	ν_{II}		

DESIGNATED FACILITY TO GENERATOR