

# COMPREHENSIVE REMEDIAL INVESTIGATION/FINAL ENGINEERING REPORT

RIVER PLAZA SHOPPING CENTER
124 TO 134 WILDEY STREET
TARRYTOWN, WESTCHESTER COUNTY, NEW YORK
NYSDEC SITE ID NO.: 360084

Submitted to:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Division of Environmental Remediation, Region 3 21 South Putt Corners Road New Paltz, New York 12561-1620

Prepared for:

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Prepared by:

WHITESTONE ASSOCIATES INC.

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Keith T. D'Ambrosio, P.E.

Principal, Environmental Service

Professional Engineer Cleans N

**Christopher Seib** 

**Director, Environmental Division** 

Whitestone Project No.: EJ0810744.005

August 18, 2011



August 18, 2011

via email and FedEx

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Protection, Region 3 21 South Putt Corners Road New Paltz, New York 12561-1620

Attention:

Ms. Janet E. Brown

Case Manager

Regarding:

COMPREHENSIVE REMEDIAL INVESTIGATION/

FINAL ENGINEERING REPORT RIVER PLAZA SHOPPING CENTER

124 TO 134 WILDEY STREET

TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

**NYSDEC SITE ID NO.: 360084** 

WHITESTONE PROJECT NO.: EJ0810744.005

Dear Ms. Brown:

Whitestone Associates, Inc. (Whitestone) is pleased to submit for your review the attached Comprehensive Remedial Investigation/Final Engineering Report (Comprehensive RI/FER) for the above-referenced site that was prepared on behalf of Acadia Tarrytown, LLC.

Please contact us at (908) 668-7777 with any questions or comments regarding the enclosed report.

Sincerely,

WHITESTONE ASS

Principal, Environinental

Professional Engine

Christopher Seib

Director, Environmental Division

Enclosures

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Nathan Waltz, NYSDOH

Guy Saccento, Acadia Tarrytown, LLC

Other Office Locations:



August 18, 2011

via email and FedEx

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Protection, Region 3 21 South Putt Corners Road New Paltz, New York 12561-1620

Attention:

Ms. Janet E. Brown

Case Manager

Regarding:

REPORT CERTIFICATION

COMPREHENSIVE REMEDIAL INVESTIGATION/

FINAL ENGINEERING REPORT RIVER PLAZA SHOPPING CENTER

124 TO 134 WILDEY STREET

TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

NYSDEC SITE ID NO.: 360084

WHITESTONE PROJECT NO.: EJ0810744.005

#### Dear Ms. Brown:

I, Keith T. D'Ambrosio, certify that I am currently a New York State registered professional engineer and that this Remedial Investigation/Final Engineering Report 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.

I, Keith T. D'Ambrosio, certify that I am currently a New York State registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Sub-Slab Depressurization System Design Plan (Work Plan) was implemented and that all construction activities were completed in substantial conformance with the DEC-approved Work Plan.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

The data submitted to the DEC demonstrates that the remediation requirements set forth in the Sub-Slab Depressurization System Design Plan and all applicable statutes and regulations have been achieved in accordance with the time frames, if any, established in the Work Plan.

All use restrictions, institutional controls, engineering controls and/or any operation and maintenance requirements applicable to the site are contained in an environmental easement created and recorded pursuant



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Report Certification
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124 to 134 Wildey Street
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to ECL 71-3605 and that any affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

A Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of any engineering controls employed at the site including the proper maintenance of any remaining monitoring wells, and that such plan has been approved by the DEC.

Please contact us at (908) 668-7777 if you require any further information or have any questions.

Sincerely,

WHITESTON

Keith T. D'Am

Principal, Environmental/Ser Professional Engineer Agent Christopher Seib, LSRP

Director, Environmental Division

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Nathan Waltz, NYSDOH

Guy Saccento, Acadia Tarrytown, LLC



August 18, 2011

via email and FedEx

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Protection, Region 3 21 South Putt Corners Road New Paltz, New York 12561-1620

Attention:

Ms. Janet E. Brown

Case Manager

Regarding:

REPORT CERTIFICATION

SITE MANAGEMENT PLAN

RIVER PLAZA SHOPPING CENTER

124 TO 134 WILDEY STREET

TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

**NYSDEC SITE ID NO.: 360084** 

WHITESTONE PROJECT NO.: EJ0810744.005

Dear Ms. Brown:

I, Keith T. D'Ambrosio, 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.

Please contact us at (908) 668-7777 if you require any further information or have any questions.

Sincerely,

WHITESTONE A

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Keith T. D'Ambrosio, P.E. Principal, Environmental Service

Professional Engineer Lie

Christopher Seib, LSRP

Director, Environmental Division

DK/mjb

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Copy: Nathan Waltz, NYSDOH

Guy Saccento, Acadia Tarrytown, LLC

# River Plaza Shopping Center 124 to 134 Wildey Street

# Tarrytown, Westchester County, New York

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# SECTION 1.0 Executive Summary

Whitestone Associates, Inc. (Whitestone) was retained by Acadia Tarrytown, LLC (Acadia) to prepare this Comprehensive Remedial Investigation/Final Engineering Report (CRI/FER) to document the activities implemented to address soil, groundwater, and soil vapor intrusion (SVI) conditions at the River Plaza Shopping Center site (herein referred to as the "site" or "subject property") located at 124 to 134 Wildey Street in Tarrytown, Westchester County, New York. This CRI/FER has been prepared to address the New York State Department of Environmental Conservation's (NYSDEC's) and New York State Department of Health's (NYSDOH's) comments provided in the December 11, 2009 letter issued by NYSDEC pertaining to Whitestone's June 24, 2009 Remedial Investigation Report and Supplemental Remedial Investigation/Corrective Action Workplan (RIR & SRI/CAW) and September 30, 2009 Supplemental Remedial Investigation Workplan (SRIW) as outlined in Section 3.0 as well as the comments provided in NYSDEC's August 3, 2011 correspondence. This report also documents remedial investigation (RI) activities conducted at the site pursuant to the September 2007 Supplemental Investigation Workplan (SIW) prepared by J.R. Holzmacher, P.E., LLC (JRH) on behalf of The Robert Martin Company (former owner) as approved by NYSDEC on October 1, 2007, NYSDEC's May 12, 2008 Supplemental Investigation Workplan Addendum (SIWA), NYSDEC's December 18, 2008 Modification to Order on Consent, Whitestone's January 21, 2010 Supplemental Remedial Investigation Workplan (Rev. 1) (SRIW) as approved by NYSDEC and NYSDOH on February 3, 2010, and Whitestone's April 7, 2010 Interim Remedial Measure Workplan (revised to Sub-Slab Depressurization System Design Plan) as approved by NYSDEC on May 12, 2010. The RI activities are outlined in Sections 2.3 (historic) and 4.0 (February 2010). Section 6.0 of this report provides a Site Conceptual Model for the property.

After completion of the RI at the site, low-level soil and groundwater contamination was documented to remain (hereafter referred to as "remaining contamination"). Generally, the RI activities determined that subsurface investigations conducted within and immediately north of the on-site drycleaners in the late 1990's and early 2000's identified tetrachloroethene (PCE) as well as select degradation compounds of PCE at low-level concentrations in shallow soil and groundwater exceeding NYSDEC Remedial Program Unrestricted Use Soil Cleanup Objectives (SCOs) and NYSDEC Technical & Operational Guidance Series (1.1.1) Water Quality Standards (TOGS WQS). Acetone was also detected above the NYSDEC Remedial Program Unrestricted Use SCOs, however, is considered a laboratory contaminant and not a contaminant of concern at the site. The VOCs were not detected at concentrations exceeding NYSDEC Remedial Program Restricted Use Commercial SCOs, however, PCE and methylene chloride were detected at concentrations exceeding their NYSDEC Protection of Groundwater SCOs in one soil sample. As a result of the identification of the volatile organic (VO) contamination, a total of eight groundwater monitor wells were installed at the site along with supplemental borings to collect additional soil and groundwater data. The results of the soil and groundwater RI activities as well as initial air sampling conducted by others required a soil vapor intrusion (SVI) investigation at the site. Results of the SVI investigation required the installation of a sub-slab

depressurization system (SSDS) within the drycleaners unit to address VOCs in indoor air as well as performing post-mitigation indoor air sampling. The installation and testing of the SSDS are outlined in Section 5.0.

In addition to the low-level VOC contamination identified in the immediate vicinity of the drycleaners, select semi-volatile organic compounds (SVOCs) and metals have been identified in soils located throughout the site exceeding NYSDEC Remedial Program Unrestricted Use SCOs. A single pesticide (p,p'-DDD) was also detected in one soil sample exceeding the NYSDEC Remedial Program Unrestricted Use SCO. The select SVOCs, pesticides, and metals were not detected at concentrations exceeding NYSDEC Remedial Program Restricted Use Commercial SCOs with the exception of the SVO benzo[a]pyrene. In addition, the majority of the metals concentrations and p,p'-DDD only exceed the NYSDEC Protection of Ecological Resources SCOs which are not applicable to the completely developed subject property. Select SVOCs were also detected at concentrations exceeding the Protection of Groundwater SCO. This soil contamination can be attributed to historic fill material located throughout the site and naturally occurring concentrations.

Select metals have also been identified in groundwater throughout the site exceeding NYSDEC TOGS WQS, however, these concentrations are generally consistent with and appear to be attributed to naturally occurring background conditions. The pesticide dieldrin was detected in one upgradient on-site groundwater monitor well at a concentration exceeding the NYSDEC TOGS WQS and may be the result of a potential off-site source.

No future active investigation or remediation of the remaining soil and groundwater contamination is being proposed, however, the site will be subject to the requirements of an Environmental Easement (Appendix N) and a Site Management Plan (SMP). The SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required at the site. Specifically, the SMP requirements include:

- Maintenance of a soil cover system consisting of existing concrete building slabs, asphalt-paved parking areas, concrete sidewalks, and landscaped areas to prevent human exposure to remaining contaminated soil/fill at the site;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site;
- Prohibiting the use of the groundwater underlying the property without treatment rendering it safe for intended use;
- Operation of the SSDS to prevent human exposure to SVI concerns; and

Implementation of the SMP for long-term management of remaining contamination as required by the Environmental Easement. The SMP provides plans for IC/ECs, monitoring, operation and maintenance, and reporting.
The SMP is summarized in more detail in Section 7.0 of this report.

# SECTION 2.0 Introduction

#### 2.1 SITE LOCATION/DESCRIPTION

#### 2.1.1 Location

The subject property is located at 124 to 134 Wildey Street in Tarrytown, Westchester County, New York. The property is further identified as Section 1, Tax Sheet 2, Lots P25 and P-25B, and comprises approximately 3.3 acres. The site location and site layout are shown on Figures 1 and 2. The boundaries of the site are more fully described on the site survey and metes and bounds description provided in Appendix A - Metes and Bounds.

#### 2.1.2 Existing Structures/Improvements and Current Site Use

The subject property currently consists of an approximately 24,000 square feet (footprint), single-story, retail building occupied by Walgreens, Dunkin' Donuts, a vacant space and Chase Bank in the southern portion of the site and an approximately 9,000 square feet (footprint), retail-strip building occupied (from west to east) by Van Tassel Cleaners, a vacant space (former Tappan Zee Dental Group), a laundromat, a vacant space (a former video store), and a former dollar store. The remaining portions of the site consist of asphalt-paved parking and driveway areas and landscaped areas. The parcel located immediately west of the retail-strip building currently is occupied by a McDonald's restaurant.

#### 2.1.3 Past Uses of the Property

According to historical sources reviewed by Whitestone, the current site buildings reportedly were constructed in 1976. The current Walgreens building formerly was occupied by a supermarket. The retail-strip building has been occupied by a drycleaning facility since construction. This facility reportedly utilized an open-loop cleaning system from 1976 until 1980 when a closed-loop system was installed. Prior to 1976, the subject property was occupied by a variety of commercial retail uses dating back to the late-1800's. The site currently is owned by Acadia Tarrytown, LLC.

#### 2.1.4 Uses of Adjoining Properties

The area immediately surrounding the subject property consists of a mix of residential and commercial uses. The site is bound by a playground and residential properties beyond Wildey Street to the north; residential properties beyond Central Avenue to the east; a residential apartment building to the south; and a McDonald's restaurant, Cortland Street, commercial properties, and railroad tracks to the west.

#### 2.2 PHYSICAL SETTING

#### 2.2.1 Topography/Geology

Surface topography at the subject property is relatively flat with an approximate average elevation of approximately 25 feet above mean sea level (msl). The subsurface conditions encountered in the soil borings and monitor wells installed at the site by Whitestone consisted of the following generalized strata in order of increasing depth.

Surface Material: Six inches of asphalt/subbase or topsoil were encountered in the borings and monitor wells drilled at the site.

**Fill Materials:** Fill materials generally consisting of gray medium to fine sand with variable amounts of silt, gravel, and debris were encountered in the borings drilled during this investigation. The debris encountered in the borings consisted of brick, asphalt, concrete, and wood fragments. The borings penetrated through the fill material at depths ranging from approximately 0.5 feet below ground surface (fbgs) to 6.0 fbgs. Fill material historically had been documented at the site to depths of 7.0 fbgs.

**Native Materials:** Underlying the fill materials, three strata of soils were encountered in the borings. The first stratum consisted of layers of dark grayish-brown sand and silt between 6.0 fbgs and 14.0 fbgs. The second stratum consisted of a layer of dark brownish-black fibrous peat between 14.0 fbgs and 16.0 fbgs and the third stratum consisted of intermingled layers of clay, silt, and sand to termination depths of 30.0 fbgs.

**Groundwater:** Static groundwater conditions recorded during the current investigations and monitoring activities were encountered at depths that ranged from approximately 5.0 fbgs to 8.0 fbgs. RI activities conducted by Whitestone have not identified perched groundwater conditions at the site. Groundwater at the site flows to the southwest which is suspected to be consistent with regional conditions. Groundwater flow direction is shown on Figures 4 and 5.

#### 2.2.2 Surface Water/Wetlands

No evidence of surface water or wetland areas were observed on or adjacent to the site. The subject property is not described on the United States Fish and Wildlife Service *National Wetlands Inventory Interactive Mapper* as a mapped wetlands area. The nearest surface water body (the Hudson River) is located approximately 0.33 mile to the west of the subject property.

#### 2.2.3 Groundwater

Groundwater was encountered beneath the subject property during the most recent investigation activities at depths of approximately 6.0 fbgs to 8.0 fbgs. RI activities conducted by Whitestone have not identified

perched groundwater conditions at the site. Following the installation and gauging of an additional groundwater monitor well (MW-8) in the southwestern portion of the site during Whitestone's most recent RI activities, a southwesterly groundwater flow direction has been confirmed. Groundwater flow direction is shown on Figures 4 and 5.

#### 2.3 PREVIOUS REMEDIAL INVESTIGATION ACTIVITIES

#### 2.3.1 Previous Investigations Conducted by Others between 1998 and 2008

Previous investigation activities have been conducted at the subject property by others between 1998 and 2008. The results of the RI activities are described in detail in the following reports:

- July 1998 (finalized October 1998) *Phase I Environmental Assessment* (ESA) prepared by Property Solutions, Inc. (PSI);
- August 1998 (finalized October 1998) Limited Subsurface Investigation prepared by PSI;
- June 2003 Phase I Environmental Site Assessment prepared by ATC Associates, Inc. (ATC);
- September 2003 Focused Subsurface Investigation prepared by ATC;
- October 2003 Limited Subsurface Investigation prepared by CNS Management Corp. (CNS);
- January 12, 2005 Site Characterization Report and Remedial Action Plan prepared by JRH in joint venture with CNS; and
- March 14, 2005 Geoprobe Investigation prepared by CNS.

## 2.3.1.1 Data Summary (1998 to 2008)

Laboratory analytical data available for the investigations outlined above are provided in Appendix O (on disk). The laboratory data provided is based on documentation identified by and provided to Whitestone during a search of project files including attempting to obtain data from previous consultants. The laboratory data obtained was only available in summary report formats and, accordingly, could not undergo formal data validation to provide *Data Usability Summary Reports* (DUSRs). The data associated with PSI's 1998 investigations, JRH's December 2004 soil investigation, and JRH's/CNS's November 2004 and January 2005 groundwater investigations were not available. The available data was reviewed by Whitestone and it was determined to be suitable for use (along with the other site data) to develop the Site Conceptual Model outlined in Section 6.0. Due to the limited data available, electronic data summary (EDS) submittals could not be completed for these previous investigations conducted by others.

Based on the correspondences and reports reviewed by Whitestone for the previous investigations, it appears that the initial investigations were conducted by ATC and PSI in general accordance with NYSDEC's *DER-10 (Technical Guidance for Site Investigation and Remediation)* (DER-10). Subsequent investigations by CNS and JRH were conducted in accordance with DER-10 and NYSDEC approved workplans. Following the investigation activities outlined below, all boring/sample locations appear to have been properly abandoned in accordance with NYSDEC requirements. No evidence of former borings were identified on site by Whitestone.

Key findings regarding the prior investigations at the subject site which were discussed in the previous report submissions are summarized as follows:

- Phase I ESAs conducted by PSI in July 1998 and ATC in 2003 identified one unregulated 550 gallon fuel oil underground storage tank (UST) located to the north of the drycleaners and drycleaning operations as potential environmental concerns. Subsurface investigations were recommended to determine if releases from the UST and/or drycleaning operations had impacted subsurface conditions at the subject site. PSI also recommended conducting a tightness test to determine the integrity of the UST (never performed).
- A limited subsurface investigation conducted by PSI in August 1998 identified the VOC PCE (1.829 parts per million [ppm]) in one soil sample collected and the VOC methylene chloride (0.136 ppm) in one soil sample collected as well as PCE (8 ppm and 43 ppm) in both of the groundwater samples collected in the vicinity of the drycleaners at concentrations exceeding NYSDEC Remedial Program Unrestricted SCOs and NYSDEC TOGS WQS. The NYSDEC TOGS WQS for PCE is 5 parts per billion (ppb). The PCE and methylene chloride soil concentrations did not exceed their NYSDEC Remedial Program Restricted Use Commercial SCOs of 150 ppm and 500 ppm, respectively. The PCE and methylene chloride concentrations exceed their NYSDEC Protection of Groundwater SCOs of 1.3 ppm and 0.05 ppm, respectively. Further investigation was recommended to determine the extent of PCE in groundwater and soil.
- A subsurface investigation conducted by ATC in August 2003 identified the VOC vinyl chloride (13 ppb) in one of the three groundwater samples collected at a concentration exceeding the NYSDEC TOGS WQS of 2.0 ppb. ATC indicated that the vinyl chloride concentration detected in the groundwater sample likely was attributed to the operations of the drycleaners. SVOCs were detected at concentrations below NYSDEC Remedial Program Unrestricted Use SCOs. ATC recommended a UST tightness test (never performed) and additional delineation of VOCs in groundwater.
- Additional subsurface investigations conducted in the vicinity of the fuel oil UST and drycleaners by CNS in October 2003 revealed select SVOCs in one of eight soil samples collected at concentrations exceeding their respective NYSDEC Remedial Program Unrestricted Use SCOs. The SVOC benzo[a]pyrene (1.1 ppm) was also detected at a concentration exceeding the NYSDEC Remedial Program Restricted Use Commercial SCO of 1 ppm. The SVOC concentations were below NYSDEC Protection of Groundwater SCOs. Total SVOCs were less than 500 parts per million (ppm). The VOC acetone was identified in two of eight soil samples collected at concentrations (0.17 ppm and 0.43 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO of 0.05 ppm, however, below the Restricted Use Commercial SCO of 500 ppm. Acetone

is considered a laboratory contaminant and not a contaminant of concern at the site. VOCs including PCE and vinyl chloride were detected in six of 11 soil samples collected, however, were detected at concentrations below their respective NYSDEC Remedial Program Unrestricted Use SCOs. Groundwater analytical results identified methyl tert butyl ether (MTBE) in one of the groundwater samples collected at a concentration (13 ppb) slightly exceeding the NYSDEC TOGS WQS of 10 ppb. CNS indicated that no previous investigations had detected this compound, therefore, was not a compound of concern at the site. MTBE was not detected during any future RI activities at concentrations exceeding the NYSDEC TOGS WQS.

- on March 8, 2004, the 550 gallon fuel oil UST located to the north of the drycleaners was removed from the site by JRH and replaced with the existing UST. No evidence of holes were noted in the UST and no evidence of impacted soils were noted within the excavation. Post-excavation soil samples were collected and analyzed for VOCs and SVOCs. Analytical results indicated that select SVOCs were detected in two of the soil samples at concentrations exceeding their respective NYSDEC Remedial Program Unrestricted Use SCOs. The SVOC benzo[a]pyrene (1.6 ppm) was also detected at a concentration exceeding the NYSDEC Remedial Program Restricted Use Commercial SCO of 1 ppm in one of the samples (SW-1). Benzo[a]anthracene (1.8 ppm) and chrysene (1.9 ppm) were detected at concentrations exceeding their NYSDEC Protection of Groundwater SCOs of 1.0 ppm. Total SVOCs were less than 500 ppm. Based on their visual inspection of the UST and UST excavation and soil boring data, JRH concluded that the SVOC detections likely were attributed to fill materials beneath the site. VOCs including PCE were detected in select soil samples, however, at concentrations below their respective NYSDEC Remedial Program Unrestricted Use SCOs.
- Additional subsurface investigations conducted by JRH in conjunction with CNS between March 2004 and January 2005 included the installation and sampling of four soil borings/groundwater monitor wells (identified as MW-1 through MW-4). Sampling results indicated that select SVOCs were detected at concentrations exceeding their respective Remedial Program Unrestricted Use SCOs in one shallow soil sample collected during the installation of monitor well MW-4 in the vicinity of the fuel oil tank and drycleaners. The SVOC benzo[a]pryrene (2.6 ppm) was also detected at a concentration exceeding the NYSDEC Remedial Program Restricted Use Commercial SCOs of 1 ppm. Benzo[a]anthracene (2.9 ppm), benzo[b]fluoranthene (2.6 ppm), and chysene (3.2 ppm) were detected at concentations exceeding their NYSDEC Protection of Groundwater SCOs of 1.0 ppm, 1.7 ppm, and 1.0 ppm, respectively. Total SVOCs were less than 500 ppm. Based on these results, JRH concluded that SVOCs present in shallow soils at the site are related to fill and are not associated with the former fuel oil UST. JRH also indicated that these compounds were not detected in groundwater, indicating they are not leaching from the soil.
- JRH and CNS indicated that PCE was detected in eight of 20 soil samples collected as part of the investigations conducted between August 2003 and March 2004, however, the concentrations were significantly below the Remedial Program Unrestricted Use SCO of 1.3 ppm and these detections did not warrant further investigation and/or corrective action. Elevated detections of PCE and methylene chloride were only detected in soil during the 1998 RI and have not been detected in RI soil samples collected in that area at concentrations exceeding NYSDEC Remedial Program Unrestricted Use SCOs since that time.

- PCE (5.4 ppb) was detected in monitor well MW-3 and vinyl chloride (5.1 ppb to 11 ppb) was detected in monitor wells MW-1 through MW-3 during groundwater sampling activities conducted in March 2004 by JRH and CNS at concentrations exceeding their respective NYSDEC TOGS WQS of 5 ppb and 2 ppb.
- PCE (6.8 ppb) was detected in monitor well MW-3 and vinyl chloride (3 ppb to 12 ppb) was detected in monitor wells MW-1 through MW-3 during groundwater sampling activities conducted in October 2004 by JRH and CNS at concentrations exceeding their respective NYSDEC TOGS WQS of 5 ppb and 2 ppb.
- PCE (14.4 ppb) was detected in monitor well MW-3 and vinyl chloride (3.08 ppb to 10.5 ppb) was detected in monitor wells MW-1 through MW-3 during groundwater sampling activities conducted in November 2004 by CNS at concentrations exceeding their respective NYSDEC TOGS WQS of 5.0 ppb and 2.0 ppb. Since there was no documented source of PCE in soil, JRH and CNS concluded that the low-level PCE concentrations detected in groundwater isolated to the north of the drycleaners (MW-3) likely would continue to decline. JRH and CNS recommended groundwater monitoring and additional soil borings to delineate the extent of PCE and degradation products in the shallow groundwater isolated near the rear of the drycleaners.
- In December 2004, one groundwater sample and two soil samples were collected by CNS from one boring drilled inside the drycleaners and analyzed for VOCs. Five additional borings were attempted, however, refusal was encountered at shallow depths (suspected to be caused by an obstruction and not bedrock). Analytical results only identified acetone (considered a laboratory contaminant and not a contaminant of concern at the site) in one of the two soil samples collected at a concentration of 0.276 ppm. PCE was detected at a concentration below its NYSDEC TOGS WQS of 5 ppb in the groundwater sample collected during these activities.
- In January 2005, four additional borings were advanced in the vicinity of the drycleaners by CNS. One groundwater sample was collected from each boring and analyzed for VOCs. Vinyl chloride (8.9 ppb) was detected in one of the samples at a concentration exceeding the NYSDEC TOGS WQS of 2 ppb. PCE and several other degradation products were detected in the samples, however, below their respective NYSDEC TOGS WQS.

## 2.3.2 Whitestone/Quest Investigations Conducted between March 2008 and April 2009

Investigation activities were conducted by Whitestone and Quality Environmental Solutions Technologies (Quest) between March 2008 and April 2009 pursuant to a revised SIW submitted by JRH in September 2007 and NYSDEC's May 12, 2008 SIWA to further characterize site conditions through the collection and analyses of indoor air and soil gas vapor samples. These activities included:

- sub-slab soil gas vapor and indoor air quality sampling in March 2008 by Quest;
- installation and sampling of four deep temporary wellpoints/borings (WB-1 to WB-4) to vertically delineate soil and groundwater conditions by Whitestone in January 2009 and February 2009;

- installation and surveying of three additional on-site and off-site groundwater monitor wells (MW-5 to MW-7) by Whitestone in January 2009 and February 2009;
- collection of soil samples from the newly installed monitor wells during well installation/drilling activities;
- collection and analyses of groundwater samples from the three new and four existing groundwater monitor wells in February 2009;
- off-site treatment/disposal of purged water and drill cuttings generated during monitor well/boring installation and sampling activities; and
- completion of a well search as specified in NYSDEC's DER-10. The results of the well search previously were reported to NYSDEC and are included in Appendix G.

#### 2.3.2.1 Soil Investigation Methodology - Whitestone

In conjunction with the groundwater monitor well installation activities, four additional temporary deep wellpoints/borings (WB-1 through WB-4) were installed by Enviroprobe Drilling Services, Inc. (Enviroprobe) utilizing Geoprobe equipment on January 13, 2009, February 19, 2009, and February 20, 2009 to further investigate subsurface conditions at the site. NYSDEC also had requested wellpoint/boring installation at the northwestern corner of the McDonald's property, however, multiple drilling attempts encountered refusal in this area. The locations of these borings are shown on Figure 7.

Temporary deep wellpoint/boring WB-1 and groundwater monitor well MW-5 were installed on the off-site McDonald's parcel to the west of the subject property on January 13, 2009. Soil samples collected from this boring and monitor well were submitted for VOCs and SVOCs analyses. Temporary deep borings/wellpoints WB-3 and WB-4 along with monitor well MW-7 were installed on site on February 19, 2009. Temporary deep boring/wellpoint WB-2 and monitor well MW-6 were installed on site on February 20, 2009.

NYSDEC representative Jim Schreyer was on site during the drilling activities on February 19, 2009 and February 20, 2009. Whitestone subsequently was contacted by Ms. Janet Brown, NYSDEC's Case Manager, on February 20, 2009 and advised that the soil and groundwater samples being collected should be analyzed for Target Compound List plus 30 additional peaks/Target Analyte List (TCL+30/TAL) compounds rather than VOCs and SVOCs as previously outlined in the September 2007 SIW and NYSDEC's October 1, 2007 approval letter. Ms. Brown noted that these additional requirements had been outlined in a May 12, 2008 letter issued by NYSDEC to The Robert Martin Company. Whitestone previously had not been provided a copy of NYSDEC's May 12, 2008 letter requiring the expanded/upgraded laboratory analyses. Accordingly, soil samples collected from borings and well installations on February 19, 2009 and February 20, 2009 were submitted for TCL+30/TAL. The results of the soil investigations are summarized in the

tables provided in Appendix L with the formal laboratory package provided in Appendix O (on disk). DUSRs confirming the reliability of analytical data are attached as Appendix E.

Soil samples collected from temporary deep wellpoints/borings WB-1 through WB-4 and monitor wells MW-5, MW-6, and MW-7 were submitted to Hampton Clarke-Veritech (New York Certified Lab #11408) along with contingency duplicate samples (per the 2007 SIW), trip blanks, and field blanks for laboratory analyses.

### 2.3.2.2 Groundwater Investigations (Temporary Wellpoints) Methodology - Whitestone

Pursuant to the approved SIW, groundwater samples were collected from each of the temporary deep wellpoints/borings during the investigation activities. On January 13, 2009, groundwater sample WB-1GW was collected from boring WB-1 installed on the off-site McDonald's parcel. On January 20, 2009, a groundwater sample was collected from monitor well MW-5 which is also located on the McDonald's parcel. Groundwater samples WB-1GW and MW-5 were submitted for VOC and SVOC analyses along with the appropriate trip and field blanks. The analytical results are summarized in the tables provided in Appendix L with laboratory analytical reports provided in Appendix O (on disk). DUSRs confirming the reliability of analytical data are attached as Appendix E.

On February 19, 2009 and February 20, 2009, groundwater samples WB-2GW through WB-4GW were collected from deep temporary wellpoints/borings WB-2 through WB-4, respectively, and submitted for TCL+30/TAL (per conversations with NYSDEC site representative Jim Schreyer and Case Manager Janet Brown).

# 2.3.2.3 Monitor Well Installation and Sampling Methodology - Whitestone

Four groundwater monitor wells (MW-1 through MW-4) previously had been installed at the subject property by JRH with the oversight of CNS to delineate low-level contamination in the vicinity of the drycleaners. Three additional groundwater monitor wells (MW-5 through MW-7) were installed at on-site and off-site locations by Enviroprobe in January 2009 and February 2009. The previously existing and newly installed monitor wells subsequently were surveyed by DPK Consulting, LLC (DPK) to establish permanent datum and elevations. The locations of the wells are shown on Figure 7.

The wells were gauged on February 24, 2009, April 2, 2009, and April 24, 2009 to establish groundwater flow direction. The contour maps reveal a southwesterly groundwater flow direction. A slight flexure was observed during the February 24, 2009 gauging event.

Groundwater samples collected from the seven on-site and off-site monitor wells on February 24, 2009 were submitted for TCL+30/TAL analyses along with duplicate samples and the appropriate trip and field blanks. The groundwater data summary table is provided in Appendix L and the formal laboratory report is provided in Appendix O (on disk).

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#### 2.3.2.4 Data Summary (Whitestone/Quest)

Conclusions and recommendations regarding Whitestone's activities and/or Quest's prior investigation at the subject site are summarized as follows:

- As part of the NYSDEC-approved September 2007 SIW prepared by JRH, three sub-slab soil gas vapor samples were collected from the drycleaners on March 27, 2008 by Quest. One indoor air sample and one outdoor air sample also were collected. Samples were analyzed for VOCs using EPA Method TO-15. The results of these investigations are summarized in Quest's October 13, 2008 report. These results indicate that PCE (341.11 ug/m³ to 4,156.65 ug/m³) was detected in all three sub-slab soil gas vapor samples. PCE (4.9 ug/m³) and TCE (15.9 ug/m³) were detected in the indoor air sample collected from within the drycleaners. No VOCs were detected in the sample collected of ambient air outside of the drycleaners. The TCE concentration was above the NYSDOH Air Guideline Value in the indoor air sample.
- The VOC acetone was detected in soil samples collected during investigation activities conducted in January 2009 including the installation of borings/wells MW-5 and WB-1 to WB-4 at concentrations (0.083 ppm to 0.19 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO (based on the NYSDEC Protection of Groundwater SCO) of 0.05 ppm, however, these concentrations do not exceed the NYSDEC Remedial Program Restricted Use Commercial SCO of 500 ppm. Acetone is a common laboratory contaminant and is not considered a contaminant of concern for this investigation or the site. The SVOC benzo[a]pyrene (2.0 ppm) was detected in soil sample WB-4 at a concentration slightly exceeding the NYSDEC Remedial Program Restricted Use Commercial SCO of 1 ppm (total SVO concentrations below 500 ppm). Benzo[a]pyrene was detected below the NYSDEC Protection of Groundwater SCO of 22 ppm. The detection is suspected to be associated with historic fill at the site and in the boring. Select metals were detected in soil samples WB-2, MW-6S, WB-7S, and WB-3 at concentrations exceeding the NYSDEC Remedial Program Unrestricted Use SCOs. These concentrations are below the NYSDEC Remedial Program Restricted Use Commercial SCOs. These metal detections appeared to be representative of natural background concentrations. With the exception of iron, the metals (aluminum and chromium) only exceed NYSDEC Protection of Ecological Resources SCOs. These SCOs are not applicable to the completely developed subject property and iron (11,000 ppm to 19,000 ppm) is a naturally occurring metal. Iron does not have NYSDEC Protection of Groundwater or Commercial SCOs. No residual VOC contamination was identified in the soil samples collected at the site during these investigation activities.
- A slight exceedance of the NYSDEC TOGS WQS of 5.0 ppb was identified in monitor well MW-3 for PCE (5.3 ppb) during Whitestone's February 2009 monitor well sampling event. Duplicate groundwater sample DUP-E was also analyzed for VOCs to confirm the result. PCE was detected at a concentration of 6.9 ppb in duplicate sample DUP-E. VOCs were not detected at concentrations exceeding NYSDEC TOGS WQS in the remaining seven wells.
- A slight exceedance of the NYSDEC TOGS WQS of 0.004 ppb was identified in a duplicate sample collected from monitor well MW-7 for the pesticide dieldrin (0.024 ppb) during Whitestone's February 2009 monitor well sampling event. This low-level detection in this upgradient well may be the result of an off-site source of contamination.

Select metals were detected in the unfiltered groundwater samples collected at the site at concentrations exceeding NYSDEC TOGS WQS during Whitestone's January 2009 and February 2009 sampling activities. Magnesium (36,000 ppb), sodium (34,000 ppb to 260,000 ppb), manganese (880 ppb and 2,400 ppb), and/or iron (5,000 ppb) were also detected in select filtered groundwater samples collected from the site at concentrations exceeding their NYSDEC TOGS WQS of 35,000 ppb, 20,000 ppb, 600 ppb, and 600 ppb, respectively. These filtered metals exceedances appear to be representative of natural background concentrations. Metals impacts to groundwater from releases or fill material at the site were not identified.

The laboratory data obtained from Quest were only available in a summary report format (see Appendix O) and, accordingly, could not undergo formal data validation to provide a DUSR. The available data was reviewed by Whitestone and was determined to be suitable for use (along with the other site data) to develop the Site Conceptual Model outlined in Section 6.0. Based on the report reviewed by Whitestone for the previous Quest investigation, it appears that the investigation was conducted in general accordance with NYSDEC DER-10 and the NYSDEC-approved workplan.

#### 2.4 CURRENT REMEDIAL INVESTIGATION ACTIVITIES

In response to NYSDEC's and NYSDOH's comments pertaining to Whitestone's June 24, 2009 RIR & SRI/CAW and September 30, 2009 SRIW and as discussed on the January 13, 2010 conference call with NYSDEC and NYSDOH, supplemental soil, groundwater, and SVI investigations were conducted at the site by Whitestone in February 2010 in accordance with Whitestone's January 21, 2010 SRIW as approved by NYSDEC and NYSDOH on February 3, 2010. Corrective action/mitigation was implemented by Whitestone in July 2010 and August 2010 in accordance with Whitestone's April 7, 2010 Sub-Slab Depressurization System Design Plan to address SVI concerns. The following activities were implemented by Whitestone:

- conducting a ground penetrating radar (GPR) survey in an effort to locate a suspected UST in the parking lot area to the southeast of the retail-strip building and collecting soil and groundwater samples in the vicinity of the suspected UST location for laboratory analyses (Comment 18);
- utilizing utility locating equipment and the GPR survey to identify utility corridors, floor drains, and other subsurface structures in an effort to develop the Site Conceptual Model and identify potential preferential pathways (Comment 4);
- installation and sampling of one shallow (eventually completed as a monitor well) and one deep temporary wellpoints/borings to confirm or deny contaminant migration to the southwest of the retail-strip building and to characterize shallow site soils (Comment 10);
- installation and sampling of two shallow borings and two deep borings in the vicinity of the Walgreens in an effort to characterize Parcel P-25B (Comments 16 and 17);
- pauging of monitor wells MW-1 through MW-8 in March 2010 and June 2010 to establish groundwater flow direction (Comment 10) and sampling and analyses of monitor well MW-8;

- conducting a product inventory inspection within the retail-strip building to identify any potential sources of PCE, TCE, and/or other contaminants and completion of NYSDOH *Indoor Air Quality Questionnaire and Building Inventory* forms (Comment 11c);
- conducting sub-slab, soil gas, and indoor air quality sampling at the subject property in order to investigate the potential for SVI into the retail-strip building and adjacent McDonald's restaurant and Walgreens (Comments 11, 13 to 15, and 21 to 25);
- performing communication testing in March 2010, July 2010, and August 2010 at the site to confirm that vapors will be drawn from underneath the entire floor slab of the retail-strip building following the installation of a SSDS.
- Design and installation of a SSDS within the drycleaners unit.

These RI and CA activities were conducted as required by the May 12, 2005 *Order on Consent* and subsequent December 18, 2008 modification. Section 3.0 of this report addresses the comments provided in the December 11, 2009 NYSDEC letter correspondence (Appendix K). The RI and CA activities were conducted in accordance with NYSDEC DER-10 and NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). Results of the RI and CA are presented in Sections 4.0 and 5.0 of this report, respectively.

#### **SECTION 3.0**

# **Responses to NYSDEC/NYSDOH Comments**

NYSDEC and NYSDOH (collectively, the "Agencies") reviewed Whitestone's June 24, 2009 RIR & SRI/CAW and September 30, 2009 SRIW. These documents were commented on by the Agencies in a December 11, 2009 correspondence. Whitestone's responses to the Agencies' comments pertaining to the RIR & SRI/CAW and SRIW are outlined below and include responses to the initial NYSDOH comments that were provided to Whitestone on July 27, 2009.

#### June 2009 RIR & SRI/CAW

Comment 1: "The RIR should be revised and resubmitted to contain all of the data gathered for the Site Characterization/Remedial Investigation into one comprehensive RIR, which defines the full nature and extent of contamination and creates a site conceptual model, consistent with DER-10 - Technical Guidance for Site Investigation and Remediation and the May 12, 2005 Order on Consent and subsequent December 18, 2008 modification. The revised RIR should include discussion of all relevant/valid data, data summary tables and figures, appending the previous relevant investigations to the comprehensive RIR, as well as address the comments herein."

**Response:** The submission of this CRI/FER addresses this comment. The development of the site Conceptual Model is included in Section 6.0 of this report. Previous investigation data tables are included in Appendices L and M.

Comment 2: "A data validation summary discussion should be included in the body of the revised RIR."

Response: Data validation summary discussions are included in Sections 4.0 and 5.0 of this report.

**Comment 3:** "A summary discussion of the Community Air Monitoring Program data should be provided in the report text and the data included as a document appendix."

**Response:** Summary discussions of relevant Community Air Monitoring Program data are included in Sections 4.0 and 5.0 of this report. Community Air Monitoring Program data are included in Appendix H.

**Comment 4:** "Attached is a February 21, 2006 letter that contained the Agencies' comments on the January 2005 *Site Characterization Report/Remedial Action Plan.* Many of the comments in that letter were to be

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addressed in the comprehensive investigation report that was ultimately prepared for this site (see comment 1). To the extent these comments were not addressed in the subsequent submittals, please ensure these items are covered in the revised RIR or SRIW, as appropriate (e.g., utility corridors/connections, floor drains, etc., that could act as preferential pathways were not located on the site plans or investigated)."

**Response:** The submission of this CRI/FER addresses this comment. The development of the Site Conceptual Model is included in Section 6.0 of this report. Utility corridors, etc. are shown on Figure 3.

**Comment 5:** "Section 2.2.1 of Whitestone's June 24, 2009 RIR & SRI/CAW (Topography/Geology) speak to the presence/absence of perched groundwater. Previous investigations by others indicated that perched groundwater appeared to be present at the northwest corner of the property."

**Response:** According to Whitestone's previous and most recent groundwater investigation activities (see Section 2.2.3), perched water has not been encountered at the site.

**Comment 6:** "Section 2.3 of Whitestone's June 24, 2009 RIR & SRI/CAW references exceedances of respective soil cleanup objectives (SCOs). Please note that in preparing the revised RIR and Site Conceptual Model that site data should be compared to the appropriate 6 NYCRR Part 375 SCOs."

Response: All data discussed in this report have been compared to the appropriate 6 NYCRR Part 375 SCOs.

**Comment 7:** "Section 2.3 of Whitestone's June 24, 2009 RIR & SRI/CAW references the March 2004 removal of the 550 gallon fuel oil UST. Please indicate whether a tank tightness test was performed and, if so, please include the results in this discussion."

**Response:** According to documentation reviewed by Whitestone, a tank tightness test was not performed on this UST, however, no inductions of releases reportedly were observed during the UST removal.

Comment 8: "Section 2.4 should also mention the May 12, 2008 work plan addendum."

**Response:** NYSDEC's May 12, 2008 SIWA is referenced in this CRI/FER and information previously provided in Section 2.4 of Whitestone's June 24, 2009 RIR & SRI/CAW is provided in Section 2.3 of this CRI/FER.

**Comment 9:** "Section 3.1.1 - please clarify that NYSDEC was not informed of the start of the off-site investigation field work on January 13, 2009 until after the work was completed, and thus did not have an opportunity to perform oversight, or advise of the requirement for full characterization (TCL+30/TAL) per the May 12, 2008 addendum to the SIW that had not been provided to Whitestone by the previous owner."

**Response:** NYSDEC was not informed of the start of the off-site investigation field work on January 13, 2009 until after the work was completed. Accordingly, NYSDEC did not have an opportunity to perform oversight or advise of the requirement for full characterization (TCL+30/TAL) per the May 12, 2008 SIWA that had not been provided to Whitestone by the previous owner.

Comment 10: "Section 3.2 - Page 13 of the SIW indicated that three rounds of groundwater levels, once every three months, would be collected to determine the direction of groundwater flow. While three rounds were collected, they were too close together (i.e., February 24, 2009, April 2 and 24, 2009) such that potential seasonal changes in groundwater flow direction could not be identified. However, the Agencies acknowledge the slight flexure noted between the February and April gauging events. Site monitoring wells should be gauged at the previously-approved frequency to confirm the apparent southwesterly groundwater flow direction remains consistent.

Since the well locations were chosen based on the presumed westerly groundwater flow direction, and there is no monitoring well directly down-gradient based on the identified southwesterly groundwater flow direction, an additional shallow and deep soil boring should be installed and the soil sampled consistent with the September 2007 SIW and the May 12, 2008 addendum. The shallow boring shall be completed as a monitoring well also consistent with the September 2007 SIW. If evidence suggests that there is contamination in the deep boring, that boring shall also be completed as a monitoring well; otherwise a groundwater grab sample should be collected and analyzed for the full suite of parameters. See attached figure for approximate boring/well locations. In addition, since there are no characterization data for shallow site soils, a soil sample should be collected from the top 2 feet of the new shallow boring and analyzed for the full suite of parameters."

**Response:** A shallow and deep soil boring have been installed and sampled in the location identified by NYSDEC and in accordance with JRH's September 2007 SIW and NYSDEC's May 12, 2008 SIWA. Results of the soil and groundwater investigations pertaining to this comment are presented in Section 4.0 of this report. As part of the groundwater investigation at the site, groundwater level measurements were collected on a quarterly basis to identify the potential for seasonal changes in groundwater flow direction. Groundwater level measurements are included in Table 4 and *Groundwater Contour Maps* are included as Figures 4 and 5.

#### **Comment 11:** Section 3.5 is deficient for the following reasons:

"Only the dry cleaner section of this approximately 9,000-square foot (sf) retail building was investigated. According to the document, the other businesses in this retail building include the Tappan Zee Dental Group, a laundromat, a video store, and a Dollar Store. Based on review of the data collected from the dry cleaner shop and the likelihood of a continuous slab under the remainder of the building, a Supplemental Soil Vapor Intrusion (SVI) Workplan for the remainder of the building should be developed and submitted to the agencies, or corrective actions (i.e., an expanded sub-slab depressurization system [SSDS]) should be considered for reducing the potential for exposure to the employees and patrons of those other businesses."

**Response:** Results of additional SVI investigation activities conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

"Because tetrachloroethene (PCE) is currently used by this dry cleaner, it is permissible to compare the detected indoor air PCE level to the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) as the potential exists for the PCE detected in the indoor air to be a result of the dry cleaning operation (i.e., dry cleaned clothes), although it is reported that the dry cleaner has used a closed loop system since 1980. The 8th sentence in this section should be revised to reflect only one sample was collected from the indoor air. The current sentence is plural which suggests more than one indoor air PCE result which is incorrect."

**Response:** Comments pertaining to the reporting of TCE and/or PCE concentrations and SVI results/conclusions one addressed in Section 4.0 of this report.

"The 10th sentence states that the "....TCE (trichloroethene) concentration was above the NYSDOH air guideline value in the indoor air sample." The next sentence states that "...the source of the TCE likely is attributable to a source within the dry cleaners." Since TCE was not detected in any of the three sub-slab soil vapor samples, the Agencies agree that the source of the TCE detected in the indoor air sample (15.9 ug/m³) is something other than from soil vapor intrusion. However, because this detected concentration exceeds the NYSDOH air guideline of 5.0 micrograms per cubic meter (ug/m³) for TCE, the source of the TCE should be identified through a review of the product inventory, or by conducting a product inventory if one was not completed previously, or by resampling of the indoor air."

**Response:** A product inventory was conducted as part of the current SVI investigation activities at the site. The results of the product inventory inspections as well as the sampling results from the SVI are discussed in Section 4.0 of this report.

11d. "The Agencies disagree with the final sentence of Section 3.5 which is nearly identical to the conclusion in the October 13, 2008 letter report found in Appendix F. The conclusion states that "...the PCE level detected in the indoor air sample does not appear to indicate that the PCE contamination beneath the building is contributing to the PCE level detected within the dry cleaners." That statement is indefensible and should be removed from this June 2009 document. That statement is in sharp contrast to the proposal in the document to install an active SSDS beneath the dry cleaners."

**Response:** A supplemental SVI investigation has been conducted at the site and is described in Section 4.0 of this report. Based on the results of the supplemental SVI investigation, Whitestone recommended and completed the installation of a SSDS at the site to address the PCE concentrations in indoor air. Details regarding the installation of the SSDS are discussed in Section 5.0 of this report.

**Comment 12:** "Section 4.1 - as noted in Comment 1, the revised RIR should be a comprehensive report that includes all relevant site characterization data."

**Response:** The submission of this SRI/FER & CAW addresses this comment. Previous RI activities are discussed in Section 2.3 of this report and the development of the Site Conceptual Model is included in Section 6.0 of this report.

**Comment 13:** "Section 4.2 - a SSDS (i.e., placing a PVC pipe into the sub-base beneath the dry cleaner slab and actively venting to the atmosphere) is proposed only for the dry cleaner portion of the 9,000-sf building. No explanation has been provided as to why the entire building is not being depressurized, especially since there is likely a shared foundation slab with communication via the sub-base material. The potential for vapor migration and intrusion into the other businesses within this retail structure needs to be considered, evaluated, investigated and/or mitigated."

**Response:** Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

Comment 14: "Section 4.2 - the potential for vapor migration and intrusion into the adjacent McDonald's restaurant and the 24,000 sf retail building in the same shopping center plaza should be evaluated/investigated during the proposed supplemental RI and discussed in the revised RI report to support a recommendation for mitigation or no corrective action, as appropriate."

**Response:** Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

**Comment 15:** "Section 4.2 makes no mention of a pressure field extension test to show that the system is drawing vapors under the entire slab. Any SSDS design work plan should include details of the confirmation testing (physical and chemical) that would be performed along with operation, monitoring and maintenance requirements."

**Response:** Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

#### September 2009 SRIW:

**Comment 16:** "Since the site definition/metes and bounds description (see the December 18, 2008 Modification to the Order on Consent) includes the Walgreens parcel this area will also require characterization. Therefore, the SRIW should be expanded to include investigation of the entire site as defined."

**Response:** As required by the December 18, 2008 *Modification to Order on Consent* which defines the site to include the Walgreens parcel, characterization including additional soil, air, and groundwater sampling and analyses was conducted on this parcel by Whitestone in February 2010. Results of the investigations conducted in this area of the site are provided in Section 4.0 of this report.

**Comment 17:** "The SRIW should be expanded to include the additional groundwater and soil sampling requested above, in addition to the SVI sampling outlined below."

**Response:** As required by the December 18, 2008 *Modification to Order on Consent* which defines the site to include the Walgreens parcel, characterization including additional soil, air, and groundwater sampling and analyses was conducted on this parcel by Whitestone in February 2010. Results of the investigations conducted in this area of the site are provided in Section 4.0 of this report.

**Comment 18:** "Based on a review of a survey plan received for the subject property, please also expand the SRIW to investigate the "possible underground tank from previous survey" noted on the south side of the strip mall building."

**Response:** The "possible underground tank from previous survey" was investigated by Whitestone in February 2010 with results documented in Section 4.0 of this report.

**Comment 19:** "Please provide an updated project schedule. The supplemental investigation work should be completed first and the results included in the comprehensive RIR. Should the data indicate that, for instance, a SSDS is necessary, an Interim Remedial Measure (IRM) work plan should be prepared and submitted to the agencies for review and approval."

Response: An updated Project Schedule is included in Section 7.0 of this report.

Comment 20: "Section 2.1.1 - please include a site plan that shows the entire site, including the tax parcels. This section states that Figure 2 shows the entire site, but it is not reflective of the entire 3.3-acre parcel."

**Response:** See Figures 1 and 2 of this report.

**Comment 21:** "Section 3.1 - a copy of the NYSDOH's product inventory and building questionnaire form that should be filled out for each location/tenant space sampled is attached."

**Response:** Copies of the NYSDOH *Indoor Air Quality Questionnaire and Building Inventory* forms which were completed during each indoor air sampling event are included as Appendix I of this report.

**Comment 22:** "Section 3.2 - the proposed concurrent sub-slab and indoor air samples should be collected over an 8-hour period."

**Response:** Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

Comment 23: "Section 3.2 - the detection limits for TCE, vinyl chloride and carbon tetrachloride must be 0.25 micrograms per cubic meter (ug/m³) for indoor and outdoor air samples. Detection limits for all compounds need to be 1 ug/m³ for sub-slab and soil gas samples as this was a problem in the first round of sampling. During the soil vapor intrusion testing done in March 2008, TCE was detected in the indoor air at 15.9 ug/m³ and the report states that TCE was not detected in sub-slab vapor. However, all of the sub-slab samples had elevated detection limits ranging from 18.4 to 46.8 ug/m³."

**Response:** Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

**Comment 24:** "Section 3.2 - the air samples collected should have the negative inches of mercury in the SUMMA canisters recorded prior to sample collection and at the end of the 8-hour period."

**Response:** Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report.

**Comment 25:** "Section 3.2 - please note that the heating season runs from November 15th through March 31st. Page 7 lists November 1st as the start of the heating season."

**Response:** The SVI investigation was conducted within the heating season on February 18, 2010. Results of additional SVI investigations conducted by Whitestone to address this comment are provided in Section 4.0 of this report. Post-mitigation air sampling conducted following the installation of the SSDS was also completed within the heating season. Details regarding this sampling event are provided the Section 5.0 of this report.

Comment 26: "Section 3.2 - proposed soil vapor sample SS-7 should be shifted to a location just north of MW-5 to better assess vapor migration from the dry cleaners. Please note that the sample location should be off-set by at least 5 feet from MW-5 to avoid short-circuiting from the existing monitoring well."

**Response:** As discussed on the January 13, 2010 conference call, proposed soil vapor sample location SS-7 was not shifted due to access constraints associated with the adjoining McDonald's parcel. Specifically, shifting this proposed location was not feasible due to the location and operation of the McDonald's drivethru lane.

Comment 27: "Section 3.3 - this section is incomplete and will not be accepted as is. A separate document should be submitted that details testing procedures and system design specifications."

**Response:** Additional details pertaining to the communication testing performed as part of the SVI investigation activities are included in Section 4.0 of this report. These results as well as the final design of the SSDS were also provided to NYSDEC in Whitestone's April 7, 2010 *Sub-Slab Depressurization System Design Plan*.

#### **SECTION 4.0**

# **Summary of Supplemental Remedial Investigations**

#### 4.1 SUPPLEMENTAL REMEDIAL INVESTIGATIONS

A summary of the RI activities implemented to address NYSDEC's and NYSDOH's comments documented in the December 11, 2009 letter issued by NYSDEC pertaining to Whitestone's June 24, 2009 RIR & SRI/CAW and September 30, 2009 SRIW and conducted in accordance with Whitestone's January 21, 2010 SRIW as approved by NYSDEC and NYSDOH on February 3, 2010 is provided in Sections 4.1 through 4.6. The supplemental RI was completed in February 2010 under the supervision of a Professional Engineer pursuant to the project's *Site Health and Safety Plan* (SHASP) as previously provided in JRH's September 2007 SIW.

Soil and groundwater samples collected during this RI phase were submitted to Hampton Clarke-Veritech (HCV) (New York Certified Lab#11408) along with contingency duplicate samples (per JRH's 2007 SIW), trip blanks, and field blanks for laboratory analyses. Air samples collected during this investigation were submitted to Alpha Analytical Laboratories (New York Certified Lab#11627). Analytical results for the February 2010 and March 2010 soil and/or groundwater sampling events are summarized in Tables 1 through 3. Groundwater level measurements are listed in Table 4. Results of the SVI investigation are outlined in Table 5 and communication test results are included as Table 6.

#### 4.2 SUPPLEMENTAL SOIL AND GROUNDWATER INVESTIGATION

#### 4.2.1 Suspected UST Investigation (Comment 18)

Based on NYSDEC's Comment 18 and a site survey not previously provided to Whitestone, a suspected UST location had been identified in the parking lot area to the southeast of the retail-strip building. A GPR survey was conducted at the subject property on February 17, 2010 in an effort to locate the suspected UST location. A magnetic locator was also utilized to supplement the effort of the GPR unit.

The GPR survey did not identify an anomaly indicative of an UST or an UST excavation in this area. Accordingly, one boring (ST-1) was advanced using Geoprobe sampling equipment on the downgradient side of the suspected UST location based on the site survey for site characterization purposes. One shallow soil sample (ST-1S), one deep soil sample (ST-1D), and one groundwater sample (ST-1GW) were collected from this boring and analyzed for VOCs and SVOCs by USEPA Methods 8260/8270. The groundwater sample was collected through the installation of a PVC temporary wellpoint. Soil samples were screened with a photoionization detector (PID) for evidence of VO contamination. The soil analytical results from this sampling event were compared with the appropriate 6 NYCRR Part 375 SCOs and groundwater results were compared to NYSDEC TOGS WQS. Boring locations were backfilled with soil and bentonite, and patched

at the surface with asphalt of concrete as appropriate. The locations of these borings are shown on Figure 2 with boring logs provided in Appendix B.

As listed in Table 1, the VOC acetone was detected in soil samples ST-1S (0.15 ppm) and ST-1D (0.11 ppm) at concentrations exceeding the NYSDEC Remedial Program Unrestricted Use SCO (based on the NYSDEC Protection of Groundwater SCO) of 0.05 ppm, however, these concentrations do not exceed the NYSDEC Remedial Program Restricted Use Commercial SCO of 500 ppm. According to a May 13, 2010 letter from the HCV Quality Assurance (QA) director (included in Appendix E), the acetone concentrations detected in these soil samples are the result of laboratory contamination. Acetone is a common laboratory contaminant and is not considered a contaminant of concern for this investigation or the site. The SVOCs benzo[b]fluoranthene (1.1 ppm) and indeno [1,2,3-cd]pyrene (0.56 ppm) were detected in shallow soil sample ST-1S at concentrations slightly exceeding NYSDEC Remedial Program Unrestricted Use SCOs of 1 ppm and 0.5 ppm, respectively. However, these concentrations do not exceed NYSDEC Remedial Program Restricted Use Commercial SCOs of 5.6 ppm. The detections are suspected to be associated with fill materials at the site and in the boring. Mercury (0.24 ppm), chromium (10 ppm), lead (230 ppm), calcium (15,000 ppm), iron (37,000 ppm), and zinc (250 ppm) were detected in shallow soil sample ST-1S at concentrations exceeding NYSDEC Remedial Program Unrestricted Use SCOs, however, these concentrations do not exceed the NYSDEC Remedial Program Restricted Use Commercial SCOs. Iron was also detected in soil sample ST-1D at a concentration (17,000 ppm) above the NYSDEC Remedial Program Unrestricted Use SCO of 2,000 ppm. There are no NYSDEC Restricted Use Commercial SCO or Protection of Groundwater SCO for iron. With the exception of iron (which only has a NYSDEC Restricted Use Residential SCO), the metals detected in this area only exceeding the NYSDEC Remedial Program Protection of Ecological Resources SCO which are not applicable to the completely developed subject property and iron is a naturally occurring metal. The metals detections are suspected to be associated with fill material at the site. As listed in Table 2, groundwater sample ST-1GW did not exhibit VOC or SVOC exceedences of NYSDEC TOGS WQS.

The pesticide p,p'-DDD was detected in soil sample ST-1S at a concentration (0.0043 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO of 0.0033 ppm, however, at a concentration below the Restricted Use Commercial SCO of 93 ppm. This pesticide detection only exceeds the NYSDEC Remedial Program Protection of Ecological Resources SCO which is not applicable to the completely developed subject property.

The soil sampling and analyses results pertaining to this comment are provided in Table 1 (Soil Sampling and Analyses Data Summary) and groundwater sampling and analyses results pertaining to this comment are provided in Table 2 (Groundwater Sampling and Analyses Data Summary [Temporary Wellpoints]) with the formal laboratory package provided in Appendix D (on disk). The DUSR confirming the reliability of the analytical data is attached as Appendix E and described in Section 4.6 below.

#### 4.2.2 Utility Investigation (Comment 4)

The GPR survey along with utility locating equipment were utilized to identify utility corridors and other potential subsurface structures in an effort to develop the Site Conceptual Model and identify potential preferential pathways. With the exception of site utilities, no other subsurface structures were identified during the survey. Based on the survey as well as inspections conducted throughout the site buildings, preferential pathways which could alter soil, groundwater, or soil vapor conditions at the site generally were not identified. Locations of subsurface utilities are shown on Figure 3. The SSDS discussed in Section 5.0 of this report currently prevents the migration of soil vapors through utility corridors or other potential pathways. With the exception of the combined sewer line, site utilities located downgradient of the drycleaners are not located below the groundwater table and would not impact contaminant migration, if present. Although the combined sewer line is located at or slightly below the groundwater table, elevated contaminant concentrations (with the exception of naturally occurring compounds) have not been detected in the vicinity of the sewer line. Accordingly, the sewer line would not impact contaminant migration and has not been documented to be contributing to on-site groundwater contaminant conditions.

#### 4.2.3 Supplemental Site Characterization

#### Comment 10

Whitestone's previous investigations have identified a southwesterly groundwater flow direction at the site. To confirm or deny contaminant migration to the southwest of the retail-strip building, one additional shallow (MW-8) and deep soil borings (WB-5) were installed to the southwest of the retail-strip building as shown on Figure 2. Whitestone utilized Geoprobe sampling equipment to advance these soil borings in a manner consistent with JRH's September 2007 SIW. Per the SIW, the shallow boring was completed as a monitor well (MW-8). Field screening and visual observations of deep boring WB-5 did not indicate the presence of contamination. Accordingly, this boring was not completed as a groundwater monitor well. The boring was backfilled with soil and bentonite, and patched with asphalt.

On February 17, 2010, soil and groundwater were sampled from the borings/well in a manner consistent with JRH's 2007 SIW and NYSDEC's May 12, 2008 SIWA. Deep soil samples (MW-8S-B and WB-5) and a groundwater sample (WB-5GW) were collected and analyzed for TCL+30/TAL compounds. In addition, since shallow site soils previously had not been characterized, one shallow soil sample (MW-8S-A) was collected from the top two feet of the shallow boring advanced in this portion of the site and analyzed for TCL+30/TAL compounds. The soil analytical results from this sampling event were compared with the appropriate 6 NYCRR Part 375 SCOs and groundwater results were compared to NYSDEC TOGS WQS. The locations of these borings/well are shown on Figure 2 with boring/well construction logs provided in Appendix B.

As listed in Table 1, the VOC acetone was detected in soil sample MW-8S-B at a concentration (0.094 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO (based on the NYSDEC Protection of Groundwater SCO) of 0.05 ppm, however, this concentration does not exceed the NYSDEC Remedial Program Restricted Use Commercial SCO of 500 ppm. According to a May 13, 2010 letter from the HCV QA director, the acetone concentration detected in this soil sample is the result of laboratory contamination. Acetone is a common laboratory contaminant and is not considered a contaminant of concern for this investigation or the site.

Select SVOCs including benzo[a]pryrene (1.8 ppm), benzo[a]anthracene (1.5 ppm), benzo[b]fluoranthene (2.2 ppm), chysene (1.4 ppm), dibenzo[a,h]anthracene (0.4 ppm), and indeno[1,2,3-cd]pyrene (1.2 ppm) were detected in shallow soil sample MW-8S-A at concentrations exceeding their NYSDEC Remedial Program Unrestricted Use SCOs of 1 ppm, 1 ppm, 1 ppm, 1 ppm, 0.33 ppm, and 0.5 ppm, respectively (total SVOC concentrations less than 500 ppm). Benzo[a]pyrene was detected at a concentration exceeding the NYSDEC Remedial Program Restricted Use Commercial SCO in this sample of 1 ppm. The remaining SVOC detections in soil sample MW-8S-A did not exceed the NYSDEC Remedial Program Restricted Use Commercial SCOs. Benzo[a]pyrene was also detected in deep soil sample WB-5 at a concentration (3.9 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO and Restricted Use Commercial SCOs of 1 ppm. None of the SVOC concentrations exceeded NYSDEC Protection of Groundwater SCOs. These SVOCs detections are suspected to be associated with fill material at the site and in the boring.

Mercury (0.59 ppm), lead (230 ppm), calcium (13,000 ppm), iron (14,000 ppm), and zinc (150 ppm) were detected in shallow soil sample MW-8S-A; chromium (37 ppm), aluminum (14,000 ppm), and iron (19,000 ppm) were detected in soil sample WB-5; and aluminum (12,000 ppm) and iron (20,000 ppm) were detected in soil sample MW-8S-B at concentrations exceeding NYSDEC Remedial Program Unrestricted Use SCO, however, these concentrations do not exceed NYSDEC Remedial Program Restricted Use Commercial SCOs. With the exception of iron (which only has a NYSDEC Restricted Use Residential SCO of 2,000 ppm), the metals detected in this area only exceed the NYSDEC Remedial Program Protection of Ecological Resources SCOs which are not applicable to the completely developed subject property and iron is a naturally occurring metal. The metals detections are suspected to be associated with fill material at the site.

As listed in Table 2, sodium was detected in both filtered and unfiltered groundwater sample WB-5GW at concentrations (up to 34,000 ppb) exceeding the NYSDEC TOGS WQS of 20,000 ppb. Aluminum, iron, and lead were detected in unfiltered groundwater sample WB-5GW at concentrations exceeding NYSDEC TOGS WQS. The detected metals levels appear representative of natural background conditions. No other exceedences of NYSDEC TOGS WQS were documented in groundwater sample WB-5GW.

The soil sampling and analyses results pertaining to this comment are provided in Table 1 (Soil Sampling and Analyses Data Summary) and the groundwater sampling and analyses results pertaining to this comment are provided in Table 2 (Groundwater Sampling and Analyses Data Summary [Temporary Wellponts]) with

the formal laboratory package provided in Appendix D (on disk). The DUSR confirming the reliability of the analytical data is attached as Appendix E and described in Section 4.6 below.

#### Comments 16 and 17

Shallow soil boring WB-6 and deep soil boring WB-7 were installed to the north of the Walgreens building and shallow soil boring WB-8 and deep soil boring WB-9 were installed to the west of the Walgreens building in an effort to characterize Parcel P-25B as discussed on the January 13, 2010 conference call with NYSDEC and NYSDOH. Soil and groundwater samples were collected from these borings pursuant to JRH's September 2007 SIW and NYSDEC's May 12, 2008 SIWA and analyzed for TCL+30/TAL compounds. Field screening and visual observation of borings WB-6 through WB-9 did not indicate the presence of contamination. Accordingly, these borings were not completed as groundwater monitor wells. Boring locations were backfilled with soil and bentonite, and patched at the surface with asphalt of concrete as appropriate. The soil boring locations are identified on Figure 2. The soil analytical results from this sampling event were compared with the appropriate 6 NYCRR Part 375 SCOs and groundwater results were compared to NYSDEC TOGS WQS.

As listed in Table 1, soil sample WB-6 collected from above the confining layer of the shallow boring advanced to the north of the Walgreens building identified chromium (40 ppm), aluminum (14,000 ppm), and iron (20,000 ppm) at concentrations exceeding NYSDEC Remedial Program Unrestricted Use SCOs of 30 ppm, 10,000 ppm, and 2,000 ppm, respectively. Aluminum was also detected in soil sample WB-7 at a concentration (13,000 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO of 10,000 ppm. These concentrations are below the NYSDEC Remedial Program Restricted Use Commercial SCOs and Protection of Groundwater SCOs, and appears be representative of natural background concentrations. The aluminum concentrations detected in this area only exceed the NYSDEC Remedial Program Protection of Ecological Resources SCO which are not applicable to the completely developed subject property. Iron is a naturally occurring metal. Soil sample WB-6 (0.088 ppm) and soil sample WB-7 (0.054 ppm) exhibited acetone at concentrations exceeding the NYSDEC Remedial Program Unrestricted Use SCO of 0.05 ppm (which is based on the NYSDEC Protection of Groundwater SCO), however, below the NYSDEC Restricted Use Commercial SCO. According to a May 13, 2010 letter from the HCV QA director, the acetone concentrations detected in these soil samples are the result of laboratory contamination and, accordingly, are not contaminants of concern for the site. No other exceedences of NYSDEC SCOs were identified in soil samples WB-6 and WB-7.

As listed in Table 2, groundwater samples collected from borings WB-6 (WB-6GW) and WB-7 (WB-7GW) exhibited select metals at concentrations exceeding NYSDEC TOGS WQS. Iron, magnesium, manganese, and sodium were detected in the unfiltered and/or filtered groundwater samples collected from these borings at concentrations exceeding NYSDEC TOGS WQS. Only elevated concentrations of sodium (400,000 ppb and 350,000 ppb) and manganese (1,400 ppb and 2,900 ppb) were detected in the filtered samples exceeding

the NYSDEC TOGS WQS of 20,000 ppb and 600 ppb, respectively. These metal exceedances appear to be representative of natural background concentrations.

As listed in Table 1, the VOC acetone was detected in soil sample WB-8D at a concentration (0.091 ppm) exceeding the NYSDEC Remedial Program Unrestricted Use SCO of 0.05 ppm (which is based on the NYSDEC Protection of Groundwater SCO), however, this concentration does not exceed the NYSDEC Remedial Program Restricted Use Commercial SCO of 500 ppm. According to a May 13, 2010 letter from the HCV QA director, the acetone concentration detected in this soil sample is the result of laboratory contamination and, accordingly, is not a contaminant of concern for this site. The SVOC indeno[1,2,3-cd]pyrene was detected in shallow soil sample WB-8S at a concentration (0.53 ppm) slightly exceeding the NYSDEC Remedial Program Unrestricted Use SCO of 0.5 ppm, however, this concentration does not exceed the NYSDEC Remedial Program Restricted Use Commercial SCO of 5.6 ppm. This detection is suspected to be associated with fill material at the site and in the boring.

Mercury (0.31 ppm and 0.22 ppm) and iron (12,000 ppm and 18,000 ppm) were detected in soil samples WB-8S and WB-8D and iron (19,000 ppm) was detected is soil sample WB-9 at concentrations exceeding NYSDEC Remedial Program Unrestricted Use SCOs, however, these concentrations do not exceed NYSDEC Remedial Program Restricted Use Commercial SCOs. Lead (130 ppm), calcium (33,000 ppm), and zinc (150 ppm) were also detected in shallow soil sample WB-8S at concentrations exceeding NYSDEC Remedial Program Unrestricted Use SCOs, however, these concentrations do not exceed NYSDEC Remedial Program Restricted Use Commercial SCOs. With the exception of iron (which only has a NYSDEC Restricted Use Residential SCO of 2,000 ppm), the metals detected in these areas only exceed the NYSDEC Remedial Program Protection of Ecological Resources SCOs which are not applicable to the completely developed subject property. Iron is a naturally occurring metal. The metals detections are suspected to be associated with fill material and/or naturally occurring concentrations at the site.

As listed in Table 2, sodium (up to 410,000 ppb), iron (up to 760 ppb), manganese (up to 1,100 ppb), and/or magnesium (up to 62,000 ppb) were detected at concentrations exceeding NYSDEC TOGS WQS of 20,000 ppb, 600 ppb, 600 ppb, and 35,000 ppb, respectively, in the filtered groundwater samples. These concentrations are suspected to be associated with naturally occurring metals.

The soil sampling and analyses results pertaining to this comment are provided in Table 1 (Soil Sampling and Analyses Data Summary) and the groundwater sampling and analyses results pertaining to this comment are provided in Table 2 (Groundwater Sampling and Analyses Data Summary [Temporary Wellpoints]) with the formal laboratory package provided in Appendix D (on disk). A DUSR confirming the reliability of the analytical data are attached as Appendix E and described in Section 4.6 below.

## 4.2.4 Monitor Well Sampling and Gauging (Comment 10)

On March 9, 2010, monitor well MW-8 was surveyed to establish its location and elevation. Following the surveying effort, one round of groundwater sampling was conducted from monitor well MW-8 and submitted for TCL+30/TAL analyses along with a duplicate sample and the appropriate trip and field blanks in accordance with JRH's 2007 SIW. Monitor well MW-8 as well as the remaining on-site and off-site monitor wells (MW-1 through MW-7) were gauged at this time to establish groundwater flow direction. The wells were also gauged to evaluate groundwater flow direction in June 2010. These two gauging events along with Whitestone's prior gauging events satisfy the requirements of JRH's 2007 SIW and NYSDEC's comment. The sampling and gauging was conducted as outlined in JRH's September 2007 SIW and NYSDEC's May 12, 2008 SIWA. Groundwater level measurements are included in Table 4 and *Groundwater Contour Maps* measured in March 2010 and June 2010 are provided as Figures 4 and 5, respectively.

As listed in Table 3, magnesium (40,000 ppb), sodium (250,000 ppb), manganese (1,700 ppb), and iron (33,000 ppb) were detected in filtered groundwater sample MW-8 at concentrations exceeding their NYSDEC TOGS WQS of 35,000 ppb, 20,000 ppb, 600 ppb, and 600 ppb, respectively. These metals detections appear representative of natural background conditions. No other exceedences of NYSDEC TOGS WQS were documented in the groundwater sample collected during this sampling event.

The groundwater sampling and analyses results pertaining to this comment are provided in Table 3 (Groundwater Sampling and Analyses Data Summary (Monitor Well MW-8 - March 9, 2010) with the formal laboratory package provided in Appendix D (on disk). A DUSR confirming the reliability of the analytical data are attached as Appendix E and described in Section 4.6 below.

### 4.3 DISPOSAL OF INVESTIGATION DERIVED WASTES

Purged water and drill cuttings generated during the monitor well/boring installation and sampling activities were drummed and transported from the site for regulated disposal on May 12, 2010. Disposal documentation is attached in Appendix F. Waste classification sampling and laboratory analyses were not required.

## 4.4 SUPPLEMENTAL AIR QUALITY INVESTIGATION

## 4.4.1 Product Inventory Inspection (Comment 11c)

Prior to the supplemental sub-slab and indoor air sampling activities, a product inventory inspection was conducted to identify any potential sources of PCE, TCE, and/or other contaminants within Van Tassel Cleaners as well as the four adjoining tenants located in the retail-strip building. During the product inventory inspection, NYSDOH *Indoor Air Quality Questionnaire and Building Inventory* forms were

completed for each of the tenants of the building. Copies of the forms for each of the tenants are included in Appendix I of this report.

As listed on the forms, various cleaners and stain removers were identified in the drycleaners unit. A review of the *Material Safety Data Sheets* (MSDSs) for these products revealed that the stain remover Picrin is composed entirely of TCE. The MSDSs for the cleaners/stain removers Pyratex and Streetex identified in the drycleaners unit did not report their specific chemical compositions as they are trade secrets. These products are used on a daily basis in the drycleaning operation, and could not be removed prior to the subslab or indoor air sampling activities.

Product inventory inspections for the remaining tenants did not identify any potential sources of PCE or TCE. Disinfectants and sterilizers including rubbing alcohol were noted in Tappen Zee Dental Group. A complete inventory of the products used in the laundromat could not be conducted as patrons of this unit continuously bring various detergents/cleaners to the facility for use in the washing machines.

## 4.4.2 Sub-Slab and Indoor Air Quality Sampling (Comments 11, 13 to 15, and 21 to 25)

One sub-slab soil gas sample was collected within Van Tassel Cleaners as well as in each of the four units located within the retail-strip structure (former Tappen Zee Dental Group [currently vacant], the laundromat, the former video store [currently vacant], and the dollar store) in order to investigate the potential for SVI. Concurrently, one indoor air sample was collected from within each of the five units which occupy the structure.

Soil gas vapor samples were also collected to assess the potential for SVI into the adjacent McDonald's restaurant. Specifically, one soil gas vapor sample was collected immediately northwest and one soil gas vapor sample was collected immediately southwest of the drycleaners unit to assess the potential for SVI into the McDonald's restaurant. Whitestone attempted to collect one additional soil gas vapor sample in the parking lot area to the southeast of the drycleaners unit to assess the potential for SVI into the Walgreens building, however, due to the presence of trapped water in the subbase beneath the asphalt pavement in this area, this sample could not be properly collected. One ambient air quality sample was also collected from outside the retail-strip building to establish background conditions.

The sub-slab, soil gas, indoor air, and ambient air samples were collected over the same 8-hour duration utilizing Summa canisters and submitted to Alpha Analytical Laboratories, a NYSDOH-certified laboratory, for VOC analyses by USEPA Method TO-15. The samples were collected utilizing the methodologies outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). The negative inches of mercury contained within the Summa canisters were recorded prior to and following sample collection and are displayed on the laboratory chain of custody (provided in Appendix I). The sample locations are identified on Figure 2. The analytical results from this sampling event are provided in Table 5 and were compared with the criteria outlined in NYSDOH's *Guidance for Evaluating Soil Vapor* 

*Intrusion in the State of New York* (October 2006). Elevated laboratory reported detection limits were not identified in the analytical data. Following sub-slab and soil gas vapor sampling, the sampling holes were sealed with concrete or asphalt, as appropriate.

The SVI sampling activities were conducted on February 18, 2010 during the heating season which runs from November 15<sup>th</sup> through March 31<sup>st</sup>. As listed in Table 5, the analytical results identified select VOC exceedances of NYSDOH's Soil Vapor/Indoor Air Matrices. PCE was detected in sub-slab air sample SS-1 at a concentration of 220 ug/m³ and indoor air sample IAQ-1 at a concentration of 57.4 ug/m³ from the drycleaners unit warranting mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 2. PCE was not identified at concentrations warranting further monitoring or mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 2 in the sub-slab or indoor air samples from the four adjoining units.

TCE was detected in sub-slab air sample SS-1 at a concentration of 13.4 ug/m³ and indoor air sample IAQ-1 at a concentration of 2.89 ug/m³ from the drycleaners unit warranting additional monitoring per to NYSDOH's Soil Vapor/Indoor Air Matrix 1. PCE was not identified at concentrations warranting further monitoring or mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 1 in the sub-slab or indoor air samples from the four adjoining units. PCE and TCE as well as methylene chloride were not detected at concentrations exceeding NYSDOH Air Guidance Values in the indoor air samples.

Additional VOCs including acetone, chloroform, isopropanol, and ethanol were detected in select sub-slab and/or indoor air samples at slightly elevated levels. The most elevated levels of acetone (20.1 ug/m³), ethanol (349 ug/m³), and isopropanol (624 ug/m³) detected in indoor air were documented in Tappen Zee Dental Group. The presence of these compounds is attributable to the disinfectants and sterilizers including rubbing alcohol utilized within the dental facility. Products containing isopropanol also were identified in the video store and products containing ethanol were identified in the drycleaners and dentist. Chloroform was detected at a slightly elevated concentration (34.6 ug/m³) in indoor air in the laundromat. The presence of chloroform may be attributable to clothing dyes present in the laundromat on a daily basis. The remainder of the VOCs detected exceeding laboratory reported detection limits appear to be contributable to background conditions, products stored in the individual units, or off-gasing building materials. With the exception of PCE and TCE, the VOCs detected at the site are not compounds of concern.

CAs including the installation and operation of a SSDS as on EC to mitigate the elevated PCE and TCE concentrations are described in Section 5.0 of this report.

## 4.4.3 Communication Testing (Comment 27)

Following Whitestone's review of the results of the sub-slab and indoor air sampling activities, communication testing was performed to confirm that vapors would be drawn from underneath the entire floor slab of the drycleaners unit as the SVI investigation documented PCE and TCE concentrations requiring mitigation and monitoring. Communication testing in the two adjoining units (former Tappen Zee Dental

Group [currently vacant] and the laundromat) also was conducted to ensure the protection of air quality in these units. The communication testing consisted of drilling three holes through the drycleaner's flooring and concrete slab. These borings were terminated in the sub-base material immediately beneath the floor slab. One boring location was installed in the location of the future SSDS unit and the two other borings were installed in the two locations within the unit that were furthest from the SSDS location to ensure that a vacuum can be created across the entire floor slab of the unit. The former locations utilized to collected the sub-slab air samples in the two adjoining units were re-established in an effort to confirm that vapors would also be drawn from underneath these units. Hand-held, digital micromanometers with the ability to measure inches of water column (wc) of pressure to the ten thousandth of an inch of a wc (with an accuracy of one percent) were placed in the holes away from the proposed SSDS unit location to evaluate/measure pressure differentials while a vacuum was applied at the proposed SSDS location test hole.

The micromanometers were utilized to confirm that a preferred pressure differential of 0.0025 inches we to 0.0035 inches we could be achieved across the floor slab in the drycleaners unit as well as the two adjoining units (former Tappen Zee Dental Group [currently vacant] and the laundromat). A portable device capable of establishing comparable vacuum pressure to a SSDS was utilized to complete the communication testing. The device utilized for the testing was capable of extracting approximately 90 cubic feet per minute (CFM) of air. A meter was utilized to confirm the CFM of air being removed to create the required vacuum pressure across the floor slabs. Based on the results of the initial communication testing, a pressure differential of 0.0026 inches we was detected at the furthest sampling point (the laundromat). Pressure differentials in the drycleaners unit ranged for 0.0029 to 0.0041 inches we. The holes in the floor slab were sealed following the communication test using concrete patch.

## 4.5 COMMUNITY AIR MONITORING PLANS - WHITESTONE/QUEST

The NYSDOH requires continuous real-time monitoring for VOCs and particulates at the downwind perimeter of each designated work area when ground intrusive activities, such as the installation of soil borings and monitoring wells, are in progress at a contaminated site. These activities were conducted by Whitestone between 2008 and 2010 during the RIs.

Upon arrival to the site each day during the intrusive RI activities, Whitestone identified a downwind perimeter location where real-time monitoring instruments would be staged. In addition, perimeter samples were also collected upon arrival to the site to establish background. A RaeSystems Mini-Rae 2000 PID with a 10.6 ev lamp was utilized to monitor VOCs in the air, a RaeSystems Multi-Gas Meter was utilized to monitor combustible gases, and a Dust Trak Model 8520 logged particulate concentrations.

Each unit was calibrated at the beginning of each day and as necessary thereafter, and was operated continuously during all intrusive activities. Each unit was pre-programmed to calculate a 15-minute average of the readings collected. The logged data from the PID, MultiRae, and Dust Trak were recorded at the end of each day, and are presented in Appendix H for the 2010 RI activities. Community air monitoring data

are not available for the 2008/2009 RI activities. Whitestone was not provided documentation regarding the community air monitoring program conducted by Quest.

The implementation of CAs due to exceedance of action limits in accordance with the NYSDOH Generic Community Air Monitoring Plan (CAMP) was not required during any of the intrusive field activities completed during the RIs.

## 4.6 DATA VALIDATION SUMMARY - CURRENT/ HISTORIC

Data validation was provided by an independent chemist subcontracted by Whitestone to provide this service. Ms. Valerie Smith of Payson, Arizona performed data validation of the laboratory data packages from the RI activities and prepared the DUSRs. The DUSRs prepared for the RI activities conducted by Whitestone between 2008 and 2010 and Quest in 2008 are included in Appendix E. DUSRs could not be completed for the laboratory analytical data conducted by others between 1998 and 2008 due to the limited or lack of data available for these investigations. Available data was only provided in summary formats. The previous data (1998 to 2008) were reviewed and evaluated by Whitestone to determine the data's usability in preparing the Site Conceptual Model. Review of the data determined that the results were acceptable to be used in the development of the Site Conceptual Model along with the other available data. Electronic data summaries (EDSs) for Whitestone's investigations are being provided on disk.

The purpose of a DUSR is to determine whether or not the data, as provided by the laboratory, meets project-specific data quality objectives (DQOs). The data review leading up to the production of the DUSR provides a thorough evaluation of analytical data and determines whether the laboratory data packages and data conform to the appropriate NYSDEC regulations and methods, that all data including quality control data has been generated using and falls within the analytical protocols, and that the correct data qualifiers have been used. According to the DUSR prepared by Ms. Smith for Whitestone and Quest's RI activities, all data that has been provided by HCV, Alpha Analytical Laboratory, and York Analytical Laboratories, Inc. is over 95 percent usable and, therefore, is adequate to support any recommendations and conclusions pertaining to the site.

## **SECTION 5.0**

## **Corrective/Mitigative Actions**

### 5.1 CORRECTIVE/MITIGATIVE ACTIONS

As outlined in Section 4.0 of this CRI/FER, elevated concentrations of PCE and TCE were detected in the sub-slab and indoor air samples collected from Van Tassel Cleaners warranting further monitoring and/or mitigation. Additional VOCs including acetone, chloroform, isopropanol, and ethanol were detected in select sub-slab and/or indoor air samples at slightly elevated levels. The most elevated levels of acetone, ethanol, and isopropanol detected in indoor air were documented in the former Tappen Zee Dental Group unit. The presence of these compounds is attributable to the disinfectants and sterilizers including rubbing alcohol utilized within the dental facility. Chloroform was detected at a slightly elevated concentration in indoor air in the laundromat. The presence of chloroform may be attributable to clothing dyes present in the laundromat on a daily basis. The remainder of the VOCs detected exceeding laboratory reported detection limits appear to be contributable to background conditions, products stored in the individual units, or offgasing building materials. With the exception of PCE and TCE, the VOCs detected at the site were not compounds of concern.

As discussed with NYSDEC and NYSDOH during the March 3, 2010 conference call, Whitestone proposed the installation of a SSDS in the drycleaners unit of the retail-strip building to mitigate the elevated TCE and PCE concentrations impacting indoor air quality. Details pertaining to the design of the SSDS are outlined below.

## 5.2 SSDS INSTALLATION

In accordance with Whitestone's April 7, 2010 Sub-Slab Depressurization System Design Plan and Westchester County Department of Health (WCDOH) Permit No. 52-7276, a SSDS was constructed at the site on July 28, 2010. The SSDS consists of a four-inch diameter PVC pipe installed in the sub-base immediately below the dry cleaning unit's floor slab which extends vertically upward through the roof and connects to a motorized fan and exhaust stack. The SSDS installation was completed under the supervision of a Professional Engineer pursuant to the project's SHASP as previously provided. In accordance with Permit No. 52-7276 and Whitestone's design, the SSDS initially utilized a Radonaway Model RP-145 fan.

Following the installation of the SSDS, a series of diagnostic and communication tests were performed in order to evaluate the effectiveness of the system and confirm the system's ability to create the necessary differential pressure beneath the building floor slab. Communication test results recorded utilizing the Radonaway Model RP-145 fan (as described below) did not achieve consistent or adequate levels of differential pressure beneath the building floor slab as required by NYSDEC and NYSDOH.

Accordingly, Whitestone tested the Radonaway Model HS-5000 fan on the SSDS. The Radonaway Model HS-5000 fan is capable of creating a greater vacuum pressure in poor sub-base materials and over larger areas with a decreased exhaust volume of approximately 53 CFM. Communication test results recorded during the test utilizing the Radonaway Model HS-5000 fan (as described below) achieved sufficient, consistent levels of differential pressure across the building floor slab.

Based on the results of the communication tests, Whitestone replaced the Model RP-145 fan with the Model HS-5000 fan. Whitestone subsequently submitted the details of this alteration of the SSDS in the required WCDOH *Application for a Certificate to Operate a Source of Air Contamination*. An as-built plan of the SSDS is included as Figure 6, and SSDS specification sheets and the WCDOH permit (with backup documentation) are included in Appendix J.

## 5.2.1 Post-Installation Communication Testing

Following Whitestone's installation of the SSDS, communication testing was performed to confirm that vapors will be drawn from underneath the entire floor slab of the drycleaners unit as this unit documented PCE and TCE concentrations requiring mitigation and monitoring. Communication testing in the two adjoining units (former Tappen Zee Dental Group [currently vacant] and the laundromat) also was conducted to ensure the protection of air quality in these units. The communication testing consisted of drilling three holes through the drycleaner's flooring and concrete slab. Two of the borings were installed in the two locations within the unit that were furthest from the SSDS location to ensure that a vacuum can be created across the entire floor slab of the unit. The former locations utilized to collect the sub-slab air samples in the two adjoining units were re-established in an effort to confirm that vapors would also be drawn from underneath these units. Hand-held, digital micromanometers with the ability to measure inches of wc of pressure to the ten thousandth of an inch of a wc (with an accuracy of one percent) were placed in the holes to evaluate/measure pressure differentials while the SSDS was operating.

The micromanometers were utilized to confirm that a preferred pressure differential of 0.0025 inches we to 0.0035 inches we was achieved across the floor slab in the drycleaners unit as well as the two adjoining units. The SSDS with the Radonaway RP-145 fan was utilized to complete the communication testing performed in July 2010. Based on the results of this communication test, it was determined that the Radonaway RP-145 could not establish the required pressure differential. The insufficient results were suspected to be associated with the dense sub-base material located underneath the building floor slab.

The SSDS equipment the Radonaway HS-5000 fan was utilized to complete the final communication testing in August 2010. Based on the results of the communication testing, a pressure differential of 0.0321 inches we was detected at the furthest sampling point (laundromat). Pressure differentials in the drycleaners unit ranged for 0.0038 to 0.0244 inches we. Final communication test results are included in Table 6. The holes in the floor slab were sealed following each communication test.

## 5.3 POST-MITIGATION INDOOR AIR TESTING

## 5.3.1 Product Inventory Inspection

Prior to the post-mitigation indoor air sampling activities, a product inventory inspection was conducted to identify any potential sources of PCE, TCE, and/or other contaminants within the former Tappan Zee Dental Group (vacant) space located immediately adjacent to Van Tassel Cleaners in the retail-strip building. During the product inventory inspection, a NYSDOH *Indoor Air Quality Questionnaire and Building Inventory* form was completed for the former Tappen Zee Dental Group unit. A copy of the form is included in Appendix I.

The product inventory inspection for this unit did not identify any potential sources of PCE or TCE. No household cleaning products or former chemicals stored during Whitestone's initial SVI investigation were noted in the former Tappan Zee Dental Group unit. During this visit, Whitestone also confirmed that the heating system was operational and would remain so during to the indoor air sampling event.

## 5.3.2 Post-Mitigation Indoor Air Quality Sampling

One indoor air sample was collected within the former Tappan Zee Dental Group. Concurrently, one ambient air sample was collected from outside of the structure to establish background conditions. The indoor air and ambient air samples were collected to assess the effectiveness of the SSDS.

The indoor air and ambient air samples were collected over the same 8-hour duration utilizing Summa canisters and submitted to Alpha Analytical Laboratories for VOC analyses by USEPA Method TO-15. The samples were collected utilizing the methodologies outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). The negative inches of mercury contained within the Summa canisters were recorded prior to and following sample collection and are displayed on the laboratory chain of custody provided in Appendix I. The sample locations are identified on Figure 2. The analytical results from this sampling event are provided in Appendix D (on disk) and Table 7, and were compared with the criteria outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). Elevated laboratory reported detection limits were not identified in the analytical data.

The post-mitigation air sampling activities were conducted on January 18, 2011 during the heating season which runs from November 15<sup>th</sup> through March 31<sup>st</sup>. As listed in Table 7, the analytical results identified one VOC exceedance of NYSDOH's Soil Vapor/Indoor Air Matrices. PCE was detected at a concentration of 3.2 ug/m³ in the indoor air sample (IAS-1) collected from the former Tappan Zee Dental Group unit warranting monitoring per NYSDOH's Soil Vapor/Indoor Air Matrix 2. TCE was not identified at a concentration of 1.36 ug/m³ warranting further monitoring or mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 2 in the indoor air sample from the unit.

### 5.4 COMMUNITY AIR MONITORING

The NYSDOH requires continuous real-time monitoring for VOCs and particulates at the downwind perimeter of each designated work area when ground intrusive activities, such as the installation of soil gas sample locations, are in progress at a contaminated site.

Upon arrival to the site, Whitestone identified a downwind perimeter location where real-time monitoring instruments would be staged. In addition, perimeter samples were also collected upon arrival to the site to establish background concentrations. A RaeSystems Mini-Rae 2000 PID with a 10.6 ev lamp was utilized to monitor VOCs in the air, a RaeSystems Multi-Gas Meter was utilized to monitor combustible gases, and a Dust Trak Model 8520 logged particulate concentrations.

Each unit was calibrated at the beginning of each day and as necessary thereafter, and was operated continuously during all intrusive activities. Each unit was pre-programmed to calculate a 15-minute average of the readings collected. The logged data from the PID, MultiRae, and Dust Trak were recorded at the end of the day, and are presented in Appendix H.

The implementation of CAs due to exceedance of action limits in accordance with the NYSDOH CAMP was not required during any of the intrusive field activities completed during this phase of the RI.

### 5.5 DATA VALIDATION SUMMARY

Data validation was provided by an independent chemist subcontracted by Whitestone to provide this service. Ms. Valerie Smith of Payson, Arizona performed data validation of the laboratory data package from the air sampling activities and prepared the DUSR included in Appendix E. EDSs are being provided on disk.

The purpose of a DUSR is to determine whether or not the data, as provided by the laboratory, meets project-specific data quality objectives (DQOs). The data review leading up to the production of the DUSR provides a thorough evaluation of analytical data and determines whether the laboratory data packages and data conform to the appropriate NYSDEC regulations and methods, that all data including quality control data has been generated using and falls within the analytical protocols, and that the correct data qualifiers have been used. According to the DUSR prepared by Ms. Smith during this phase of the RI, all data that has been provided by Alpha Analytical Laboratory is over 95 percent usable, and is therefore adequate to support any recommendations and conclusions pertaining to the site.

## **SECTION 6.0**

## Site Conceptual Model

## 6.1 SOURCES OF CONTAMINATION

The retail-strip building located in the northern portion of the subject site has been occupied by a drycleaning facility since construction in 1976. This facility reportedly utilized an open-loop cleaning system from 1976 until 1980 when a closed-loop system was installed. Prior to 1976, the subject property was occupied by a variety of commercial retail uses dating back to the late-1800's. Due to the extensive use of PCE as a drycleaning solvent during the 1970's, it is believed that the source of low-level VO contamination at the site was the incidental spillage and/or discharge of drycleaning solvents within or behind the drycleaners facility. While factual information is difficult to present to substantiate this proposition, the localized low-level VO contamination (indicative of an operation that only ran for a short period of time) is supportive.

Select SVOCs, pesticides, and metals have also been identified at primarily shallow depths and at generally low concentrations throughout the subject property. These contaminants can be attributable to the fill materials that have been utilized to achieve site grades during previous development and redevelopment activities. The low-level pesticide detected in groundwater also may be the result of an off-site source.

## 6.2 NATURE AND EXTENT OF CONTAMINATION

After completion of the RI at the site, low-level soil and groundwater contamination was documented to remain (hereafter referred to as "remaining contamination"). Generally, the RI activities determined that subsurface investigations conducted within and immediately north of the on-site drycleaners in the late 1990's and early 2000's identified PCE as well as select degradation compounds of PCE at low-level concentrations in shallow soil and groundwater exceeding NYSDEC Remedial Program Unrestricted Use SCOs and NYSDEC TOGS WQS. Acetone was also detected above the NYSDEC Remedial Program Unrestricted Use SCOs, however, is considered a laboratory contaminant and not a contaminant of concern at the site. The VOCs were not detected at concentrations exceeding NYSDEC Remedial Program Restricted Use Commercial SCOs, however, PCE and methylene chloride were detected at concentrations exceeding their NYSDEC Protection of Groundwater SCOs in one soil sample. As a result of the identification of the VO contamination, a total of eight groundwater monitor wells were installed at the site along with supplemental borings to collect additional soil and groundwater data. The results of the soil and groundwater RI activities as well as initial air sampling conducted by others required a SVI investigation at the site. Results of the SVI investigation required the installation of a SSDS within the drycleaners unit to address VOCs in indoor air as well as performing post-mitigation indoor air sampling. The installation and testing of the SSDS are outlined in Section 5.0.

In addition to the low-level VOC contamination identified in the immediate vicinity of the drycleaners, select SVOCs and metals have been identified in soils located throughout the site exceeding NYSDEC Remedial Program Unrestricted Use SCOs. A single pesticide (p,p'-DDD) was also detected in one soil sample exceeding the NYSDEC Remedial Program Unrestricted Use SCO. The select SVOC, pesticides, and metals were not detected at concentrations exceeding NYSDEC Remedial Program Restricted Use Commercial SCOs with the exception of the SVOC benzo[a]pyrene. In addition, the majority of the metals concentrations and p,p'-DDD only exceed the NYSDEC Protection of Ecological Resources SCOs which are not applicable to the completely developed subject property. This soil contamination can be attributed to fill material located throughout the site and naturally occurring concentrations.

Select metals have also been identified in groundwater throughout the site exceeding NYSDEC TOGS WQS, however, these concentrations are generally consistent with and appear to be attributed to naturally occurring background conditions. The pesticide dieldrin was detected in one upgradient on-site groundwater monitor well at a concentration exceeding the NYSDEC TOGS WQS and may be the result of a potential off-site source.

Tables 8 and 9 and Figure 7 summarize the results of all soil and groundwater sample locations remaining at the site after completion of the RI that exceed NYSDEC Remedial Program Unrestricted Use SCOs or NYSDEC TOGS WQS.

## 6.3 DOMINANT FATE AND TRANSPORT CHARACTERISTICS OF THE SITE

The depth to the groundwater table at the site is approximately 5.0 fbgs to 8.0 fbgs. Groundwater flows to the southwest towards the Hudson River, which is approximately 0.33 mile west of the site. A consistent layer of fill material underlies the site to depths of approximately 7.0 fbgs. Fill material encountered by Whitestone generally consists of gray medium to fine sand with variable amounts of silt, gravel, and debris. The debris encountered in the borings consisted of brick, asphalt, concrete, and wood fragments. Soil contamination at the site has been confirmed to be generally contained in the shallow site soils.

Soil contamination at the site could be transported via erosion and/or leaching. The existing cover system as outlined in Section 7.0 of this report prevents soil erosion and reduces contaminant leaching by limiting infiltration. In addition, the SVOCs, metals, and single pesticide documented at the site in soils are generally immobile compounds and have not been documented to have impacted groundwater. The metals detections are also anticipated to be naturally occurring.

Select VOCs were detected in groundwater in select locations and dieldrin was detected in groundwater in one location at concentrations slightly exceeding NYSDEC TOGS WQS. These contaminants would migrate via groundwater flow, however, have not been documented at downgradient locations and appear to be localized.

The ICs and ECs outlined in Section 7.0 have been or will be established at the site to prevent further impacts from the remaining contamination and prevent adverse impacts to human health or the environment.

### 6.4 POTENTIAL EXPOSURE PATHWAYS

The site is capped with existing concrete, asphalt, building slabs, or landscaping which prevents any incidental ingestion or dermal exposure to low-level soil contamination from select pesticides, VOCs, SVOCs, and metals. As ecologically sensitive areas are not present on or adjacent to site, impacts to these potential receptors are not present. In addition, the nearest surface water body is located 0.33 mile from the site.

The most recent groundwater sampling event conducted at the site identified a slight exceedance of PCE in monitor well MW-3 located immediately north of the drycleaners facility and the pesticide dieldrin in monitor well MW-7 located at the most upgradient point at the site. In addition, select metals that are assumed to be naturally occurring have been detected throughout the site. Ingestion of this groundwater or dermal contact is restricted by the fact that the site and surrounding properties are serviced by the municipal water system and the groundwater table is located at depths of 5.0 fbgs to 8.0 fbgs. Production wells also are not located on or within close proximity to the subject property.

Due to the presence of low-level VO concentrations in soil and groundwater in the vicinity of the drycleaners, the exposure pathway for SVI was a concern at the site. Accordingly, a SVI investigation was performed. As outlined in Section 4.0 of this CRI/FER, elevated concentrations of PCE and TCE were detected in the sub-slab and indoor air samples collected from Van Tassel Cleaners warranting further monitoring and/or mitigation. Due to the presence of this exposure pathway to workers within the retail-strip building, a SSDS was installed to draw vapors from beneath the floor slab and vent them above the roof of the site building. Diagnostic tests and post-mitigation air sampling were conducted to confirm that the SSDS would mitigate the SVI concern. SVI investigations (soil gas sampling) have not identified potential impacts to other structures in the vicinity of the drycleaners including the McDonald's restaurant.

Based on the utility survey conducted at the site, preferential pathways for contaminant migration have not been identified.

## 6.5 POTENTIALLY IMPACTED RECEPTORS

Due to the installation of the SSDS at the site and the presence of existing site caps, a limited potential for impacted receptors remains. Workers who perform excavation work on the property in the future may be exposed to impacted soil and/or groundwater. Future subsurface work will be performed by properly trained personnel using methods specified in a site-specific HASP and the SMP. As ecologically sensitive areas are not present on or adjacent to the site, impacts to these potential receptors are not present. The ICs and ECs outlined in Section 7.0 of this report have been established to prevent exposure to any potential receptors.

# SECTION 7.0 Site Management Plan Summary

## 7.1 SUMMARY OF SITE MANAGEMENT PLAN COMPONENTS

Since contaminated soil, groundwater, and soil vapor remains at the site, ECs and ICs are required to protect human health and the environment. The ICs and ECs are described in the following sections. Long-term management of the EC/ICs and residual contamination will be performed under a SMP as required by NYSDEC and in accordance with the Environmental Easement recorded for the site (Appendix N).

### 7.2 ENGINEERING CONTROLS

## 7.2.1 Engineering Control Systems

## 7.2.1.1 Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a cover system placed over the site. This cover system is comprised of a minimum of six inches of existing topsoil, four inches of asphalt pavement, three inches of concrete sidewalks, and four inches of concrete building slabs. The cover system is depicted on Figure 8 - *Location of Cover System Types*. The *Excavation Work Plan* of the SMP 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 system are provided in the *Monitoring Plan* included in Section 3 of the SMP and are summarized below.

## 7.2.1.2 Sub-Slab Depressurization System

The SSDS was constructed in the northeastern portion of the drycleaners unit of the retail-strip building by placing a four-inch diameter PVC pipe in the sub-base immediately below the building's floor slab. The pipe extends vertically (upward) through the unit and vents to the exterior atmosphere above the roof. A fan (Radonaway Model HS-5000) capable of mechanically venting a minimum of 53 CFM of air from beneath the slab was placed in line with the vent pipe above the roof. A sealable sampling port was installed at the base of the unit for future sampling purposes (if necessary). Additionally, an in-line magnahelic vacuum gauge and alarm system (Radonaway Checkpoint II) was installed on the SSDS unit. The fan and gauge/alarm each have their own dedicated electrical circuits. The SSDS continually operates to remove soil vapors from and depressurize beneath the building. An as-built plan depicting the SSDS location and design of the system is included as Figure 6. Specifications for the gauge/alarm system and fan used on the SSDS are attached in Appendix J.

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

## 7.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the CA objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

## 7.2.2.1 Cover System

The cover system is a permanent control and the quality and integrity of this system will be inspected at intervals in perpetuity unless remaining contaminant concentrations are removed from the site.

## 7.2.2.2 Sub-Slab Depressurization System

The active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. A proposal to discontinue the SSDS system would need to be submitted by the property owner to the NYSDEC and NYSDOH documenting the shut-down of the system and outlining SVI investigations that would be conducted to confirm SVI concerns no longer are present.

### 7.3 INSTITUTIONAL CONTROLS

An IC is required to implement, maintain, and monitor the ECs systems, prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination, and limit the use and development of the site to restricted commercial uses only. Adherence to these ICs on the site will be required by the Environmental Easement (Appendix N) that is to be established for the property and will be implemented under the SMP. These ICs include:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;
- All ECs must be operated and maintained as specified in the SMP and Section 7.5;
- All ECs on the property must be inspected at a frequency and in a manner defined in the SMP; and
- Data and information pertinent to the management of the property must be reported at the frequency and in a manner defined in this SMP and Section 7.5.

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site will have a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the property are:

- The property may only be used for restricted commercial use provided that the long-term ECs/ICs included in the SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted use or restricted residential use, without additional remediation and amendment of the Environmental Easement, as approved by NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area noted on Figure 7 and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited; and
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that controls employed at the property are unchanged from the previous certification or that any changes to the controls were approved by NYSDEC, and nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC will retain the right to access the property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow, and will be made by an expert that the NYSDEC finds acceptable.

## 7.4 INSPECTIONS AND NOTIFICATIONS

## 7.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP *Monitoring Plan* schedule and Section 7.5. A comprehensive site-wide inspection will be conducted annually. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be proactive of human health and the environment;

- Compliance with requirements of the SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- If site records are complete and up to date;
- Changes, or needed changes, to the remedial system.

Inspections will be conducted in accordance with the procedures set forth in the *Monitoring Plan* of the SMP and as outlined in Section 7.5 below.

If an emergency, such as a natural disaster or unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within five 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.

## 7.4.2 Notifications

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

- Sixty-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent, 6 NYCRR Part 375, and/or Environmental Conservation Law.
- Seven-day advance notice of any proposed ground-intrusive activities pursuant to the *Excavation Work Plan*.
- Notice with 48-hours of any damage or defect to the foundations/structures that reduces or has the potential to reduce the effectiveness of other ECs and likewise any action to be take to mitigate the damage or defect.
- Verbal notice by noon the following day of any emergency, such as a fire, flood, or earthquake, that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within seven 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 on-going 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 changes in the ownership of the site or the responsibility for implementing the 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 a copy of the Order on Consent and all approved work plans and reports including the 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.

## 7.5 INSPECTION SCHEDULE

Annual inspection of the performance of the remedy will be conducted. Monitoring/inspection programs are outlined in detail in Sections 3.2 and 3.3 of the SMP.

	Monitoring/Inspection	n Schedule	
Inspection Program	Frequency*	Matrix	Analysis
Cover System Inspection	Annual	Soil/Asphalt/Concrete	NA
SSDS Inspection	Annual	Soil Vapor/Indoor Air	NA

### Notes:

NA - Not Applicable

### 7.6 REPORTING AND CERTIFICATIONS

Reporting documents (inspection forms and maintenance reports) associated with the inspection of the ECs/ICs which have been installed at the site will be completed as outlined in Section 5.0 of the SMP. Following the last inspection of the reporting period, a New York-licensed Professional Engineer will certify that the ECs/ICs implemented at the site remain effective. As outlined in Section 5.0 of the SMP, this certification will be included in a Periodic Review Report. If any component of the site remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an EC/IC, a Corrective Measures Plan will be submitted to NYSDEC for approval.

<sup>\*</sup> The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

TABLE 1
Soil Sampling and Analyses
Data Summary

## TABLE 1 SOIL SAMPLING AND ANALYSES DATA SUMMARY

## River Plaza Shopping Center 124 to 134 Wildey Street

		acj street	
Tarrytown,	Westchester	County, New	York

A	SAMPLE ID:	.T ×	/W-8S-A		MW-8S-B	l wi	B-5 T	u	VB-6		WB-7		WB-8S		WB-8D	r	WB-9		ST-1S	ST	`-1D		DS-1		DS-3
<b>WHITESTONE</b>	LAB ID:	_	249930-001		C49930-002		30-003		930-004	-	49930-005	AC	49930-006	A	C49930-007	AC	C49930-008	AC	49930-009	AC499	930-010	AC4	49930-019	A	AC49930-021
ACCOCHATECING	COLLECTION DATE:		2/17/2010		2/17/2010	2/17/	/2010	2/1	7/2010	2/	/17/2010	2	/17/2010		2/17/2010	2	2/17/2010	2.	/17/2010		/2010	2/	17/2010	-	2/17/2010
ASSOCIATES, INC.	SAMPLE DEPTH:	:	1.5 to 2.0	1	3.5 to 14.0	22.5 t	o 23.0	10.5	to 11.0	13	.0 to 13.5	1	.0 to 1.5	1	6.0 to 16.5	20	0.0 to 20.5	1	.5 to 2.0		to 8.0				
	SAMPLE MATRIX:	:	Soil		Soil	Se	oil		Soil		oil	D 1	Soil	D is	Soil t Fle RL										
ANALYTE	NYSDEC RPUUSCO	Result	Flg RL	Result	Fig. RL	Result F	lg RL	Result	Flg RL	Result	Fig RL	Result	Flg RL	Result	Flg RL	Result	Fig RL	Result	Flg RL	Result I	lg RL	Result	Flg RL	Result	t Flg RL
VOLATILE ORGANICS VOCs)		1				Lin		NID		NID		ND		ND		ND		0.015	I	ND		ND		I ND	
Total VO TICs	NA 0.60	ND	0.0054	ND	0.0060	ND	0.0067	ND ND	0.0060	ND ND	0.0062	ND ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,1,1-Trichloroethane	0.68	ND ND	0.0054	ND ND	0.0069	ND ND	0.0067 0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	0.0057
1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2 trifluoroethane	NA NA	ND	0.0054	ND	0.0069	ND ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	0.0057
1,1,2-Trichloroethane	NA NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	0.0057
1,1-Dichloroethane	0.27	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0,0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,1-Dichloroethene	0.33	ND	0.0054	ND	0.0069	ND	0.0067	ND	0,0060	ND	0.0062	ND	0.0055	ND	0,0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,2,3-Trichloropropane	NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND_	0,0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,2,4-Trimethylbenzene	3.6	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND_	0.0012	ND	0.0011	ND ND	0.0012	ND ND	J 0.0011 J 0.0054	ND ND	
1,2-Dichlorobenzene	1.1	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0,0062	ND	0.0055	ND	0.0063	ND ND	0.0060	ND ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,2-Dichloroethane	0.02	ND	0.0054	ND	0.0069	ND ND	0.0067	ND ND	0.0060	ND ND	0.0062	ND ND	0.0055 0.0055	ND ND	0.0063	ND ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,2-Dichloropropane	NA 8.4	ND ND	0.0054	ND ND	0.0069	ND	0.0067 0.0013	ND	0.0000	ND	0.0002	ND	0.0033	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	0.0011
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	2.4	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0,0054	ND	0.0057
1,3-Dichloropropane	NA	ND	0,0054	ND	0.0069	ND	0.0067	ND	0,0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,4-Dichlorobenzene	1.8	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
1,4-Dioxane	0.1	ND	0.27	ND	0.35	ND	0,33	ND	0.30	ND	0.31	ND	0.27	ND	0.31	ND	0.30	ND	0.29	ND	0.30	ND	J 0.27	ND	
2-Butanone	0.12	ND	0.0054	ND	0 0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054 J 0.0054	ND ND	
2-Chloroethylvinylether	NA NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0,0063	ND	0.0060	ND ND	0.0057	ND ND	0.0060	ND ND	J 0.0054	ND	
2-Hexanone	NA NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND ND	0.0062	ND	0.0055	ND ND	0.0063	ND ND	0.0060	0.0019	0.0057	ND ND	0.0080	ND	J 0.0034	ND	
4-Isopropyltoluene	NA NA	ND ND	0.0011	ND ND	0.0014	ND ND	0.0013	ND ND	0.0012	ND ND	0.0012	ND ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0017	ND	0.0060	ND	J 0.0054	ND	
4-Methyl-2-pentanone	NA 0.05 (500)	0.030	0.0054	0.094	0.0069	ND ND	0.0087	0.088	0.000	0.054	0.031	0.049	0.027	0.091	0.031	0.037	0.030	0.15	0.029	0.11	0.030	0.033	J 0.027	0.071	0.028
Acrolein	0.03 (500) NA	ND	0.027	ND	0.035	ND	0.033	ND	0.030	ND	0.031	ND	0.027	ND	0.031	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Acrylonitrile	NA NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
Benzene	0.06	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	
Bromodichloromethane	NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0 0062	ND	0.0055	ND	0.0063	ND	0,0060	ND	0.0057	ND	0,0060	ND	J 0.0054	ND	
Bromoform	NA	ND	0,0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0 0060	ND	0.0057	ND	0,0060	ND ND	J 0.0054 J 0.0054	ND ND	
Bromomethane	NA NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0,0060	ND	0,0062	ND	0.0055	ND	0.0063	ND ND	0.0060	ND ND	0.0057	ND ND	0.0060	ND ND	J 0.0054	ND	
Carbon disulfide	NA 0.7/	ND	0.0054	ND	0.0069	ND	0.0067	ND ND	0,0060	ND ND	0.0062	ND ND	0.0055	ND ND	0.0063	ND	0.0060	ND	0.0057	ND	0,0060	ND	J 0.0054	ND	
Carbon tetrachloride	0.76	ND ND	0.0054	ND ND	0.0069	ND ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
Chlorobenzene Chloroethane	NA NA	ND	0.0054	ND	0,0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	0.0057
Chloroform	0.37	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
Chloromethane	NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0 0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
cis-1,2-Dichloroethene	0.25	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND.	J 0.0054	ND	
cis-1,3-Dichloropropene	NA	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND ND	0.0060	ND ND	J 0.0054 J 0.0054	ND ND	
Dibromochloromethane	NA	ND	0.0054	ND	0 0069	ND	0.0067	ND	0.0060	ND	0,0062	ND ND	0.0055	ND ND	0.0063	ND ND	0.0060	ND ND	UJ 0.0057	ND	0.0060	ND	J 0.0054	ND	
Dichlorodifluoromethane	NA ,	ND ND	0.0054	ND ND	0,0069	ND ND	0.0067	ND ND	0.0060	ND ND	0.0062	ND	0.0055	ND	0.00063	ND	0.00060	ND	0.00057	ND	0.00060	ND	J 0.00054	ND	
Ethylbenzene Isopropylbenzene	NA NA	ND	0.0011	ND	0.0003	ND	0.0003	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	0.0011
m&p-Xylenes	0.26	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	0.0011
Methylene chloride	0.05	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	0.0063	
Methyl-t-butyl ether	0.93	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	
n-Butylbenzene	12	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND ND	J 0.0011 J 0.0011	ND ND	
n-Propylbenzene	3.9	ND	0.0011_	ND	0.0014	ND	0.0013	ND ND	0.0012	ND	0.0012	ND ND	0.0011	ND ND	0.0013	ND ND	0.0012	ND ND	0.0011	ND ND	0.0012	ND ND	J 0.0011	ND	
o-Xylene	0.26	ND	0.0011	ND ND	0.0014	ND ND	0.0013 0.0013	ND ND	0.0012	ND ND	0.0012	ND ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011		0.0012	ND	J 0.0011	110	0.0011
sec-Butylbenzene	11 NA	ND ND	0.0011	ND ND	0.0014	ND ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
Styrene t-But/l Alcohol	NA NA	ND	R 0.027	ND		ND 1	R 0.033	ND	R 0.030	ND	R 0.031	ND	R 0.027	ND	R 0.031	ND	R 0.030	ND	R 0.029	ND	R 0.030	ND	J/R 0.027	ND	R 0.028
t-Butylbenzene	NA NA	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	
Tetrachloroethene	1.3	ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND_	J 0.0054	ND	
Toluene	0.7	ND	0.0011	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	
Trans-1,2-dichloroethene	0.19	ND	0.0054	ND	0.0069	ND	0,0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060 UJ 0.0060	ND ND	0.0057 UJ 0.0057	ND 1	0.0060 UJ 0.0060	ND ND	J 0.0054 J/UJ 0.0054	ND ND	
trans-1,3-Dichloropropene	NA 0.47	ND	UJ 0.0054	ND			JJ 0.0067	- 1125	UJ 0.0060 0.0060	ND ND	UJ 0.0062 0.0062	ND ND	UJ 0.0055 0.0055	ND ND	UJ 0.0063 0.0063	ND ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
Trichland Quantum ethano	0.47 NA	ND ND	0,0054	ND ND	0.0069	ND ND	0.0067 0.0067	ND ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0.0057	ND	0.0060	ND	J 0.0054	ND	
Trichlorofluoromethane Vinyl chloride	0.02	ND ND	0.0054	ND	0.0069	ND	0.0067	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0063	ND	0.0060	ND	0,0057	ND	0.0060	ND	J 0.0054	ND	
Xylenes (Total)	NA	ND	0.0034	ND	0.0014	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0011	ND	0.0012	ND	J 0.0011	ND	0.0011
SEMI-VOLATILE ORGANICS (SVOCs)	8	0 - 1				All .				71		177													
Total SVO TICs	NA	220	J	140	J	94	J	42	J	170	J	270	J	72	J	77	J	200	J	140	J	170	J	180	
1,2,4-Trichlorobenzene	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0,082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND	J 0.22	ND	
1,2-Diphenylhydrazine	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND ND	0.23	ND ND	0.080	ND ND	J 0.22 J 0.22	ND ND	
2,4,5-Trichlorophenol	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND ND	0.080	ND ND	0.23	ND	0.080	ND	J 0.22	ND	
2,4,6-Trichlorophenol	NA NA	ND	0.22	ND	0.094	ND	0.090	ND ND	0.080	ND ND	0.082	ND ND	0.15	ND ND	0.085	ND	0.080	ND	0.23	ND	0.080		J 0.22	ND	
2,4-Dichlorophenol	NA NA	ND ND	0.22	ND ND	0.094 0.094	ND ND	0.090	ND ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND	J 0.22	ND	
2,4-Dimethylphenol 2,4-Dinitrophenol	NA NA	ND	1.1	ND	0.094	-	JJ 0.45		UJ 0.40	ND	0.41	ND	0.73	ND		ND	UJ 0.40	ND	1.2	ND	0.40	ND	J 1,1	ND	1.1
2,4-Dinitrophenoi	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	_	0.15	ND	0.085	ND	0.080	ND	0 23	ND	0.080	ND	J 0.22	ND	0.23
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Whitestone Associates, Inc.

# TABLE 1 SOIL SAMPLING AND ANALYSES DATA SUMMARY River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

	SAMPLE ID:	MX	V-8S-A	T N	MW-8S-B	г ,	WB-5	WE	3-6		WB-7		WB-8S	,	WB-8D		WB-9	ST-	1S	S	Γ-1D		DS-1			S-3
	LAB ID:		930-001		C49930-002		9930-003	AC499.		AC4	9930-005	AC	49930-006		49930-007		C49930-008	AC4993			930-010		49930-019			930-021
WHITESTONE ASSOCIATES, INC.	COLLECTION DATE:	2/1	7/2010	2	2/17/2010	2/1	17/2010	2/17/	2010		17/2010		/17/2010		/17/2010	+	2/17/2010	2/17/2			7/2010 to 8.0	2/	/17/2010	-+	2/17	//2010
ASSOCIATES, INC.	SAMPLE DEPTH:		to 2.0	13	3.5 to 14.0	22.5	5 to 23 0	10.5 to		13.0	0 to 13.5	1	.0 to 1.5	16	Soil Soil	20	0.0 to 20.5 Soil	1.5 to			to 8.0 Soil		Soil	-+	S	Soil
	SAMPLE MATRIX:		Soil		Soil	D I	Soil	Sc Davids El	oil lg RL	Result	Soil Fle RL	Result	Soil Fle RL	Result	Fig RI.	Result	Fle RL	Result Fl			Fle RL	Result	10014	RL		Fig RL
ANALYTE	NYSDEC RPUUSCO	Result ND	Flg RL 0.22	Result ND	Flg RL 0.094	Result ND	Flg RL 0.090	Result FI ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND	J 0	0.22	ND	0.23
2,6-Dinitrotoluene 2-Chloronaphthalene	NA NA	ND ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
2-Chlorophenol	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
2-Methylnaphthalene	NA	ND	0.22	ND	0.094	ND	0.090	ND	0,080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND ND		0.22	ND ND	0.23
2-Methylphenol	0.33	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0,082	ND	0.15	ND	0.085	ND ND	0.080	ND ND	0.23	ND ND	0.080	ND		0.22	ND	0.23
2-Nitroaniline	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND ND	0.082	ND ND	0.15 0.15	ND ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
2-Nitrophenol	NA 0.22	ND ND	0.22	ND ND	0.094	ND ND	0.090	ND ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND	J C	0.22	ND	0.23
3&4-Methylphenol 3,3'-Dichlorobenzidine	0.33 NA	ND	0,22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
3-Nitroaniline	NA NA	ND	0.22	ND	0.094	ND	UJ 0.090	ND U	IJ 0.080	ND	0.082	ND	0.15	ND	UJ 0.085	ND	UJ 0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
4,6-Dinitro-2-methylphenol	NA	ND	0.22	ND	0.47	ND	UJ 0.45	ND U	IJ 0.40	ND	0.41	ND	0.15	ND	UJ 0.43	ND	UJ 0.40	ND	0.23	ND	0.40	ND ND		0.22	ND ND	0.23
4-Bromophenyl-phenylether	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND ND	0.080	ND ND	0.23	ND ND	0.080	ND ND		0.22	ND	0.23
4-Chloro-3-methylphenol	NA NA	ND	0.22	ND	0.094	ND	0.090	ND ND	0.080	ND ND	0.082	ND ND	0.15 0.15	ND ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
4-Chloroaniline	NA NA	ND	0-22	ND ND	0.094	ND ND	0.090	ND ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0,080	ND	J (	0.22	ND	0.23
4-Chlorophanyl-phenylether 4-Nitroaniline	NA NA	ND ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
4-Nitrophenol	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND 0.24		0.22	ND	0.23
Acenaphthene	20	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND ND	0.23	ND ND	0.080	0.24		0.22	ND 0.93	0.23
Acenaphthylene	100	0.35	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	0.17	0.15	ND ND	0.085	ND ND	0.080	ND ND	0.23	ND ND	0.080	ND		0.22	ND	0.23
Aniline	NA 100	ND 0.20	0.22	ND	0.094	ND ND	0.090	ND ND	0.080	ND ND	0.082	ND 0.16	0.15	ND ND	0.085	ND	0.080	ND	0.23	ND	0.080	0.65		0.22	0.49	0,23
Anthracene	100 NA	0.30 ND	0.22	ND ND	0.094	ND ND	0.090	ND	0.080	ND	0.082	ND	0.73	ND	0.43	ND	0.40	ND	1.2	ND	0.40	ND		1.1	ND	1.1
Benzidine Benzo[a]anthracene	1 {5.6}	1.5	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	0.57	0.15	0.22	0.085	ND	0.080	0.81	0.23	ND	0.080	2.1		0.22	2.0	0.23
Benzo[a]pyrene	1 (1)	1.8*	0.22	0.11	0.094	3.9*	0.090	ND	0.080	ND	0.082	0.74	0.15	0.47	0,085	0.098	0.080	0.86	0.23	ND	0.080	21		0.22	1.0*	0.23
Benzo[b]fluoranthene	1 (5.6)	2.2	0.22	ND	0.094	- ND	0.090	ND	0,080	ND	0.082	0.90	0.15	0.50	0.085	ND	0.080	0.59	0.23	ND ND	0.080	3.0 1.5		0.22	3.0	0.23 0.23
Benzo[g,h,i]perylene	100	1.2	0-22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	0.60	0.15	0.30	0.085	ND ND	0.080	0.39	0.23	ND ND	0.080	0.87		0.22	1.2	0.23
Benzo[k]fluoranthene	0.8 (56)	0.76	0.22	ND	0.094	ND ND	0.090	ND ND	0.080	ND ND	0.082	0.31 ND	0.15	ND	0.083	ND	0.40	ND	1.2	ND	0.40	ND		1.1	ND	1.1
Benzoic acid	NA NA	ND ND	0.22	ND ND	0.47	ND	0.43	ND	0.40	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
bis(2-Chloroethyl)ether	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
bis(2-Chloroisopropyl)ether	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0 080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
bis(2-Ethylhexyl)phthalate	50	ND	0.22	ND	0.094	ND	0.090	0.090	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	0.26	0.23	ND ND	0.080	0.56 ND		0.22	ND ND	0.23
Butylbenzylphthalate	NA	ND	0.22	ND	0_094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND ND	0.085	ND ND	0.080	ND ND	0.23	ND	0.080	0.23		0.22	ND	0.23
Carbazole	NA NA	ND	0.22	ND	0.094	ND ND	0.090	ND ND	0.080	ND ND	0.082	ND 0.61	0.15	0.19	0.085	ND	0.080	0.76	0.23	ND	0.080	2.0		0.22	2.2	0.23
Chrysene	1 {56} 0.33 {0.56}	0.47	0.22	ND ND	0.094	ND	0.090	ND	0.080	ND	0.082	0.18	0.15	0.13	0.085	ND	0.080	ND	0.23	ND	0.080	0.50	J (	0.22	0.80*	8.23
Dibenzo[a,h]anthracene   Dibenzofuran	7	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
Diethylphthalate	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND ND	0.23
Dimethylphthalate	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND ND	0.080	ND ND	0.23	ND ND	0.080	ND ND		0.22	ND	0.23
Di-n-butylchthalate	NA	ND	0.22	ND	0.094	ND	0,090	ND	0.080	ND 0.21	0.082	ND ND	0.15	ND ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
Di-n-octylphthalate	100	ND	0.22	ND ND	0.094	ND ND	0.090	ND ND	0.080	0.21 ND	0.082	1.1	0.15	0.16	0.085	ND	0.080	1.4	0.23	ND	0.080	3.6	J (	0.22	2.4	0.23
Fluoranthene Fluorene	100 30	2.2 ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	0.31		0.22	ND	0.23
Hexachlorobenzene	0.33	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22	ND	0.23
Hexachlorobutadiene	NA_	ND	0 22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND I	0.23	ND ND	0.080	ND ND		1.1	ND 1	0.23 UJ 1.1
Hexachlorocyclopentadiene	NA	ND	1.1	ND	0.47	ND	0.090	ND	0.080	ND	0.41	ND	UJ 0.73	ND	UJ 0.085 0.085	ND ND	0.080	ND L	JJ 1.2 0.23	ND	0.40	ND		0.22	ND	0.23
Hexachloroethane	NA 0.5.65.61	ND	0.22	ND	0.094	ND	0.090	ND ND	0,080	ND ND	0.082	ND 0.53	0.15 0.15	ND 0.28	0.085	ND	0.080	0.56	0.23	ND	0.080	1.5		0.22	2.6	0.23
Indeno 1,2,3-cd pyrene	0.5 (5.6) NA	ND	0.22 0.22	ND ND	0.094	ND ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND		0.22		0.23
Isophorone Naphthalene	12	ND	0.22	ND	0.094	ND	0.090	ND	0,080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080	ND			ND	0.23
Nitrobenzene	NA NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0.080	ND	0.23	ND	0.080			0.22	ND	0.23
N-Nitrosodimethylamine	NA	ND	0.22		0.094	ND	0.090	ND	0.080	ND	0.082	ND	0,15	ND	0.085	ND	0.080	ND ND	0.23	ND ND	0.080	ND ND		0.22	ND ND	0.23
N-Nitroso-di-n-propylamine	NA	ND	0.22	ND	0.094	ND	0.090	ND	0.080	ND ND	0.082	ND ND	0.15 0.15	ND ND	0.085	ND ND	0.080	ND	0.23	+	0.080	ND		0.22	ND	0.23
N-Nitrosodiphenylamine	NA 0.8	ND	0.22	ND	0.094	ND ND	0.090	ND ND	0.080	ND ND	0.082	ND	0.13	ND	0.43	ND	0.40	ND	1.2		0.40	ND		1.1	ND	1.1
Pentachlorophenol Phenanthrene	0.8	ND 0.97	0.22	ND ND	0.47	ND	0.45	ND ND	0.40	ND	0.082	0.61	0.15	ND	0.085	ND	0.080	0.68	0.23		0.080	2.2		0.22	0.80	0.23
Phenol	0.33	ND	0.22		0.094	ND	0.090	ND	0.080	ND	0.082	ND	0.15	ND	0.085	ND	0,080	ND	0,23		0.080	ND		0.22	ND	0.23
Pyrene	100	2,2	0.22		0.094	ND	0.090	ND	0.080	ND	0.082	1.1	0.15	0.15	0.085	ND	0.080	1.4	0.23	ND	0.080	3.3	J (	0.22	2.4	0.23
METALS									1.10	1			0.00*	0.33	0.11	NID	0.10	0.24	0.097	ND	0.10	0.30	I 0	0.091	0.45	J 0.095
Мегсигу	0.18 (2.8) [0.2]	0.57	0.091		0-12		0.11	ND 14 000	0.10	ND	0.10		0.092 220	<b>0.22</b> 8,400	<b>0.11</b> 260	ND 10,000		6,900	230	9,400	240	6,500		220	8,800	230
Aluminum	10,000	6,700	220	14,000		12,000 ND	270 2,7	14,000 ND	240	13,000 ND	250 2.5	8,500 ND	2.2	ND	2.6	ND	2,4	ND	2.3		2.4	ND		2.2	ND	
Antimony	12	ND 2.8	2.2	ND 3.2	2.8	ND	2.7	ND	2.4	ND	2.5	2.3	2.2	ND	2.6	3,5	2.4	4.6	2.3		2,4	2.9		2.2	4.6	2.3
Arsenic Barium	350	130	11	100	14	74	14	61	12	43	12	96	11	70	13	70	12	91	12		12	100		11	100	J 11
Beryllium	7.2	ND	0.65	ND	0.85	ND	0.81	ND	0.72	ND	0.74	ND	0.66	ND	0 77	ND	0.72	ND	0.70		0.72	ND		0.65	ND	0.68
Cadmium	2.5	ND	0.65	ND	0.85	ND	0.81	ND	0.72	ND	0.74	ND	0.66	ND	0.77	ND	0.72	ND 15.000	0.70	ND	0.72	ND		0.65	ND	0.68 J 1,100
Calcium	10,000	13,000	1,100	ND	1,400	1,900	1,400	2,400	1,200	1,300	1,200	33,000	1,100	8,400	1,300	ND 10	1,200	15,000	1,200 J 5.8	4,400 21	J 6.0	<b>21,000</b>		5.4	<b>14,000</b> 21	J 5.7
Chromium	30 (400) [40]	15	J 5.4	24	J 7.0	37	J 6.8	40	J 6.0	18	J 6.2	14	J 5.5	7.2	J 6.4	7.9	J 6.0 3.0	6.6	2.9	7.6	3.0	5.6		2.7	6.7	2.8
Cobalt	20	5.5	2.7	8.3	3.5	5.8	3.4	7.8	6.0	9.3	6.2	4.9	2.7 5.5	16	6.4	10	6.0	46	5.8		6.0	31		5.4	31	5.7
Copper	50	25	5.4	14	7.0	19	6.8	10	0.0	9.5	U,Z	1 20		10	0.1											

Whitestone Associates, Inc.

## TABLE 1 SOIL SAMPLING AND ANALYSES DATA SUMMARY River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

p.				-																		r			
146	SAMPLE ID:		W-8S-A		V-8S-B	WE			B 6		WB-7		WB-8S		B-8D		B-9		r-1S		r-1D		DS-1		DS-3
	LAB ID:		9930-001		9930-002	AC4993			30-004	-	49930-005	_	249930-006		930-007	AC499			930-009		930-010		9930-019		9930-021
ASSOCIATES, INC.	COLLECTION DATE:	2/1	17/2010	2/1	7/2010	2/17/2			/2010	-	/17/2010	+	2/17/2010		7/2010	2/17/			7/2010		7/2010	2/1	7/2010	2/1	7/2010
/ OSOCIATES, INC.	SAMPLE DEPTH:		5 to 2.0		to 14.0	22.5 to			o 11.0	13	3.0 to 13.5		1.0 to 1.5		to 16.5		to 20.5		to 2.0		to 8.0				/
	SAMPLE MATRIX:		Soil		Soil	So	il	S	oil		Soil		Soil		Soil	So			oil		Soil	+	Soil		Soil
ANALYTE	NYSDEC RPUUSCO	Result	Flg RL	Result	Flg RL	Result FI	g RL	Result F	ig RL	Result	Flg RL	Result	Flg RL		Flg RL	Result F	~		lg RL		Flg RL		Flg RL		Flg RL
Iron	2,000	14,000	220	19,000	280	15,000	270	21,000	240	17,000	250	12,000	220	18,000	260	19,000	240	37,000	230	17,000	240	14,000	220	15,000	230
Lead	63 {1,000} [500]	230	5.4	8.6	7.0	6.9	6.8	7.5	6.0	ND	6.2	130	5.5	27	6.4	6.6	6.0	230	5.8	20	6.0	190	5.4	170	5.7
Marnesium	NA	5,600	540	3,800	700	4,100	680	4,100	600	3,400	620	7,700	550	6,900	640	3,600	600	7,100	580	5,300	600	8,100	J 540	7,300	J 570
Manganese	1,600	180	11	230	14	150	14	220	12	130	12	180	- 11	380	13	220	12	350	12	220	12	200	J 11	260	J 11
Nickel	30	13	5.4	19	7.0	19	6.8	18	6.0	13	6.2	12	5.5	15	6.4	16	6.0	23	5.8	16	6.0	13	5.4	16	5.7
Potassium	NA	2,200	540	970	700	870	680	1,500	600	800	620	1,700	550	2,300	640	1,200	600	1,500	580	2,900	600	1,500	540	2,000	570
Selenium	3.9	ND	2.0	ND	2.5	ND	2.4	ND	2.2	ND	2.2	ND	2.0	ND	2.3	ND	2.2	ND	2.1	ND	2.2	ND	2.0	ND	2.0
Silver	2	ND	1.6	ND	2.1	ND	2.0	ND	1.8	ND	1.9	ND	1.6	ND	1.9	ND	1.8	ND	1,7	ND	1.8	ND	1.6	ND	1.7
Sodium	NA	970	270	370	350	ND	340	470	300	440	310	560	270	ND	320	510	300	800	290	750	300	980	270	630	280
Thallium	5	ND	1.3	ND	1.7	ND	1.6	ND	1.4	ND	1.5	ND	1.3	ND	1.5	ND	1.4	ND	1.4	ND	1.4	ND	1.3	ND	1.4
Vanadium	100	22	J 11	26	J 14	33 J	14	30	J 12	27	J 12	21	J 11	24	J 13	26 .	J 12	23	J 12	26	J 12	25	J 11	25	11
Zinc	109 (10,000) [50]	150	J 11	49	J 14	50 J	14	45	J 12	35	J 12	110	J 11	42	J 13	43	J 12	250	J 12	44	J 12	130	11	130	11
POLYCHLORINATED BIPHENYLS (PCBs)														y:		······································									
Aroclor (Total)	NA NA	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0,029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1016	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0,029	NĐ	0.030	ND	J 0.027	ND	0.028
Aroclor-1221	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1232	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1242	0,1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1248	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1254	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1260	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1262	0.1	ND	0.027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
Aroclor-1268	NA NA	ND	0.027	ND	0.035	ND	0.034	ND	0-030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
PESTICIDES																				y:					
Aldrin	0.005	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0,0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Alpha-BHC	0.02	ND	0.0011	ND	0.0014	ND	0.0014	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0012	ND	J 0.0011	ND	0.0011
beta-BHC	0,036	ND	0.0011	ND	0.0014	ND	0.0014	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0012	ND	J 0.0011	ND	0.0011
Chlordane	0.09	ND	0.011	ND	0.014	ND	0.014	ND	0.012	ND	0.012	ND	0.011	ND	0.013	ND	0.012	ND	0.012	ND	0.012	0.018	J 0.011	ND	0.011
delta-BHC	0.04	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Dieldrin	0.005	ND	0.0011	ND	0.0014	ND	0.0014	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0012	ND	J 0.0011	ND	0.0011
Endosulfan I	2.4	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Endosulfan II	2.4	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Endosulfan Sulfate	2.4	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Endrin	0.014	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Endrin Aldehyde	NA NA	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0,0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Endrin Ketone	NA NA	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
gamma-BHC	0.1	ND	0.0034	ND	0.0014	ND	0.0014	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0013	ND	0.0012	ND	0.0012	ND	0.0012	ND	J 0.0011	ND	0.0011
Heptachlor	0.042	ND	0,0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Heptachlor Epoxide	0.042	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
Methoxychlor	1.2	ND	0.0054	ND	0.0070	ND	0.0068	ND	0.0060	ND	0.0062	ND	0.0055	ND	0.0064	ND	0.0060	ND	0.0058	ND	0.0060	ND	J 0.0054	ND	0.0057
p,p'-DDD	0.0033 (93)	ND	0.0027	ND	0.0076	ND	0.0034	ND	0.0030	ND	0.0031	ND	0.0027	ND	0.0032	ND	0.0030	0.0043	0.0029	ND	0.0030	ND	J 0.0027	ND	0.0028
p.p'-DDE	0.0033 (93)	ND	0.0027	ND	0.0035	ND	0.0034	ND	0.0030	ND	0.0031	ND	0.0027	ND	0.0032	ND	0.0030	ND	0.0029	ND	0.0030	ND	J 0.0027	ND	0.0028
p,p-DDE p,p'-DDT	0.0033	ND	0.0027	ND	0.0035	ND	0.0034	ND ND	0.0030	ND	0.0031	ND ND	0.0027	ND	0.0032	ND	0.0030	ND	0.0029	ND	0.0030	ND	J 0.0027	ND	0.0028
Toxaphene	0.0033 NA	ND	0.0027	ND	0.035	ND	0.034	ND	0.030	ND	0.031	ND	0.027	ND	0.032	ND	0.030	ND	0.029	ND	0.030	ND	J 0.027	ND	0.028
OTHER PARAMETERS	INA	140	0.021	IND	0.055	110	0.034	140	0.050	I ND	0.051	1 140	0,027	1,,5	0.034	1.2	3.050		0.027		0.050		0.027		5.020
Cyanide	27	0.46	0.27	ND	0.35	ND	0.34	ND	0.3	ND	0.31	I ND	0.27	ND	0.32	ND	0.3	ND	0.29	ND	0.3	ND	0.27	ND	0.28
Cyanuc	21	0.40	0.27	עאו	0.55	ואו	0.34	עאו	0.3	LIND	0.31	LIND	U-Z I	1110	0.34	1 110	0.5	1,10	0.27	1	0.5		V.L.		0.20

R - Rejected J/UJ -Bias

Whitestone Associates, Inc. Page 3 of 3 TABLE 2
Groundwater Sampling and
Analyses Data Summary
(Temporary Wellpoints)

## TABLE 2 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (TEMPORARY WELLPOINTS)

# River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

A 144	SAMPLE ID:	WB-5 GWU	/F	WB-6 GWU	J/F	WB-7 GWU	J/F	WB-8 GWI	U/F	WB-9 GV	WU/F	I s	T-1GW	T	FB	T	ŤB	T DS	S-1GWU/F
WHITESTONE	LAB ID:	AC49930-01	1	AC49930-0		AC49930-0		AC49930-0		AC49930			19930-016	AC	49930-017	AC	C49930-018		49930-022
WHITESTONE ASSOCIATES INC.	COLLECTION DATE:	2/17/2010		2/17/2010	)	2/17/2010		2/17/201	0	2/17/20	)10	2/	17/2010	2/	/17/2010	1 2	2/16/2010	2	/17/2010
	SAMPLE MATRIX:	Groundwate	er	Groundwat	er	Groundwate	er	Groundwa	ter	Groundw	vater	Gro	oundwater		Blank		Blank	Gr	oundwater
ANALYTE	TOGS	Result Flg	RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL								
VOLATILE ORGANICS (Vos)		5																	
Total VO TICs	NA	ND		ND		ND		ND		ND									
1,1,1-Trichloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	J 5.0								
1,1,2-Trichloroethane	1	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,1-Dichloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,1-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,2,3-Trichloropropane	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,2,4-Trimethylbenzene	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,2-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,2-Dichloroethane	0.6	ND	0.50	ND	0.50	ND	0.50	ND	UJ 0.50	ND	J 0.50								
1,2-Dichloropropane	1	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,3,5-Trimethylbenzene	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,3-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,3-Dichloropropane	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,4-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
1,4-Dioxane	NA	ND	50	ND	50	ND	50	ND	50	ND	J 50								
2-Butanone	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
2-Chloroethylvinylether	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
2-Hexanone	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	UJ/J 1.0								
4-Isopropyltoluene	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
4-Methyl-2-pentanone	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	UJ/J 1.0								
Acetone	50	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	J 5.0								
Acrolein	5	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	J 5.0								
Acrylonitrile	5	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	J 2.0								
Benzene	1	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	J 0.50								
Bromodichloromethane	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Bromoform	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Bromomethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Carbon disulfide	60	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Carbon tetrachloride	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Chlorobenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Chloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	UJ 1.0	ND	J 1.0								
Chloroform	7	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Chloromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
cis-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	UJ/J 1.0								
cis-1,3-Dichloropropene	NA SO	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Dibromochloromethane	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Dichlorodifluoromethane	5	ND UJ	1.0		UJ 1.0	ND	UJ 1.0	ND	UJ 1.0	ND	J 1.0								
Ethylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Isopropylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
m&p-Xylenes	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Methylene chloride	5	ND	1.0	ND	1.0	ND ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0
Methyl-t-butyl ether	10	ND	0.50	ND	0.50	ND ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	J 0.50
n-Butylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
n-Propylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
o-Xylene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
sec-Butylbenzene	5	ND	1.0	ND	1.0	ND ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0
Styrene	930	ND III	1.0	ND	1.0	ND	1.0	ND ND	1.0	ND	J 1.0								
t-Butyl Alcohol	NA NA	ND UJ	5.0	ND UJ			UJ 5.0	+	UJ 5.0	ND	5.0	ND	J 5.0						
t-Butylbenzene	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Tetrachloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Toluene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Trans-1,2-dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
trans-1,3-Dichloropropene	NA .	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								
Trichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	J 1.0								

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## TABLE 2 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (TEMPORARY WELLPOINTS)

# River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

· ·	CARRYDA	11.75	) E CWILM	2919	OWIE	1 11775	7 CWILE	T was	0 OMALE	T we	CHILIE	1	T LOW	T	L.D.	T-	TD		700	OWILE
▲ WHITESTONE	SAMPLE ID:		3-5 GWU/F		3-6 GWU/F		-7 GWU/F		-8 GWU/F		GWU/F		T-1GW	1	FB	1	TB			GWU/F
WHITESTONE ASSOCIATES, INC.	LAB ID: COLLECTION DATE:		49930-011		249930-012		49930-013		19930-014	+	9930-015	+	49930-016	_	C49930-017		C49930-018			930-022
ASSOCIATES, INC.	SAMPLE MATRIX:		/17/2010 oundwater	-	/17/2010 oundwater	-	/17/2010 oundwater		17/2010 oundwater	+	7/2010 indwater	+	/17/2010 oundwater	1	2/17/2010 Blank		2/16/2010 Blank	-		7/2010 ndwater
ANALYTE	TOGS	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg	RL	Result	Flg RL
Trichlorofluoromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND		1.0	ND I	J <b>J/J</b> 1.0
Vinyl chloride	2	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND		1.0	ND	J 1.0
Xylenes (Total)	NA	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND		1.0	ND	J 1.0
SEMI-VOLATILE ORGANICS (SVOCs)																				
Total SVO TICs	NA	ND		ND		ND		ND		ND		ND		4.2	J	~		~	21	J
1,2,4-Trichlorobenzene	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
1,2-Diphenylhydrazine	ND	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2,4,5-Trichlorophenol	NA	ND	2.2	ND	2.2	ND	2,2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2,4,6-Trichlorophenol	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2,4-Dichlorophenol	1	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2,4-Dimethylphenol	1	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2,4-Dinitrophenol	1	ND	UJ 11	ND	UJ 11	ND	11	ND	11	ND	11	ND	10	ND	11	~		~	ND	10
2,4-Dinitrotoluene	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2,6-Dinitrotoluene	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2-Chloronaphthalene	10	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2-Chlorophenol	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2-Methylnaphthalene	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2-Methylphenol	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2,2	ND	2.0	ND	2.1	~		~	ND	2.1
2-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
2-Nitrophenol	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
3&4-Methylphenol	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
3,3'-Dichlorobenzidine	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
3-Nitroaniline	5	ND	UJ 2.2	ND	UJ 2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
4,6-Dinitro-2-methylphenol	NA NA	ND	UJ 11	ND	UJ 11	ND	11	ND	11	ND	11	ND	10	ND	11	~		~	ND	10
4-Bromophenyl-phenylether	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
4-Chloro-3-methylphenol	NA .	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
4-Chloroaniline	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
4-Chlorophenyl-phenylether	NA 5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2,1
4-Nitroanline	5	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.0	ND ND	2.1	~		~	ND	2.1
4-Nitrophenol	NA 20	ND ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND ND	2.0	ND ND	2.1			~	ND ND	2.1
Acenaphthelene	NA NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Acenaphthylene Aniline	5	ND	2,2	ND	2.2	ND	2.2	ND	2.2	ND	2,2	ND ND	2.0	ND	2.1	<del>  ~</del>		~	ND	2.1
Anthracene	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	<del>  ~</del>		~	ND	2.1
Benzidine	5	ND	11	ND	11	ND	11	ND	11	ND	11	ND	10	ND	11	<del>-</del>		~ +	ND	10
Benzo[a]anthracene	0.002	ND	2.2	ND	2,2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	<del>-</del>		~	ND	2.1
Benzo[a]pyrene	NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	- ~		~ +	ND	2.1
Benzo[b]fluoranthene	0.002	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Benzo[g]nuorantnene Benzo[g,h,i]perylene	NA NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	-		~	ND	2.1
Benzo[k]fluoranthene	0.002	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Benzoic acid	NA	ND	11	ND	11	ND	11	ND	11	ND	11	ND	10	ND	11	~		~	ND	10
bis(2-Chloroethoxy)methane	5	ND	2.2	ND	2.2	ND	2.2	ND	2,2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
bis(2-Chloroethyl)ether	1	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
bis(2-Chloroisopropyl)ether	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
bis(2-Ethylhexyl)phthalate	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2,0	ND	2.1	~		~	ND	2.1
Butylbenzylphthalate	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	-		~	ND	2.1
Carbazole	NA NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	1 ~			ND	2.1
Chrysene	0.002	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Dibenzo[a,h]anthracene	NA NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~			ND	2.1
Dibenzofuran	NA NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		-	ND	2.1
Diethylphthalate	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Dimethylphthalate	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Di-n-butylphthalate	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Di-n-octylphthalate	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		-	ND	2.1
Fluoranthene	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Fluorene	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1
Hexachlorobenzene	0.04	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~		~	ND	2.1

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## TABLE 2 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (TEMPORARY WELLPOINTS) River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

<b>A</b>	SAMPLE ID:	WB-5 GW	/LI/E	WB-6 C	WII/F	WB-7 C	WII/F	l wa	8 GWU/F	I WB-9	GWU/F	I ST-	1GW	T	FB	T	TB	DS-1G	WU/F
	LAB ID:	AC49930-		AC4993		AC4993			9930-014		930-015		930-016		930-017	AC4	49930-018	AC4993	
ASSOCIATES, INC.	COLLECTION DATE:	2/17/20		2/17/2		2/17/2			7/2010		/2010	-	/2010		/2010	-	/16/2010	2/17/2	
	SAMPLE MATRIX:	Groundwa		Ground		Ground			undwater		ndwater		dwater		ank		Blank	Ground	dwater
ANALYTE	TOGS	Result Flg	RL	Result Fl	g RL	Result Fl	g RL	Result	Flg RL	Result F	lg RL	Result F	lg RL	Result F	ig RL	Result	Flg RL	Result Fl	g RL
Hexachlorobutadiene	0.5	ND	2.2	ND	2,2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
Hexachlorocyclopentadiene	5	ND	2.2	ND	2.2	ND	11	ND	11	ND	11	ND	10	ND	11	~	~	ND	10
Hexachloroethane	5	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2,1	~	~	ND	2.1
Indeno[1,2,3-cd]pyrene	0.002	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
Isophorone	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
Naphthalene	10	ND	2,2	ND	2,2	ND	2.2	ND	2.2	ND	2,2	ND	2.0	ND	2.1	~	~	ND	2.1
Nitrobenzene	0.4	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
N-Nitrosodimethylamine	NA NA	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND ND	2.0	ND ND	2.1	~	~	ND ND	2.1
N-Nitroso-di-n-propylamine	NA 50	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.0	ND	2.1	~	~	ND ND	2.1
N-Nitrosodiphenylamine Pentachlorophenol	1	ND	11	ND	11	ND	11	ND	11	ND	11	ND	10	ND	11	~	~	ND	10
Phenanthrene	50	ND	2,2	ND	2,2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
Phenol	1	ND	2,2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
Pyrene	50	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.0	ND	2.1	~	~	ND	2.1
METALS - UNFILTERED	1 30		2.2		2.5		20120		2,2		2.2			* **		*		*	
Mercury	1.4	ND	0.70	ND	0.70	ND	0.70	ND	0.70	ND	0.70	~	~	ND	0.70	~	~	ND	0.70
Aluminum	2,000	22,000	180	2,100	180	2,100	180	3,900	180	11,000	180	~	~	ND	180	~	~	20,000	180
Antimony	6	ND	12	ND	12	ND	12	ND	12	ND	12	~	~	ND	12	~	~	ND	12
Arsenic	50	19	7.5	ND	7.5	ND	7.5	9.3	7.5	7.6	7.5	~	~	ND	7.5	~	~	16	7.5
Barium	2,000	210 J	50	110	50	200	50	380	50	340	50	~	~	ND	50	~	2	190	50
Beryllium	3	ND	4.0	ND	4.0	ND	4.0	ND	4.0	ND	4.0	~	~	ND	4.0	~	~	ND	4.0
Cadmium	10	ND	3.5	ND	3.5	ND	3.5	ND	3.5	ND	3.5	~	~	ND	3.5	~	~	4.5	3.5
Calcium	NA	51,000	2,000	80,000	2,000	120,000	2,000	150,000	2,000	99,000	2,000	~	~	ND	2,000	~	~	48,000	2,000
Chromium	100	94	50	ND	50	ND	50	ND	50	ND	50	~	~	ND	50	~	~	88	50
Cobalt	NA	23	20	ND	20	ND	20	ND	20	ND	20	~	~	ND	20	~	~	22	20
Copper	1,000	53	50	ND	50	ND	50	ND	50	ND	50	~	~	ND	50	~	~	ND	50
Iron	600	53,000	280	3,400	280	4,000	280	49,000	280	48,000	280	~	~	ND	280 4.0	~	~	47,000	280 4.0
Lead	50 35,000	29,000	<b>4.0</b> 2,000	4.1 27,000	2,000	ND 34,000	2,000	210 65,000	2,000	60,000	4.0 2,000	~ ~	~	ND ND	2,000	~	~	27,000 J	2,000
Magnesium	600	590	40	1,400	2,000 <b>40</b>	34,000	40	1,300	40	1,300	40	~	~	ND	40	~	~	540	40
Manganese Nickel	200	54	50	ND	50	ND	50	ND	50	ND	50	~	~	ND	50	~	~	50	50
Potassium	NA NA	9,900	5,000	6,200	5,000	10,000	5,000	38,000	5,000	26,000	5,000	~	~	ND	5,000	~	~	9,000	5,000
Selenium	20	ND	40	ND	40	ND	40	ND	40	ND	40	~	~	ND	40	~	~	ND	40
Silver	100	ND	20	ND	20	ND	20	ND	20	ND	20	~	~	ND	20	~	~	ND	20
Sodium	20,000	36,000	5,000	390,000	5,000	350,000	5,000	400,000	5,000	340,000	5,000	~	~	ND	5,000	~	~	33,000	5,000
Thallium	0.5	ND	10	ND	10	ND	10	ND	10	ND	10	~	~	ND	10	~	~	ND	10
Vanadium	NA	75	50	ND	50	ND	50	ND	50	ND	50	~	~	ND	50	~	~	67	50
Zinc	5,000	170	50	ND	50	ND	50	72	50	56	50	~	~	ND	50	~	~	160	50
METALS - FILTERED	100																		
Mercury	1.4	ND	0.70	ND	0.70	ND	0.70	ND	0.70	ND	0.70	~	~	~	~	~	~	ND	0.70
Aluminum	2,000	ND	180	ND	180	ND	180	ND	180	ND	180	~	~	~	~	~	~	ND	180
Antimony	6	ND	12	ND	12	ND	12	ND	12	ND	12	~	~	~	~	~	~	ND	12
Arsenic	50	ND	7.5	ND	7.5	ND	7.5	ND	7.5	ND	7.5	~	~	~	~	~	~	ND	7.5
Barium	2,000	ND	50	90	50	160	50	140	50	180	50	~	~	~	~	~	~	ND	50
Beryllium	3	ND	4.0	ND	4.0	ND	4.0	ND	4.0	ND	4.0	~	~	~	~	~	~	ND	4.0
Cadmium	10	ND 42.000	3.5	ND	3.5	ND	3.5	ND	3.5	ND 07,000	3.5	~	~	~	~	~	~	ND	3.5
Clearning	NA 100	43,000	2,000	80,000	2,000	110,000	2,000	140,000	2,000	97,000	2,000	~	~	~	~	~	~	42,000	2,000
Cabalt	100	ND	50	ND	50	ND	50	ND	50	ND	50	~	~	~	~	~	~	ND ND	50
Common	NA 1,000	ND ND	20	ND ND	20 50	ND ND	20 50	ND ND	20 50	ND ND	20 50	~			~	_	~	ND ND	20 50
Copper	1,000	עא	50			<del></del>							~	~	~	~	~		
#	600	ND	200	I ND	างก	I ND	260	1 430	ካያስ	760	7211	~	and the second	I ~		~ .	~.		
Iron Lead	600 50	ND ND	4.0	ND ND	280 4.0	ND ND	4.0	430 ND	280 4.0	760 ND	<b>280</b> 4.0	~	~	~	~	~	~	ND ND	280 4.0

Page 3 of 4 Whitestone Associates, Inc.

## TABLE 2 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (TEMPORARY WELLPOINTS)

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

A NAME OF THE OF	SAMPLE ID:	WB-5	GWU/F	WB-6	6 GWU/F	WB-	GWU/F	WB-	-8 GWU/F	WB-9	GWU/F	ST-1GW	T	FB	1	TB	DS-1	IGWU/F
WHITESTONE	LAB ID:	AC499	930-011	AC49	9930-012	AC49	9930-013	AC4	19930-014	AC49	9930-015	AC49930-016	AC	C49930-017	A	C49930-018	AC49	9930-022
ASSOCIATES, INC.	COLLECTION DATE:	2/17.	/2010	2/1	7/2010	2/1	7/2010	2/	17/2010	2/1	7/2010	2/17/2010	2	2/17/2010		2/16/2010	2/1	7/2010
	SAMPLE MATRIX:	Groun	idwater	Grou	ındwater	Grou	ndwater	Gro	oundwater	Grou	ndwater	Groundwater		Blank		Blank	Grou	ındwater
ANALYTE	TOGS	Result F	lg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL
Manganese	600	160	40	1,460	40	2,900	40	1,100	40	1,100	40	~ ~	~	~	~	~	200	40
Nickel	200	ND	50	ND	50	ND	50	ND	50	ND	50	~ ~	~	~	~	~	ND	50
Potassium	NA	6,400	5,000	5,600	5,000	8,900	5,000	37,000	5,000	23,000	5,000	~ ~	~	~	~	~	6,400	5,000
Selenium	20	ND	40	ND	40	ND	40	ND	40	ND	40	~ ~	~	~	~	~	ND	40
Silver	100	ND	20	ND	20	ND	20	ND	20	ND	20	~ ~	~	~	~	~	ND	20
Sodium	20,000	34,000	5,000	400,000	5,000	350,000	5,000	410,000	5,000	350,000	5,000	~ ~	~	~	~	~	36,000	5,000
Thallium	0.5	ND	10	ND	10	ND	10	ND	10	ND	10	~ ~	~	~	~	~	ND	10
Vanadium	NA	ND	50	ND	50	ND	50	ND	50	ND	50	~ ~	~	~	~	~	ND	50
Zinc	5,000	ND	50	ND	50	ND	50	ND	50	ND	50	~ ~	~	~	~	~	ND	50
POLYCHLORINATED BIPHENYLS (PCBs)							22.											
Aroclor (Total)	NA	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1016	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1221	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0,26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1232	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1242	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0,26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1248	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1254	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1260	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1262	0.9	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
Aroclor-1268	NA	ND	0.25	ND	0.25	ND	0.26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
PESTICIDES																		
Aldrin	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Alpha-BHC	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
beta-BHC	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Chlordane	0.05	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	~ ~	ND	0.10	~	~	ND	0.11
delta-BHC	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Dieldrin	0.004	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Endosulfan I	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Endosulfan II	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Endosulfan Sulfate	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Endrin	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Endrin Aldehyde	5	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Endrin Ketone	5	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
gamma-BHC	NA	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Heptachlor	0.04	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Heptachlor Epoxide	0.03	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Methoxychlor	35	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
p,p'-DDD	0.3	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
p,p'-DDE	0.2	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
p,p'-DDT	0.2	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	~ ~	ND	0.010	~	~	ND	0.011
Toxaphene	0.06	ND	0.25	ND	0.25	ND	0,26	ND	0.26	ND	0.26	~ ~	ND	0.26	~	~	ND	0.27
OTHER PARAMETERS																		
Cyanide	400	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.01	~ ~	ND	0.01	~	~	ND	0.01

## Notes:

Shaded and Bold value indicates an exceedence of the NYSDEC TOGS

All results reported in parts per billion (ppb or ug/L)
TOGS - NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standard

Flg - Data Qualifier
RL - Laboratory Reporting Limit
ND - Not Detected Exceeding RL
NA - No Applicable NYSDEC standard

~ - Not analyzed for this compound UJ or J - Bias

Whitestone Associates, Inc. Page 4 of 4 TABLE 3
Groundwater Sampling and Analyses Data Summary
(Monitor Well MW-8 - March 9, 2010)

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

A	SAMPLE ID:	MW	/-8 U/F	DS	-8GW U/F			FB U/F			TB	
WHITESTONE ASSOCIATES, INC.	LAB ID:	AC50	253-001	AC	50253-003		AC	50253-0	05	AC	50253-0	07
ASSOCIATES INC	COLLECTION DATE:	3/9	/2010		3/9/2010		3	3/9/2010			3/8/2010	
ASSOCIATES INC.	SAMPLE MATRIX:	Grou	ndwater	Gı	oundwater		Gr	oundwat	er		Blank	
ANALYTE	TOGS	Result	Flg RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS VOCs)			1 11 11 11 11	915								
Total VO TICs	NA	ND		ND			ND			ND		
1,1,1-Trichloroethane	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	5.0	ND		5.0	ND		5.0	ND		5.0
1,1,2 Trichloroethane	1	ND	1.0	ND	2 4/1	1.0	ND		1.0	ND		1.0
1,1-Dichloroethane	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,1-Dichloroethene	5	ND	1.0	ND		1.0	ND		1.0	ND	160	1.0
1,2,3-Trichloropropane	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,2,4-Trimethylbenzene	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,2-Dichlorobenzene	3	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,2-Dichloroethane	0.6	ND	0.50	ND	(	0.50	ND		0.50	ND		0.50
1,2-Dichloropropane	1	ND	1.0	ND		1.0	ND	-50	1.0	ND		1.0
1,3,5-Trimethylbenzene	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,3-Dichlorobenzene	3	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,3-Dichloropropane	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,4-Dichlorobenzene	3	ND	1.0	ND		1.0	ND		1.0	ND		1.0
1,4-Dioxane	NA	ND	50	ND		50	ND		50	ND		50
2-Butanone	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
2-Chloroethylvinylether	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
2-Hexanone	50	ND	1,0	ND		1.0	ND		1.0	ND		1.0
4-Isopropyltoluene	NA	ND	1.0	ND		1.0	ND		1.0	ND		1.0
4-Methyl-2-pentanone	NA	ND	1.0	ND	UJ	1.0	ND		1.0	ND		1.0
Acetone	50	ND	5.0	ND	UJ	5.0	ND		5.0	ND		5.0
Acrolein	5	ND	5.0	ND		5.0	ND		5.0	ND		5.0
Acrylonitrile	5	ND	2.0	ND		2.0	ND		2.0	ND		2.0
Benzene	1	ND	0.50	ND		0.50	ND		0.50	ND		0.50
Bromodichloromethane	50	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Bromoform	50	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Bromomethane	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Carbon disulfide	60	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Carbon tetrachloride	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Chlorobenzene	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Chloroethane	5	ND	1.0	ND	UJ	1.0	ND	UJ	1.0	ND	UJ	1.0
Chloroform	7	ND	1.0	ND		1.0	ND		1.0	ND		1.0
Chloromethane	5	ND	1.0	ND		1.0	ND		1.0	ND		1.0

Whitestone Associates, Inc. Page 1 of 6

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

	SAMPLE ID:	M	W-8 U/F	DS	S-8GW U	/F		FB U/F			TB
▲ WHITESTONE	LAB ID:	AC5	0253-001	AC	50253-0	03		50253-0			50253-007
WHITESTONE ASSOCIATES, INC.	COLLECTION DATE:	3,	/9/2010		3/9/2010		3	/9/2010		3	/8/2010
ASSOCIATES, INC.	SAMPLE MATRIX:	Gro	undwater	Gı	roundwat			oundwat			Blank
NALYTE	TOGS	Result	Flg RL	Result	Flg	RL	Result	Flg	RL	Result	Flg RL
is-1.2-Dichloroethene	5	ND	1.0	ND	4 1	1.0	ND		1.0	ND	1.0
is-1,3-Dichloropropene	NA	ND	1.0	ND		1.0	ND		1.0	ND	1.0
bbromochloromethane	50	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Dichlorodifluoromethane	5	ND	1.0	ND	UJ	1.0	ND		1.0	ND	1.0
Chylbenzene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
sopropylbenzene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
n&p-Xylenes	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Methylene chloride	5	ND	1.0	ND		1.0	ND		1.0	ND	1,0
Methyl-t-butyl ether	10	ND	0.50	ND		0.50	ND		0.50	ND	0.50
n-Butylbenzene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
n-Propylbenzene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
-Xylene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
ec-Butylbenzene	930	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Styrene	NA NA	ND	5.0	ND		5.0	ND		5.0	ND	5.0
-Butyl Alcohol	NA NA	ND	1.0	ND		1.0	ND		1.0	ND	1.0
-Butylbenzene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Tetrachloroethene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Toluene	5	ND	1,0	ND		1.0	ND		1.0	ND	1.0
rans-1,2-Dichloroethene	NA NA	ND	1.0	ND		1.0	ND		1.0	ND	1.0
trans-1,3-Dichloropropene	5	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Trichloroethene	5	ND	1.0	ND		1.0	ND		1.0	ND	1,0
Trichlorofluoromethane	2	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Vinyl chloride	NA NA	ND	1.0	ND		1.0	ND		1.0	ND	1.0
Xylenes (Total)	NA NA	ND	1.0	IND		110					
SEMI-VOLATILE ORGANICS (SVOCs)	NA.	42	J	45	J		5.5	J		~	
Total SVO TICs	NA 5	ND	2.2	ND		2.2	ND		2.1	~	~
1,2,4-Trichlorobenzene	ND ND	ND	2.2	ND		2.2	ND		2.1	~	~
1,2-Diphenylhydrazine		ND	2.2	ND	_	2.2	ND		2.1	~	~
2,4,5-Trichlorophenol	NA NA	ND ND	2.2	ND		2.2	ND		2.1	~	~
2,4,6-Trichlorophenol	NA 1	ND	2.2	ND		2.2	ND		2.1	~	~
2,4-Dichlorophenol	1	ND	2.2	ND		2.2	ND		2.1	~	~
2,4-Dimethylphenol	1	ND ND	11	ND		11	ND		10	~	~
2,4-Dinitrophenol	1		2,2	ND		2.2	ND		2.1	~	~
2,4-Dinitrotoluene	5	ND	2.2	ND		2.2	ND		2.1	~	~
2,6-Dinitrotoluene	5	ND	2.2	ND ND		2.2	ND		2.1	~	~
2-Chloronaphthalene	10	ND				2.2	ND		2.1	~	~
2-Chlorophenol	NA	ND	2.2	ND		4.4	1 ND	_	2.1		

Whitestone Associates, Inc. Page 2 of 6

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

	SAMPLE ID:	MW	-8 U/F	DS	S-8GW U/F		FB U/F		ТВ
	LAB ID:	AC50	253-001	AC	C50253-003	AC	250253-005		50253-007
WHITESTONE ASSOCIATES, INC.	COLLECTION DATE:	3/9	/2010		3/9/2010		3/9/2010		3/8/2010
A BOOCH HEGH TO.	SAMPLE MATRIX:	Grou	ndwater	G	roundwater	Gr	roundwater		Blank
ANALYTE	TOGS	Result 1	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL
2-Methylnaphthalene	NA	ND	2.2	ND	2.2	ND	2.1	~	~
2-Methylphenol	NA	ND	2.2	ND	2.2	ND	2.1	~	~
2-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.1	~	~
2-Nitrophenol	NA	ND	2.2	ND	2.2	ND	2.1	~	~
3&4-Methylphenol	NA	6.1	2.2	6.0	2.2	ND	2.1	~	~
3,3'-Dichlorobenzidine	5	ND	2.2	ND	2.2	ND	2.1	~	~
3-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.1	~	2
4,6-Dinitro-2-methylphenol	NA	ND	11	ND	11	ND	10	~	~
4-Bromophenyl-phenylether	NA	ND	2.2	ND	2.2	ND	2.1	~	~
4-Chloro-3-methylphenol	NA	ND	2.2	ND	2.2	ND	2.1	~	~
4-Chloroaniline	5	ND	2.2	ND	2.2	ND	2.1	~	~
4-Chlorophenyl-phenylether	NA	ND	2.2	ND	2.2	ND	2.1	~	~
4-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.1	~	~
4-Nitrophenol	NA	ND	2.2	ND	2.2	ND	2.1	~	~
Acenaphthene	20	ND	2.2	ND	2.2	ND	2.1	~	~
Acenaphthylene	NA	ND	2.2	ND	2.2	ND	2.1	~	~
Aniline	5	ND	2.2	ND	2.2	ND	2.1	~	~
Anthracene	50	ND	2.2	ND	2.2	ND	2.1	~	~
Benzidine	5	ND	11	ND	11	ND	10	~	~
Benzo[a]anthracene	0.002	ND	2.2	ND	2.2	ND	2.1	~	~
Benzo[a]pyrene	NA	ND	2.2	ND	2.2	ND	2.1	~	~
Benzo[b]fluoranthene	0.002	ND	2.2	ND	2.2	ND	2.1	~	~
Benzo[g,h,i]perylene	NA	ND	2.2	ND	2.2	ND	2.1	~	~
Benzo[k]fluoranthene	0,002	ND	2.2	ND	2.2	ND	2.1	~	~
Benzoic acid	NA	ND	11	ND	11	ND	10	~	~
bis(2-Chloroethoxy)methane	5	ND	2.2	ND	2,2	ND	2.1	~	~
bis(2-Chloroethyl)ether	1	ND	2.2	ND	2.2	ND	2.1	~	~
bis(2-Chloroisopropyl)ether	5	ND	2.2	ND	2.2	ND	2.1	~	~
bis(2-Ethylhexyl)phthalate	5	ND	2.2	ND	2.2	ND	2.1	~	~
Butylbenzylphthalate	50	ND	2,2	ND	2.2	ND	2,1	~	~
Carbazole	NA	ND	2.2	ND	2.2	ND	2.1	~	~
Chrysene	0.002	ND	2.2	ND	2.2	ND	2.1	~	~
Dibenzo[a,h]anthracene	NA	ND	2.2	ND	2.2	ND	2.1	~	~
Dibenzofuran	NA	ND	2.2	ND	2.2	ND	2,1	~	~
Diethylphthalate	50	ND	2.2	ND	2.2	ND	2.1	~	~
Dimethylphthalate	50	ND	2.2	ND	2.2	ND	2.1	~	~
Di-n-butylphthalate	50	ND	2.2	ND	2.2	ND	2.1	~	~

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

_	SAMPLE ID:	MW-8	U/F	DS-	-8GW U/F		FB U/F		TB	
▲ WHITESTONE	LAB ID:	AC5025	3-001	AC	50253-003	AC	50253-005	AC50253-007		
WHITESTONE ASSOCIATES, INC.	COLLECTION DATE:	3/9/20	010	3	/9/2010		3/9/2010		3/8/2010	
ASSOCIATES INC.	SAMPLE MATRIX:	Ground	water	Gro	oundwater	Gr	oundwater		Blank	
ANALYTE	TOGS	Result Flg	g RL	Result	Flg RL	Result	Flg RL	Result	Flg	RL
Di-n-octylphthalate	50	ND	2.2	ND	2.2	ND	2.1	~		~
Fluoranthene	50	ND	2.2	ND	2.2	ND	2.1	~		~
Fluorene	50	ND	2.2	ND	2.2	ND	2.1	~_		~
Hexachlorobenzene	0.04	ND	2.2	ND	2.2	ND	2.1	~		~
Hexachlorobutadiene	0.5	ND	2.2	ND	2.2	ND	2.1	~		~
Hexachlorocyclopentadiene	5	ND	11	ND	11	ND	10	~		~
Hexachloroethane	5	ND	2.2	ND	2.2	ND	2.1	~		~
Indeno[1,2,3-cd]pyrene	0.002	ND	2,2	ND	2.2	ND	2.1	~		~
Isophorone	50	ND	2.2	ND	2.2	ND	2.1	~		~
Naphthalene	10	ND	2.2	ND	2.2	ND	2.1	~		~
Nitrobenzene	0.4	ND	2.2	ND	2.2	ND	2.1	~		~
N-Nitrosodimethylamine	NA	ND	2.2	ND	2.2	ND	2.1	~		~
N-Nitroso-di-n-propylamine	NA	ND	2.2	ND	2.2	ND	2,1	~		~
N-Nitrosodiphenylamine	50	ND	2.2	ND	2.2	ND	2.1	~		~
Pentachlorophenol	1	ND	11	ND	11	ND	10	~		~
Phenanthrene	50	ND	2.2	ND	2.2	ND	2.1	~		~
Phenol	1	ND	2.2	ND	2.2	ND	2.1	~		~
Pyrene	50	ND	2.2	ND	2.2	ND	2.1	~		~
METALS - UNFILTERED										
Mercury	1.4	ND U	J 0.70	ND	UJ 0.70	ND	UJ 0.70	~		~
Aluminum	2,000	ND	180	ND	180	ND	180	~		~
Antimony	6	ND	12	ND	12	ND	12	~		~
Arsenic	50	ND	7.5	ND	7.5	ND	7.5	~		~
Barium	2,000	250	50	260	50	ND	50	~		~
Beryllium	3	ND	4.0	ND	4.0	ND	4.0	~		~
Cadmium	10	ND	3.5	ND	3.5	ND	3.5	~		~
Calcium	NA	140,000	2,000	150,000	2,000	ND	2,000	~		~
Chromium	100	ND	50	ND	50	ND	50	~		~
Cobalt	NA	ND	20	ND	20	ND	20	~		~
Copper	1000	ND	50	ND	50	ND	50	~		~
Iron	600	33,000	280	35,000	280	ND	280	-		~
Lead	50	ND	4.0	ND	4.0	ND	4.0	~		~
Magnesium	35,000	40,000	2,000	42,000	2,000	ND	2,000	~		~
Manganese	600	1,700	40	1,800	40	ND	40	~	V.	~
Nickel	200	ND	50	ND	50	ND	50	~_		~
Potassium	NA	17,000	5,000	17,000	5,000	ND	5,000	~		~
Selenium	20	ND	40	ND	40	ND	40	~		~

Whitestone Associates, Inc. Page 4 of 6

## TABLE 3

## GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MONITOR WELL MW-8 - MARCH 9, 2010)

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

	SAMPLE ID:	: MW-8 U/F		F	DS-8GW U/F			FB U/F			TB		
WHITESTONE ASSOCIATES, INC.	LAB ID:	AC	50253-0	001	AC50253-003			AC50253-005			AC50253-007		
A ASSOCIATES INC	COLLECTION DATE:	3	3/9/2010	)	3	/9/2010			3/9/2010		3	3/8/2010	
A POSCENTES INC.	SAMPLE MATRIX:	Gro	oundwa	ter	Gr	oundwa	ter	Gr	oundwa	ter		Blank	
ANALYTE	TOGS	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
Silver	100	ND		20	ND		20	ND	183	20	~		~
Sodium	20,000	250,000		5,000	250,000		5,000	ND		5,000	~		~
Thallium	0.5	ND		10	ND		10	ND		10	~		~
Vanadium	NA	ND		50	ND		50	ND		50	~		~
Zinc	5,000	ND		50	ND		50	ND		50	~		~
METALS - FILTERED		17.			-								
Mercury	1.4	ND	UJ	0.70	ND	UJ	0.70	ND	UJ	0.70	~		~
Aluminum	2,000	ND		180	ND		180	ND		180	~		~
Antimony	6	ND		12	ND		12	ND		12	~		~
Arsenic	50	ND		7.5	ND		7.5	ND		7.5	~		~
Barium	2,000	150		50	150		50	ND		50	~		~
Beryllium	3	ND		4.0	ND		4.0	ND		4.0	~		~
Cadmium	10	ND		3.5	ND		3.5	ND		3.5	~		~
Calcium	NA	140,000		2,000	140,000		2,000	ND		2,000	~		~
Chromium	100	ND		50	ND		50	ND		50	~		~
Cobalt	NA	ND		20	ND		20	ND		20	~		~
Copper	1000	ND		50	ND		50	ND		50	~		~
Iron	600	5,800		280	5,200		280	ND		280	~		~
Lead	50	ND		4.0	ND		4.0	ND		4.0	~		~
Magnesium	35,000	40,000		2,000	40,000		2,000	ND		2,000	~		~
Manganese	600	1,700		40	1,700		40	ND		40	~		~
Nickel	200	ND		50	ND		50	ND		50	~		~
Potassium	NA	15,000		5,000	16,000		5,000	ND		5,000	~		~
Selenium	20	ND		40	ND		40	ND		40	~		~
Silver	100	ND		20	ND		20	ND		20	~		~
Sodium	20,000	240,000		5,000	250,000		5,000	ND		5,000	~		~
Thallium	0.5	ND		10	ND		10	ND		10	~		~
Vanadium	NA	ND		50	ND		50	ND		50	~		~
Zinc	5,000	ND		50	ND		50	ND		50	~		~
POLYCHLORINATED BIPHENYLS (PCBs)													
Aroclor (Total)	NA	ND		0.25	ND		0.26	ND		0.25	~		~
Aroclor-1016	0.9	ND		0.25	ND		0.26	ND		0.25	~		~
Aroclor-1221	0.9	ND		0.25	ND		0.26	ND		0.25	~		~
Aroclor-1232	0.9	ND		0.25	ND		0.26	ND		0.25	~		~
Aroclor-1242	0.9	ND		0.25	ND		0.26	ND		0.25	~		~
Aroclor-1248	0.9	ND		0.25	ND		0.26	ND		0.25	~		~

## River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

	SAMPLE ID:	M	IW-8 U/F	D	S-8GW U/F		FB U/F	ТВ		
WHITESTONE ASSOCIATES, INC.	LAB ID:	: 3/9/2010		A	C50253-003	AC	50253-005	AC50253-007		
ASSOCIATES INC	COLLECTION DATE:				3/9/2010	3/9/2010 Groundwater		3/8/2010 Blank		
, 15363-01, 11, 25, 11 to.	SAMPLE MATRIX:			G	roundwater					
ANALYTE	TOGS	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg	RL
Aroclor-1254	0.9	ND	0.25	ND	0.26	ND	0.25	~		~
Aroclor-1260	0.9	ND	0.25	ND	0.26	ND	0.25	?		~
Aroclor-1262	0.9	ND	0.25	ND	0.26	ND	0.25	~		~
Aroclor-1268	NA	ND	0.25	ND	0.26	ND	0.25	~		~
PESTICIDES										
Aldrin	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Alpha-BHC	NA	ND	0.010	ND	0.010	ND	0.010	~		~
beta-BHC	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Chlordane	0.05	ND	0.10	ND	0.10	ND	0.10	~		~
delta-BHC	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Dieldrin	0.004	ND	0.010	ND	0.010	ND	0.010	~		~
Endosulfan I	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Endosulfan II	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Endosulfan Sulfate	NA	ND	0.010	ND	0.010	ND	0,010	~		~
Endrin	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Endrin Aldehyde	5	ND	0.010	ND	0.010	ND	0.010	~		~
Endrin Ketone	5	ND	0.010	ND	0.010	ND	0.010	~		~
gamma-BHC	NA	ND	0.010	ND	0.010	ND	0.010	~		~
Heptachlor	0.04	ND	0.010	ND	0.010	ND	0.010	~		~
Heptachlor Epoxide	0.03	ND	0.010	ND	0.010	ND	0.010	~		~
Methoxychlor	35	ND	0.010	ND	0.010	ND	0.010	~		~
p,p'-DDD	0.3	ND	0.010	ND	0.010	ND	0.010	~		~
p,p'-DDE	0.2	ND	0.010	ND	0.010	ND	0.010	~		~
p,p'-DDT	0.2	ND	0.010	ND	0.010	ND	0.010	~		~
Toxaphene	0.06	ND	0.25	ND	0.26	ND	0.25	~		~
OTHER PARAMETERS										
Cyanide	400	ND	0.01	ND	0.01	ND	0.01	~		~

### Notes:

Shaded and Bold value indicates an exceedence of the NYSDEC TOGS

All results reported in parts per billion (ppb or ug/L)

TOGS - NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standard

Flg - Data Qualifier

RL - Laboratory Reporting Limit

ND - Not Detected Exceeding RL

NA - No Applicable NYSDEC standard

J - Detected at an estimated concentration

~ - Not analyzed for this compound

UJ - Bias

TABLE 4
Groundwater Level
Measurements

## **TABLE 4**

## GROUNDWATER LEVEL MEASUREMENTS

## River Plaza Shopping Center 124 to 134 Wildey Street

Tarrytown, Westchester County, New York

Well#	Screened Interval (fbgs)	Top of Casing (feet asl)*	Date	Depth to Groundwater (feet asl)	Groundwater Elevation (feet asl)		
MW-1 5 - 12 11.41		11.41	3-9-10	5.61	5.80		
			6-21-10	5.74	5.67		
MW-2	5 - 12	11.13	3-9-10	5.45	5.68		
			6-21-10	5.57	5.56		
MW-3	5 - 12	10.88	3-9-10	5.29	5.59		
			6-21-10	5.52	5.36		
MW-4 5 - 12	11.69	3-9-10	5.51	6.18			
			6-21-10	5.68	6.01		
MW-5	5 - 15	10.76	3-9-10	5.69	5.07		
			6-21-10	5.84	4.92		
MW-6	4 - 14	11.21	3-9-10	6.78	4.43		
			6-21-10	6.63	4.58		
MW-7	5 - 15	12.36	3-9-10	6.64	5.72		
			6-21-10	6.71	5.65		
MW-8	5 - 15	10.59	3-9-10	6.73	3.86		
			6-21-10	6.75	3.84		

## NOTES:

asl above mean sea level

fbgs feet below ground surface

Top of PVC casing elevation surveyed by DPK Consulting, LLC

TABLE 5
Vapor Intrusion Sampling and
Analyses Data Summary

## TABLE 5 VAPOR INTRUSION SAMPLING AND ANALYSES DATA SUMMARY

#### River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

r==															
	11/	SAMPLE LOCATION	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	IAQ-1	IAQ-2	IAQ-3	IAQ-4	IAQ-5	AAQ-1
	► WHITESTONE	SAMPLING DATE	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010
	Y ASSOCIATES INC	SAMPLE MATRIX	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Soil Gas	Soil Gas	Indoor Air	Ambient Air				

A MARTINE	SAMPLE LOCATION	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	IAQ-1	IAQ-2	IAQ-3	IAQ-4	IAQ-5	AAQ-1
VYHITESTONE	SAMPLING DATE	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010
ASSOCIATES INC	SAMPLE MATRIX	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Soil Gas	Soil Gas	Indoor Air	Ambient Air				
ADDOCIATES INC. —	LAB SAMPLE ID	L1002578-01	L1002578-02	L1002578-03	L1002578-04	L1002578-05	L1002578-06	L1002578-07	L1002578-09	L1002578-10	L1002578-11	L1002578-12	L1002578-13	L1002578-14
VOLATILE ORGANICS VOC	Cs)													
1,1,1-Trichloroethane		1.09 U	1.09 U	1.09 U	5.54	1.09 U	1.09 U	1.09 U	1.09 U					
1,1,2,2-Tetrachloroethane		1.37 U	1.37 U	1.37 U	1.37 U			<del></del>	1.37 U		1.37 U		-	1.37 U
1,1,2-Trichloroethane		1.09 U	1.09 U	1.09 U		1.09 U		1.09 U		1.09 U				
1,1-Dichloroethane		0.809 U		0.809 U		0.809 U	0.809 U	0.809 U		0.809 U				
1,1-Dichloroethene		0.792 U	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U					
1,2,4-Trichlorobenzene		6.84 J	9.77 J	4.61 J	5.45 J	4.62 J	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene		14.7	7.2	7.46	11.5	6.05	0.982 U	0.982 U	5.52	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
1,2-Dibromoethane		1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U					
1,2-Dichlorobenzene		1.2 U	1,2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U				
1,2-Dichloroethane		0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U					
1,2-Dichloropropane		0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U					
1,3,5-Trimethybenzene		4.05	2.2	1.75	2.54	1.4	0.982 U	0.982 U	2.12	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
1,3-Butadiene		0.442 U	0.442 U	0.442 U	0.442 U	2.27	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U
1,3-Dichlorobenzene		1.2 U	1,2 U	1.2 U	1,2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene		1,2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1,2 U	1.2 U	1.2 U				
1,4-Dioxane		0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U					
2,2,4-Trimethylpentane		2.78	1.92	2.08	2.21	2.52	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U
2-Butanone		11.2	4.06	3.94	3.36	8.71	36	78.8	1.45	1.76	1.42	0.725	0.589 U	0.589 U
2-Hexanone		0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U	0.819 U					
3-Chloropropene		0.626 U	0.626 U		0.626 U	0.626 U	0.020 0	0.626 U	0.626 U					
4-Ethyltoluene		3.23	1.15	1.23	2.15	1.04	0.982 U	0.982 U		0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
Acetone		73.8	48.9	44.5	50.4	105	19.6	63.2	7.25	20.1	11.5	10.6	3.13	3.53
Benzene		3.65	2.01	4.53	1.11	9.6	2.55	3.72	0.804	0.712	0.82	0.843	0.75	0.744
Benzyl chloride		1.03 U	1.03	1.03 U	1.03 U	1.03 U		1.03 U		1.03 U				
Bromodichloromethane		1.34 U	1181 0	1.34 U		1.34 U		1.34 U		1.34 U				
Bromoform		2.06 U	2.00	2.06 U		2.06 U	2.06 U	2.06 U	2.06 U	2.06 U	2.06 U	2100		2.06 U
Bromomethane		0.776 U	01.7.0	0.776 U		0.776 U	0.776 U	0.776 U	0.776 U	0.776 U	0.776 U			0.776 U
Carbon disulfide		1.42	0.622 U	0.622 U		8.68	0.622 U	1.29	0,622 U	0.622 U	0.622 U	0.622 U	0.622 U	0.622 U
Carbon tetrachloride		1.26 U	1.20	1.26 U	1120	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U	1.26 U
Chlorobenzene		0.92 U	0172	0.92 U		0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0172	0.92 U	0.92 U
Chloroethane		0.527 U	0.02.	0.527 U	0.527 U	0.527 U		0.527 U	0.527 U	0.527 U	0.527 U	0.0		0.527 U
Chloroform		4.83	0.976 U	1.28	0.976 U	0.976 U		0.976 U		2.83	34.6	0.976 U	0.976 U	0.976 U
Chloromethane		0.413 U	01110	0.718	0.413 U	0.413 U	0.766	1.54	1.17	1.12	2.53	1.23	1.08	1.15
cis-1,2-Dichloroethene		6.37	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U	0.792 U				
cis-1,3-Dichloropropene		0.907 U	0.907 U	017 01	0.907 U	0.907 U			0.907 U					
Cyclohexane		0.688 U	0.000	0.688 U	0.000	1.36	0.688 U	0.688 U		0.688 U	0,000		0,000	0.688 U
Dibromochloromethane		1.7 U		1.7 U		1.7 U		1.7 U						
Dichlorodifluoromethane		2.61	2.66	2.6	2.52	2.72	2.63	2.64	2.7	2.53	2.66	2.61	2.59	2.66
Ethanol		141	108	108	119	79.6	110	198	49.4	349	212	25.2	4.71 U	
Ethyl Acetate		1.8 U		1.8 U		1.8 U	The state of the s	1.8 U	1.8 U	1.8 U	1.8 U	7.0		
Ethylbenzene		2.19	1.66	1.93	2.14	1.82	0.868 U	0.868 U	0.868 U	0.868 U			The state of the s	
Freon-113		1.53 U		1.53 U	1.53 U	1.53 U		1.53 U	1.53 U	1.53 U				1.53 U
Freon-114		1.4 U		1.4 U		1.4 U				1.4 U				1.4 U
Hexachlorobutadiene		2.13 U		2.13 U		2.13 U		2.13 U	2.13 U	2.13 U	2.13 U			
Isopropanol Mathalana ablasida		51.7	38.9	39.9	43.1	29.1	1.23 U	13.5	46.5	624 E	35.3	5.43	1.23 U	
Methylene chloride		1.74 U		1.74 U	1.74 U	1.74 U				1.77	1.74 U			
4-Methyl-2-pentanone	1	2.21	1.9	1.53	1.62	1.72	0,819 U			0.819 U	0.819 U			
Methyl tert butyl ether		0.72 U		0.72 U	0.72 U	0.72 U		0.72	0.72	0.72 U	0.72 U			
p/m-Xylene		7.07	5.38	6.16	7.51	5.96	1.74 U	1.76	1.74 U	1.74 U				

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# TABLE 5 VAPOR INTRUSION SAMPLING AND ANALYSES DATA SUMMARY

#### River Plaza Shopping Center 124 to 134 Wildey Street

#### Tarrytown, Westchester County, New York

	SAMPLE LOCATION	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	IAQ-1	IAQ-2	IAQ-3	IAQ-4	IAQ-5	AAQ-1
<b>MANUTESTONE</b>	SAMPLING DATE	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010	2/18/2010
A SCOCIATES INC	SAMPLE MATRIX	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Soil Gas	Soil Gas	Indoor Air	Ambient Air				
ADJUCIAIED INC. —	LAB SAMPLE ID	L1002578-01	L1002578-02	L1002578-03	L1002578-04	L1002578-05	L1002578-06	L1002578-07	L1002578-09	L1002578-10	L1002578-11	L1002578-12	L1002578-13	L1002578-14
VOLATILE ORGANICS VO	Cs)													
o-Xylene		4.07	2.7	3.17	4.16	2.84	0.868 U	0.868 L	0.868 U	J 0.868 U				
Heptane		2.5	2.45	2.14	1.3	2.68	1.2	1.26	0.819 U	0.819 U	0.819 U	0.819 L	0.819 U	0.819 U
n-Hexane		4.08	2.74	2.35	1.05	3.82	1.83	3.43	0.704 U	0.704 U	0.704 U	0.704 L	0.704 l	J 0.704 U
Propylene		2.16	0.344 U	0.874	0.344 U	28.4	17.6	86.1	0.629	0.507	0.571	0.511	0.344 t	0.518
Styrene		0.851 U	_0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 U	0.851 L	0.851 U	0.851 U
Tetrachloroethene		220	15.2	8.25	1.82	2.18	1.36 U	1.36 U	57.4	13.3	7.08	1.53	1.36 U	1.36 U
Tetrahydrofuran		10.9	9.33	8.86	8.31	6.46	0.589 U	0.589 U	0.589 U	0.634	0.589 U	0.589 L	0.589 U	0.589 U
Toluene		34.1	13.1	40.8	20.3	21.3	24.8	4.4	2.03	1.54	1.49	1.49	1.14	1.1
trans-1,2-Dichloroethene		6.64	4.98	5.74	2.46	5.04	3.97	3.8	0.792 U	0.792 U	0.792 U	0.792 L	0.792 L	0.792 U
trans-1,3-Dichloropropene		0.907 U	0.907 L	0.907 L	0.907 U									
Trichloroethene		13.4	1.07 U	2.89	1.07 U	1.07 U	1.07 U	1.07 L	1.07 U					
Trichlorofluoromethane		1.41	1.44	1.31	1.39	1.35	1.38	1.39	1.32	1.3	1.42	1.36	1.26	1.33
Vinyl acetate		0.704 U	0.704 L	0.704 U										
Vinyl bromide		0.874 U	0.874 Ü	0.874 U	0.874 L	0.874 U								
Vinyl chloride		0.511 U												

#### Notes:

Results compared to the decision matrices found in the NYSDOH Final Guidance for Evaluating Soil Vapor Intrustion in the State of New York (October 2006).

Results are reported in micrograms per cubic meter (ug/m<sup>3</sup>).

Bold result identifies a detection above the laboratory Reported Detection Limit (RDL).

Bold and Shaded (Red) result identifies a compound of concern (COC) which requires mitigation to be performed per the decision matrices.

Bold and Shaded (Yellow) result identifies a COC which requires monitoring to be performed per the decision matrices.

U - Compound analyzed but not detected at a concentration above the RDL.

E - Concentration of compound exceeds the range of calibration curve and/or linear range of the instrument.

The COCs carbon tetrachloride and trichloroethene were compared to NYSDOH Soil Vapor/Indoor Air Matrix 1.

The remaining COCs including 1,1,1-trichloroethane and tetrachloroethane were compared to NYSDOH Soil Vapor/Indoor Air Matrix 2.

J - Bias high

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# TABLE 6 Communication Test Results

# TABLE 6

## COMMUNICATION TEST RESULTS

#### River Plaza Shopping Center 124 to 134 Wildey Street

Tarrytown, Westchester County, New York

	Micromanometer Reading							
Communication Test Location	March 2010*	July 2010**	August 2010***					
SS-1	0.0041	0.0011	0.0038					
SS-1F	0.0029	0.0013	0.0244					
SS-2	0.0037	0.0000	0.0334					
SS-3	0.0026	0.0000	0.0321					

#### Notes:

- 1. Micromanometer readings reported in inches of water column.
- \* Vacuum applied by a device capable of establishing 90 cubic feet per minute (CFM) from the SSDS location depicted on Figure 6.
- \*\* Vacuum applied by Radonaway Model RP-145 fan from the SSDS location depicted on Figure 6.
- \*\*\* Vacuum applied by Radonaway Model HS-5000 fan from the SSDS location depicted on Figure 6.

TABLE 7
Post-Mitigation Air Sampling and Analyses Data Summary

#### **TABLE 7**

## POST-MITIGATION AIR SAMPLING AND ANALYSES DATA SUMMARY

# **River Plaza Shopping Center**

#### 124 to 134 Wildey Street

	a come ne a comenza	T.O. 1	_	4401	
A MARTECTONE -	SAMPLE LOCATION	IAS-1	$\dashv$	AAS-1	
WHITESTONE ASSOCIATES INC	SAMPLING DATE	1/18/2011	$\dashv$	1/18/2011	
A X ASSOCIATES INC	SAMPLE MATRIX	Indoor Air	_	Ambient Air	
7 LOOD ON THEO IN TO	LAB SAMPLE ID	L1100816-01		L1100816-02	
VOLATILE ORGANICS (V	Os)				
Propylene		1.34		0.939	
Dichlorodifluoromethane		2.87		2.63	
Chloromethane		1.13		1.15	
Freon-114		1.4	U	1.4	U
Vinyl chloride		0.511	U	0.511	U
1,3-Butadiene		0.442	U	0.442	U
Bromomethane		0.776	U	0.776	U
Chloroethane		0.527	U	0.527	U
Ethanol		38.4		4.71	U
Vinyl bromide		0.874	U	0.874	U
Acetone		5.72		3.37	
Trichlorofluoromethane		1.74		1.6	
Isopropanol		4.25		1.23	U
1,1-Dichloroethene		0.792	U	0.792	U
Methylene chloride		25.3		3.47	U
3-Chloropropene		0.626	U	0.626	U
Carbon disulfide		0.622	U	0.622	U
Freon-113		1.81		1.53	U
trans-1,2-Dichloroethene		0.792	U	0.792	U
1,1-Dichloroethane		0.809	U	0.809	U
Methyl tert butyl ether		0.72	U	0.72	U
Vinyl acetate		0.704	U	0.704	U
2-Butanone		4.3	J	0.793	J
cis-1,2-Dichloroethene		0.792	U	0.792	U
Ethyl Acetate		1.8	U	1.8	U
Chloroform		0.976	U	0.976	U
Tetrahydrofuran		1.96		0.589	U
1,2-Dichloroethane		0.809	U	0.809	U
n-Hexane		0.919		0.704	U
1,1,1-Trichloroethane		1.09	U	1.09	U
Benzene		1.33		0.999	
Carbon tetrachloride		1.26	U	1.26	U
Cyclohexane		0.688	U	0.688	U
1,2-Dichloropropane		0.924	U	0.924	U
Bromodichloromethane		1.34	U		U
1,4-Dioxane		0.72	U	0.72	U
Trichloroethene		1.07	U	1.07	U
2,2,4-Trimethylpentane		0.934	U	0.934	U
Heptane		1.92		0.819	U
cis-1,3-Dichloropropene		0.907	U	0.907	U
4-Methyl-2-pentanone		0.819	U	0.819	U
trans-1,3-Dichloropropene		0.907	U	0.907	U
1,1,2-Trichloroethane		1.09	U	1.09	U
Toluene		2.78		1.74	
2-Hexanone		0.819	U	0.819	U
Dibromochloromethane		1.7_	U	1.7	U
		1.54	U	1.54	U
1,2-Dibromoethane		1.54		710	
		3.2		1.36	U
1,2-Dibromoethane Tetrachloroethene Chlorobenzene			U	1.36	U

#### TABLE 7

## POST-MITIGATION AIR SAMPLING AND ANALYSES DATA SUMMARY

#### River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

			=	<del></del>	
	SAMPLE LOCATION	IAS-1		AAS-1	
MHITESTONE ]	SAMPLING DATE	1/18/2011		1/18/2011	
ASSOCIATES, INC	SAMPLE MATRIX	Indoor Air		Ambient Air	
ADSOCIATES INC	LAB SAMPLE ID	L1100816-01		L1100816-02	
VOLATILE ORGANICS (V	Os)				
p/m-Xylene		1.74	U	1.74	U
Bromoform		2.06	U	2.06	U
Styrene		0.851	U	0.851	U
1,1,2,2-Tetrachloroethane		1.37	U	1.37	U
o-Xylene		0.868	U	0.868	U
4-Ethyltoluene		0.982	U	0.982	U
1,3,5-Trimethybenzene		0.982	U	0.982	U
1,2,4-Trimethylbenzene		0.982	U	0.982	U
Benzyl chloride		1.03	U	1.03	U
1,3-Dichlorobenzene		1.2	U	1.2	U
		1.2	U	1.2	U
1,4-Dichlorobenzene		1.2	U	1.2	U
1,2-Dichlorobenzene		1.48	U	1.48	U
1,2,4-Trichlorobenzene		2.13	U	2.13	U
Hexachlorobutadiene		2.13		2.13	

#### Notes:

Results compared to the decision matrices found in the NYSDOH Final Guidance for

Evaulating Soil Vapor Intrusion in the State of New York (October 2006).

Results are reported in micrograms per cubic meter (ug/m<sup>3</sup>).

Bold result identifies a detection above the laboratory Reported Detection Limit (RDL).

Bold and Shaded result identifies a compound of concern (COC) which

requires monitoring to be performed per the decision matrices.

U - Compound analyzed but not detected at a concentration above the RDL.

The COCs carbon tetrachloride and trichloroethene were compared to NYSDOH Soil Vapor/Indoor Air Matrix 1.

The remaining COCs including 1,1,1-trichloroethane and tetrachloroethane were compared to NYSDOH Soil Vapor/Indoor Air Matrix 2.

J - Bias high

TABLE 8
Summary of Remaining Soil
Contamination Above
Unrestricted Levels



# SOIL CONTAMINANT CONCENTRATION SUMMARY

#### River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

SAMPLE DATE	July-98	October-03	March-04	December-04	January-09	February-10	NYSDEC UUSCO	NYSDEC RUCSCO	NYSDEC PGWSCO
CONTAMINANT									
PCE	1.829	ND	ND	ND	ND	ND	1.3	150	1.3
Methylene Chloride	0.136	ND	ND	ND	ND	ND	0.05	500	0.05
Acetone	NA	0.17-0.43	ND	0.276	0.083-0.19	0.054-0.15	0.05	500	0.05
Benzo[a]pyrene	NA	1.1	1.6-2.9	NA	2.0	1.8-3.9	1.0	1.0	22
Benzo[k]fluoranthene	NA	0.94	0.98	NA	ND	ND	0.8	56	1.7
Indeno[1,2,3-cd]pyrene	NA	ND	0.63-1.7	NA	ND	0.5-0.56	0.5	5.6	8.2
Benzo[a]anthracene	NA	ND	1.8-2.6	NA	ND	1.5	1.0	5.6	1.0
Benzo[b]fluoroanthene	NA	ND	1.7-2.6	NA	ND	1.1-2.2	1.0	5.6	1.7
Chrysene	NA	ND	1.9-3.2	NA	ND	1.4	1.0	56	1_0
Dibenzo[a,h]anthracene	NA	ND	0.5	NA	ND	0.47	0.33	0.56	1,000
Aluminum	NA	NA	NA	NA	11,000-13,000	12,000-14,000	10,000	10,000	~
Iron	NA	NA	NA	NA	11,000-19,000	12,000-37,000	2,000	~	2,000
Chromium	NA	NA NA	NA	NA	36	37-110	30	1,500	~ _
Mercury	NA	NA	NA	NA	ND	0.22-0.58	0.18	2.8	0.73
Lead	NA	NA	NA	NA	ND	130-230	63	1,000	450
Zinc	NA	NA	NA	NA	ND	110-250	109	10,000	2,480
Calcium	NA	NA	NA	NA	ND	13,000-33,000	10,000	~	~
p,p-DDD	NA	NA	NA	NA	ND	0.0043	0.0033	92	14

#### Notes:

ND = Not Detected exceeding NYSDEC UUSCO

NA = Not Analyzed

~= No SCO

NYSDEC UUSCO = New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective
NYSDEC RUCSCO = New York State Department of Environmental Conservation Restricted Use Commercial Soil Cleanup Objective

NYSDEC PGWSCO = New York State Department of Environmental Conservation Protection of Groundwater Soil Cleanup Objective

All results reported in parts per million (ppm)

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#### TABLE 8

#### SUMMARY OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

#### River Plaza Shopping Center 124 to 134 Wildey Street

Sample Date	Sample ID	Sample Depth (fbgs)	Contaminant of Concern (Concentration)	Exceeds NYSDEC UUSCO (SCO)	Exceeds NYSDEC RUCSCO (SCO)	Exceeds NYSDEC POERSCO (SCO)	Exceeds NYSDEC POGWSCO (SCO)	Exceeds NYSDEC RURSCO (SCO)
July 1998	SB-2B (2)	7.0 - 7.5	PCE (1.829)	X (1.3)			X (1.3)	No.
	SB-4A (4)	2.5 - 3.0	Methylene Chloride (0.136)	X (0.05)			X (0.05)	
October 2003	S2B (SB-02)	12.0 - 14.0	Benzo[a]pyrene (1.1)	X (1)	X (1)			
			Benzo[k]fluoranthene (0.94)	X (0.8)				
	S3B (SB-03)	12.0 - 16.0	Acetone (0.43)	X (0.05)			X (0.05)	
	S4A (SB-04)	8.0 - 12.0	Acetone (0.17)	X (0.05)			X (0.05)	
March 2004	NW-1	6.5 - 7.0	Indeno[1,2,3-cd]pyrene (0.63)	X (0.5)				
	EW-1	6.5 - 7.0	Benzo[a]anthracene (1.8)	X (1)			X (1)	
			Benzo[a]pyrene (1.6)	X (1)	X (1)			
			Benzo[b]flouranthene (1.7)	X (1)				
			Chrysene (1.9)	X(1)			X(1)	
			Indeno[1,2,3-cd]pyrene (0.9)	X (0.5)				
	MW-4	4.0 - 6.0	Benzo[a]anthracene (2.9)	X (1)			X (1)	
			Benzo[a]pyrene (2.6)	X (1)	X (1)			
			Benzo[b]flouranthene (2.6)	X (1)			X(1)	

## SUMMARY OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

#### River Plaza Shopping Center 124 to 134 Wildey Street

Sample Date	Sample ID	Sample Depth (fbgs)	Contaminant of Concern (Concentration)	Exceeds NYSDEC UUSCO (SCO)	Exceeds NYSDEC RUCSCO (SCO)	Exceeds NYSDEC POERSCO (SCO)	Exceeds NYSDEC POGWSCO (SCO)	Exceeds NYSDEC RURSCO (SCO)
March 2004	MW-4	4.0 - 6.0	Benzo(k)flouranthene (0.98)	X (0.8)				
			Chrysene (3.2)	X (1)			X (1)	
			Dibenzo[a,h]anthracene (0.5)	X (0.33)				
			Indeno[1,2,3-cd]pyrene (1.7)	X (0.5)				
December 2004	\$1 (IB1)	9.0	Acetone (0.276)	X (0.05)			X (0.05)	
January 2009	MW-5	13.5 - 14.0	Acetone (0.084)	X (0.05)			X (0.05)	
	WB-1	18.5 - 19.0	Acetone (0.083)	X (0.05)			X (0.05)	
	WB-2	15.0 - 15.5	Acetone (0.19)	X (0.05)			X (0.05)	
			Aluminum (13,000)	X (10,000)		X (10,000)		
			Iron (19,000)	X (2,000)				X (2,000)
	MW-6S	13.0 - 13.5	Iron (13,000)	X (2,000)				X (2,000)
	MW-7S	12.5 - 13.0	Aluminum (11,000)	X (10,000)		X (10,000)		
			Chromium (36)	X (30)				
			Iron (11,000)	X (2,000)			<u> </u>	X (2,000)
	WB-3	19.5 - 20.0	Aluminum (13,000)	X (10,000)	19	X (10,000)		

# TABLE 8 (continued) SUMMARY OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

#### River Plaza Shopping Center 124 to 134 Wildey Street

Sample Date	Sample ID	Sample Depth (fbgs)	Contaminant of Concern (Concentration)	Exceeds NYSDEC UUSCO (SCO)	Exceeds NYSDEC RUCSCO (SCO)	Exceeds NYSDEC POERSCO (SCO)	Exceeds NYSDEC POGWSCO (SCO)	Exceeds NYSDEC RURSCO (SCO)
January 2009	WB-3	19.5 - 20.0	Chromium (36)	X (30)				
			Iron (15,000)	X (2,000)				X (2,000)
	WB-4	20.0 - 20.5	Benzo[a]pyrene (2.0)	X (1)	X (1)			
February 2010	MW-8S-A	1.5 - 2.0	Benzo[a]anthracene (1.5)	X (1)			X (1)	
			Benzo[a]pyrene (1.8)	X (1)	X (1)			
			Benzo[b]flouranthene (2.2)	X (1)			X (1)	
			Chrysene (1.4)	X (1)			X (1)	
			Dibenzo[a,h]anthracene (0.47)	X (0.33)				
			Indeno[1,2,3-cd]pyrene (1.2)	X (0.5)				
			Mercury (0.58)	X (0.18)		X (0.18)		
			Lead (230)	X (63)		X (63)		
			Zinc (150)	X (109)		X (109)		
			Calcium (13,000)	X (10,000)		X (10,000)		
			Iron (14,000)	X (2,000)				X (2,000)
	MW-8S-B	13.5 - 14.0	Acetone (0.094)	X (0.05)			X (0.05)	

#### SUMMARY OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

## River Plaza Shopping Center

## 124 to 134 Wildey Street

Sample Date	Sample ID	Sample Depth (fbgs)	Contaminant of Concern (Concentration)	Exceeds NYSDEC UUSCO (SCO)	Exceeds NYSDEC RUCSCO (SCO)	Exceeds NYSDEC POERSCO (SCO)	Exceeds NYSDEC POGWSCO (SCO)	Exceeds NYSDEC RURSCO (SCO)
February 2010	MW-8S-B	13.5 - 14.0	Aluminum (14,000)	X (10,000)		X (10,000)		
			Iron (19,000)	X (2,000)				X (2,000)
	WB-5	22.5 - 23.0	Benzo[a]pyrene (3.9)	X (1)	X(1)	X (2.6)		
			Chromium (37)	X (30)				
			Aluminum (12,000)	X (10,000)		X (10,000)		
			Iron (15,000)	X (2,000)				X (2,000)
	WB-6	10.5 - 11.0	Acetone (0.088)	X (0.05)			X (0.05)	
			Chromium (40)	X (30)				45
			Iron (20,000)	X (2,000)				X (2,000)
			Aluminum (14,000)	X (10,000)		X (10,000)		
	WB-7	13.0 - 13.5	Acetone (0.054)	X (0.05)			X (0.05)	
			Aluminum (13,000)	X (10,000)		X (10,000)		1
	WB-8S	1.0 - 1.5	Indeno[1,2,3-cd]pyrene (0.53)	X (0.5)				
			Mercury (0.31)	X (0.18)		X (0.18)		
			Lead (130)	X (63)		X (63)		

#### SUMMARY OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

#### **River Plaza Shopping Center** 124 to 134 Wildey Street

Sample Date	Sample ID	Sample Depth (fbgs)	Contaminant of Concern (Concentration)	Exceeds NYSDEC UUSCO (SCO)	Exceeds NYSDEC RUCSCO (SCO)	Exceeds NYSDEC POERSCO (SCO)	Exceeds NYSDEC POGWSCO (SCO)	Exceeds NYSDEC RURSCO (SCO)
February 2010	WB-8S	1.0 - 1.5	Zinc (110)	X (109)		X (109)		
			Calcium (33,000)	X (10,000)		X (10,000)		
			Iron (12,000)	X (2,000)				X (2,000)
	WB-8D	16.0 - 16.5	Acetone (0.091)	X (0.05)			X (0.05)	
			Mercury (0.22)	X (0.18)		X (0.18)		
			Iron (18,000)	X (2,000)				X (2,000)
	WB-9	20.0 - 20.5	Iron (19,000)	X (2,000)				X (2,000)
	ST-1S	1.5 - 2.0	Acetone (0.15)	X (0.05)			X (0.05)	
			Benzo[b]flouranthene (1.1)	X (1)				
			Indeno[1,2,3-cd]pyrene (0.56)	X (0.5)				
			Mercury (0.24)	X (0.18)		X (0.18)		
			Chromium (110)	X (30)		X (41)		
			Lead (230)	X (63)		X (63)		
			Zinc (250)	X (109)		X (109)		
			Calcium (15,000)	X (10,000)		X (10,000)		

#### SUMMARY OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

# River Plaza Shopping Center

#### 124 to 134 Wildey Street

#### Tarrytown, Westchester County, New York

Sample Date	Sample ID	Sample Depth (fbgs)	Contaminant of Concern (Concentration)	Exceeds NYSDEC UUSCO (SCO)	Exceeds NYSDEC RUCSCO (SCO)	Exceeds NYSDEC POERSCO (SCO)	Exceeds NYSDEC POGWSCO (SCO)	Exceeds NYSDEC RURSCO (SCO)
February 2010	ST-1S	1.5 - 2.0	Iron (37,000)	X (2,000)				X (2,000)
			p,p'-DDD (0.0043)	X (0.0033)		X (0.0033)		
	ST-1D	7.5 - 8.0	Acetone (0.11)	X (0.05)			X (0.05)	
			Iron (17,000)	X (2,000)				X (2,000)

#### Notes:

Soil analytical results from previous investigations have been compiled and compared to NYSDEC Part 375 SCOs. Only exceedances of NYSDEC Part 375 SCOs are included in this table. Contaminant concentrations and SCOs report in parts per million (ppm).

NYSDEC New York State Department of Environmental Conservation
NYSDEC UUSCO NYSDEC Part 375 Unrestricted Use Soil Cleanup Objective

NYSDEC RUCSCO
NYSDEC Part 375 Restricted Use Commercial Soil Cleanup Objective
NYSDEC POERSCO
NYSDEC Part 375 Protection of Ecological Resources Soil Cleanup Objective

NYSDEC POGWSCO NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objective

NYSDEC RURSCO NYSDEC Restricted Use Residential Soil Cleanup Objective feet below ground surface

fbgs feet below ground surface
() Boring Location, Shown in Parenthesis

() Boring Location, Shown in Parenthesis
PCE Tetrachloroethene

L:\Job Folders\2008\0810744EJ\0810744.005\CRI-Tables\Table8.wpd

TABLE 9
Summary of Remaining
Groundwater Contamination
Above NYSDEC TOGS WQS



# GROUNDWATER CONTAMINANT CONCENTRATION SUMMARY

River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

SAMPLE DATE	July-98	August-03	October-03	March-04	October-04	November-04	January-05	January-09	February-09	February-10	March-10	NYSDEC TOGS WQS
CONTAMINANT					111	**************************************						
PCE	8.0-43.0	ND	ND	5.4	6.8	14.4	ND	ND	5.3 [6.9]	ND	ND	5.0
Vinyl Chloride	ND	13.0	ND	5.1-11.0	3.0-12.0	3.08-10.5	8.9	ND	ND	ND	ND	2.0
MTBE	ND	ND	13.0	ND	ND	ND	ND	ND	ND	ND	ND	10.0
Sodium	NA	NA	NA	NA	NA	NA	NA	34,000 - 120,000	40,000 - 260,000	34,000 - 410,000	250,000	20,000
Magnesium	NA	NA	NA	NA	NA	NA	NA	ND	36,000	57,000 - 62,000	40,000	35,000
Iron	NA	NA	NA	NA	NA	NA	NA	ND	5,000	760	33,000	600
Manganese	NA	NA	NA	NA	NA	NA	NA	ND	880-2,400	1,100-2,900	1,700	600
Dieldrin	NA	NA	NA	NA	NA	NA	NA	ND	ND [0.024]	ND	ND	0.004

#### Notes:

ND = Not Detected exceeding NYSDEC TOGS WQS

NA = Not Analyzed

[ ] = Duplicate Sample Results, shown in brackets

NYSDEC TOGS WQS = New York State Department of Environmental Conservation Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standard All results reported in parts per billion (ppb)

Whitestone Associates, Inc. Page 1 of 1

## TABLE 9 SUMMARY OF REMAINING GROUNDWATER CONTAMINATION ABOVE NYSDEC TOGS

#### River Plaza Shopping Center 124 to 134 Wildey Street

Sample Date	Sample ID	Contaminant of Concern	Concentration (ppb)	NYSDEC TOGS WQS (ppb)
July 1998	SB-2GW (2)	PCE	8.0	5.0
	SB-4GW (4)	PCE	43.0	5.0
August 2003	GW-2	Vinyl Chloride	13.0	2.0
October 2003	GW-1 (SB-02)	MTBE	13.0	10.0
March 2004	MW-1	Vinyl Chloride	5.1	2.0
	MW-2	Vinyl Chloride	7.8	2.0
	MW-3	PCE	5.4	5.0
		Vinyl Chloride	11.0	2.0
October 2004	MW-1	Vinyl Chloride	5.6	2.0
	MW-2	Vinyl Chloride	3	2.0
	MW-3	Vinyl Chloride	12	2.0
		PCE	6.8	5.0
November 2004	MW-1	Vinyl Chloride	4.48	2.0
	MW-2	Vinyl Chloride	3.08	2.0
	MW-3	Vinyl Chloride	10.5	2.0
		PCE	14.4	5.0

#### SUMMARY OF REMAINING GROUNDWATER CONTAMINATION ABOVE NYSDEC TOGS

#### **River Plaza Shopping Center** 124 to 134 Wildey Street

Sample Date	Sample ID	Contaminant of Concern	Concentration (ppb)	NYSDEC TOGS WQS (ppb)
January 2005	GP-2	Vinyl Chloride	8.9	2.0
January 2009	WB-2GW	Sodium*	120,000	20,000
	WB-4GW	Sodium*	34,000	20,000
February 2009	MW-1	Magnesium*	36,000	35,000
		Sodium*	260,000	20,000
	MW-2	Sodium*	230,000	20,000
	MW-3	PCE	5.3 [6.9]	5.0
		Sodium*	170,000	20,000
	MW-4	Sodium*	170,000	20,000
	MW-5	Iron*	5,000	600
		Manganese*	2,400	600
		Sodium*	150,000	20,000
	MW-6	Manganese*	1,300	600
		Sodium*	150,000	20,000
	MW-7	Manganese*	880	600
		Sodium*	40,000	20,000
		Dieldrin	[0.024]	0.004

## SUMMARY OF REMAINING GROUNDWATER CONTAMINATION ABOVE NYSDEC TOGS

#### River Plaza Shopping Center 124 to 134 Wildey Street

Sample Date	Sample ID	Contaminant of Concern	Concentration (ppb)	NYSDEC TOGS WQS (ppb)
February 2010	WB-5GW	Sodium*	34,000	20,000
	WB-6GW	Manganese*	1,400	600
		Sodium*	400,000	20,000
	WB-7GW	Manganese*	2,900	600
		Sodium*	350,000	20,000
	WB-8GW	Magnesium*	62,000	35,000
		Manganese*	1,100	600
		Sodium*	410,000	20,000
	WB-9GW	Iron*	760	600
		Magnesium*	57,000	35,000
		Manganese*	1,100	600
		Sodium*	350,000	20,000
March 2010	MW-8	Iron*	33,000	600
		Magnesium*	40,000	35,000
		Manganese*	1,700	600
		Sodium*	250,000	20,000

#### SUMMARY OF REMAINING GROUNDWATER CONTAMINATION ABOVE NYSDEC TOGS

# River Plaza Shopping Center

#### 124 to 134 Wildey Street

Tarrytown, Westchester County, New York

Sample Date	Sample ID	Contaminant of Concern	Concentration (ppb)	NYSDEC TOGS WQS (ppb)
Notes:			•	

Groundwater analytical results from previous investigations have been compiled and compared to NYSDEC TOGS WQS. Only exceedances of NYSDEC TOGS WQS are included in this table.

NYSDEC TOGS WQS NYSDEC Technical and Operational Guidance Series (1.1.1) Water Quality Standards

PCE Tetrachloroethene ppb parts per billion

Only filtered metals exceedances of NYSDEC TOGS WQS are shown. These metals are believed to be naturally occurring at the site.

() Boring Location, shown in parenthesis
[] Duplicate Sample Results, shown in brackets

FIGURE 1
Figure of Site, Site Boundaries, and Community Air Monitoring

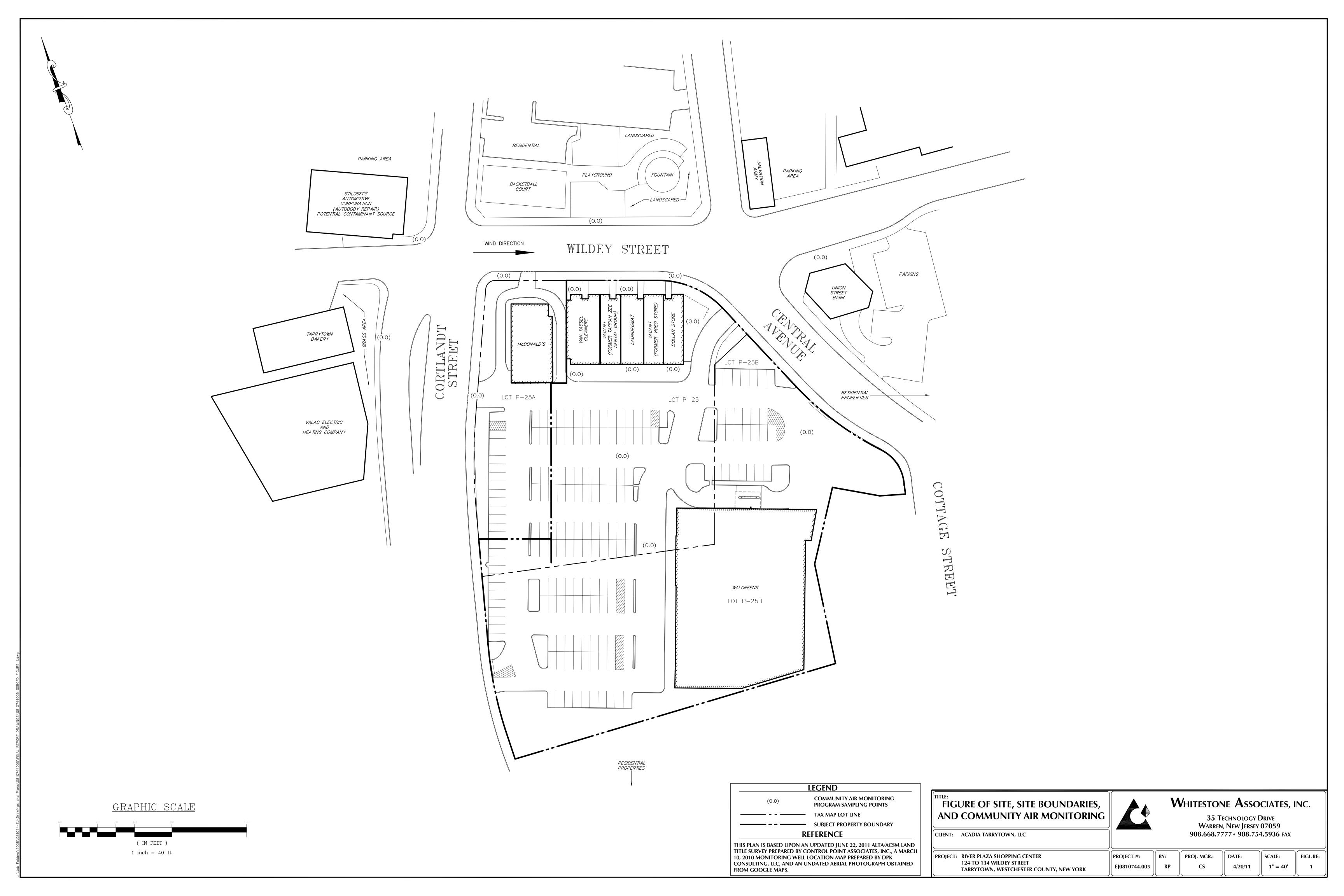


FIGURE 2
Site and Sample Location Plan

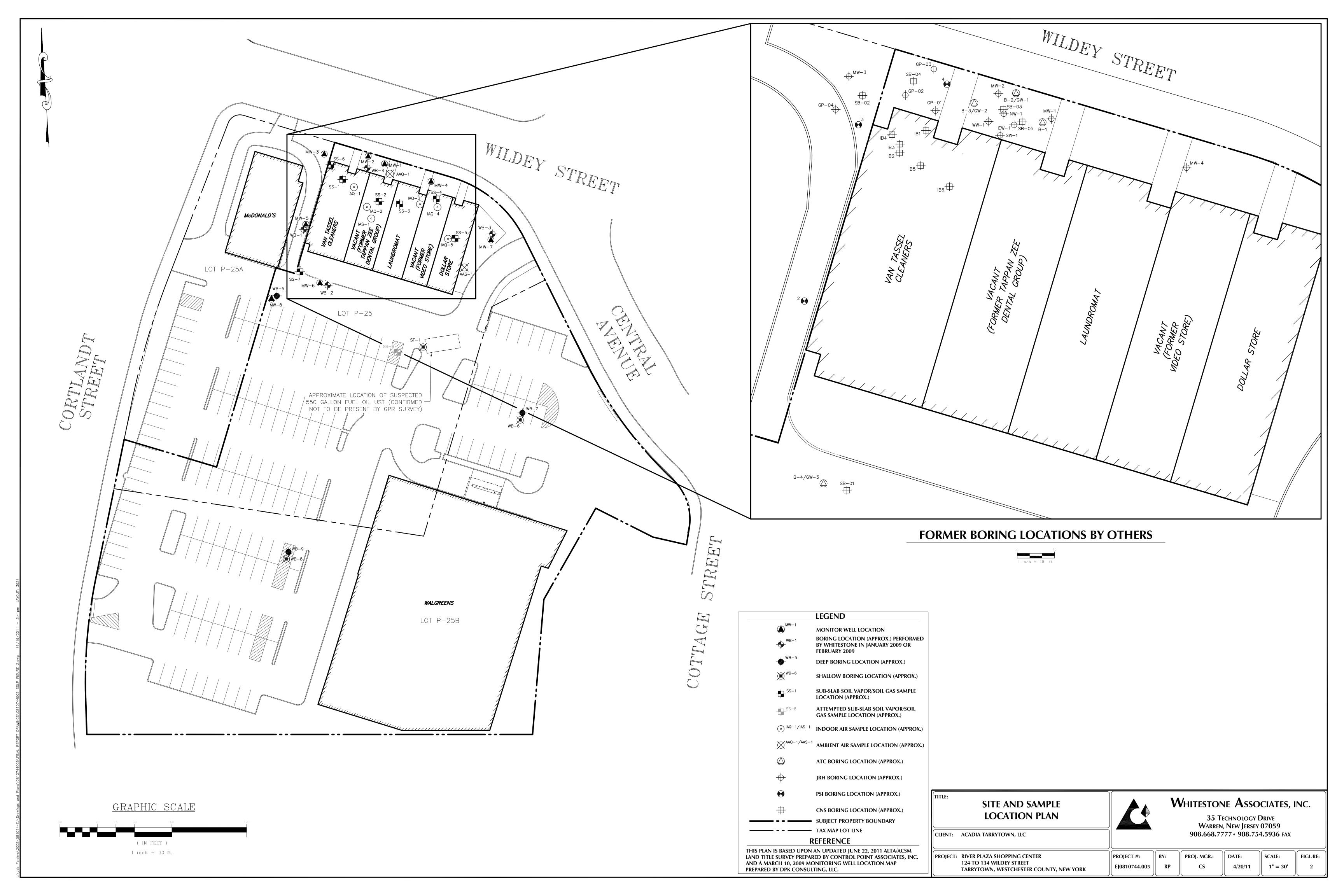


FIGURE 3
Site Utility Corridor Plan

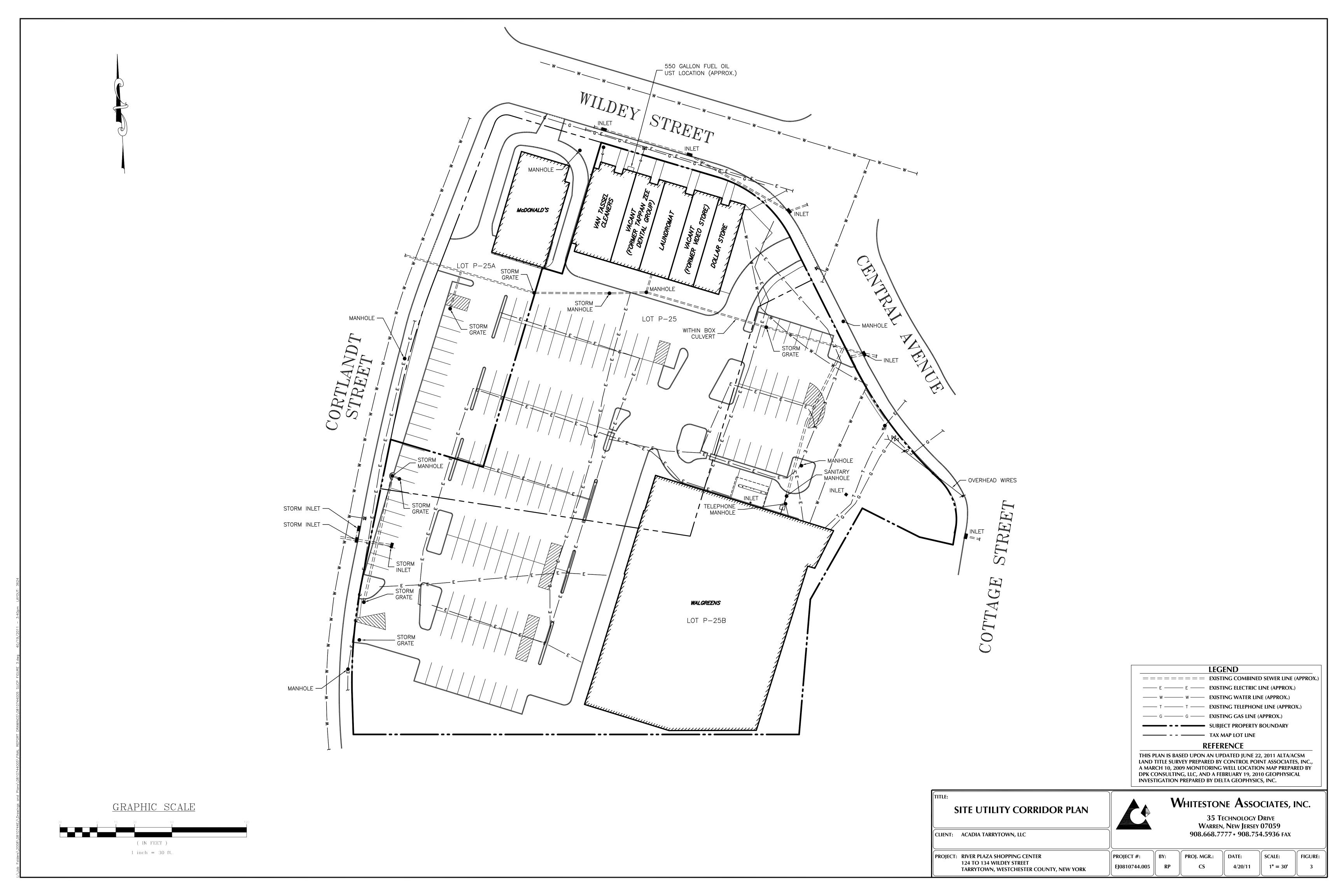


FIGURE 4
Groundwater Contour Map
(Measured March 9, 2010)

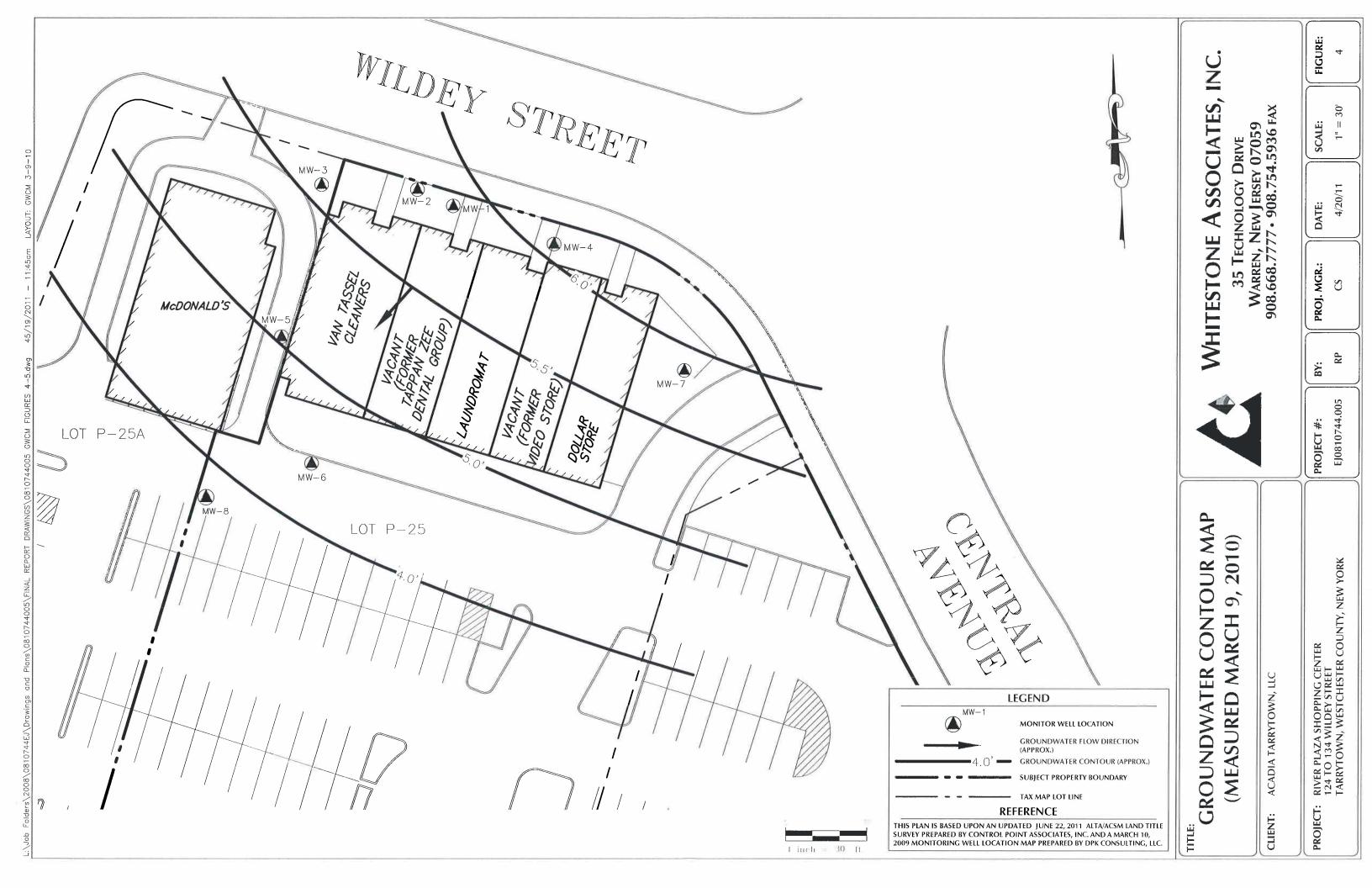


FIGURE 5 Groundwater Contour Map (Measured June 21, 2010)

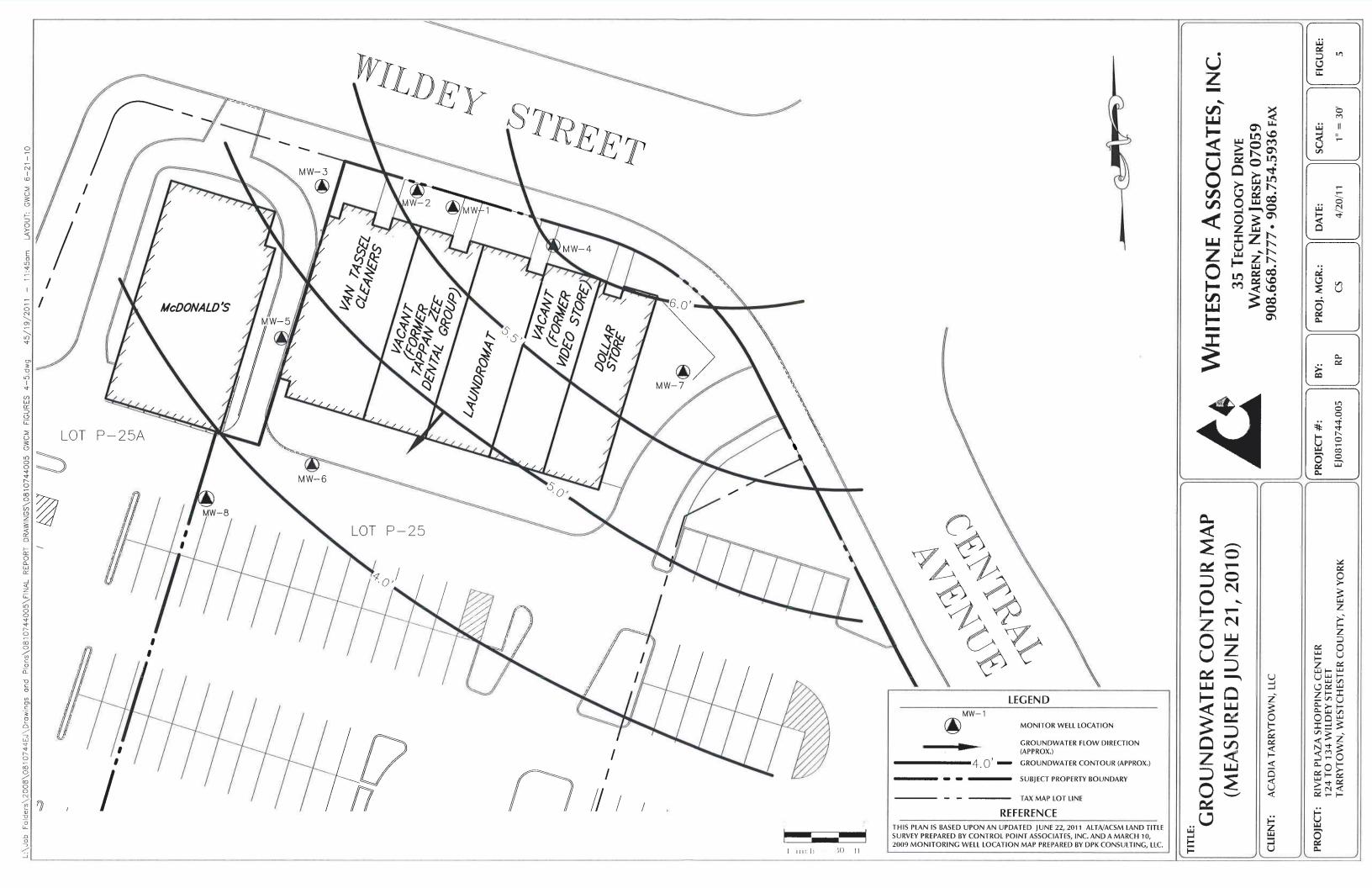
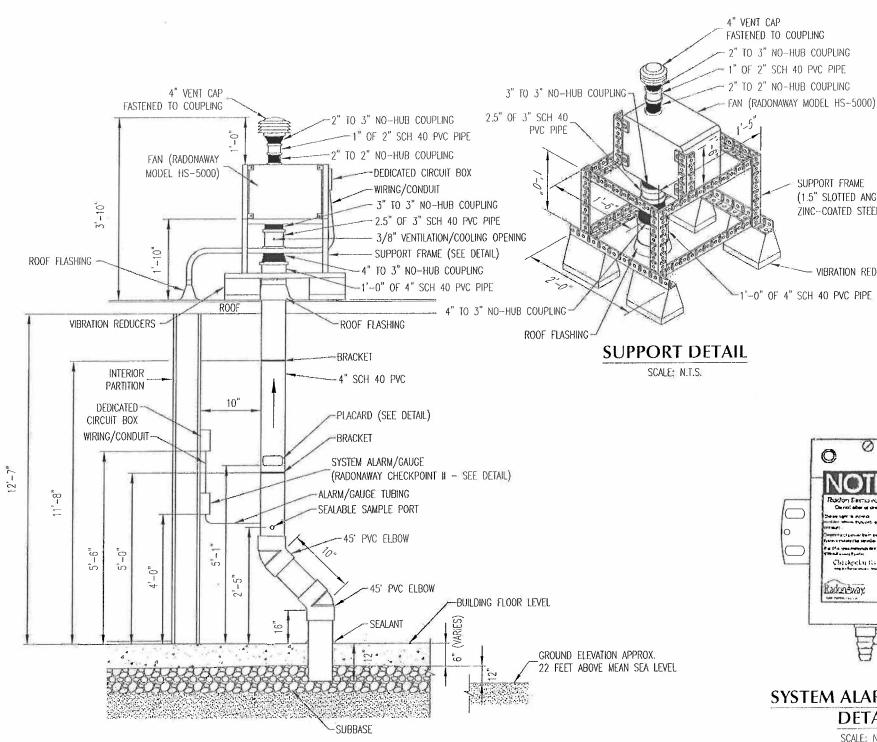


FIGURE 6
Sub-Slab Depressurization
System (SSDS) As-Built Plan



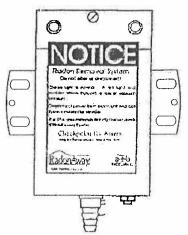


This is a component of an active soil depressurization system Do not alter or disconnect

Whitestone Associates, Inc. (908) 668-7777

## PLACARD DETAIL

SCALE: N.T.S.



SUPPORT FRAME

(1.5" SLOTTED ANGLE

ZINC-COATED STEEL)

VIBRATION REDUCERS

## SYSTEM ALARM/GAUGE DETAIL

SCALE: N.T.S.



KEITH T. D'AMBROSIO

PROFESSIONAL ENGINEER

NEW YORK LICENSE No. 076095-1

**NOTES:** 

1. SSDS PIPE AT LEAST 10 FEET AWAY FROM ANY OPENING OR INTAKE THAT IS LESS THAN 24 INCHES BELOW THE SSDS'S EXHAUST POINT. PVC CONNECTIONS IN THE INTERIOR ARE GLUED.

MAXIMUM FLOW RATE OF SSDS IS 53 CUBIC FEET PER MINUTE.

SSDS SHOWN TO ILLUSTRATE DETAILS. 45° ANGLE OF SSDS PIPING IS PARALLEL TO INTERIOR PARTITION.

IT IS A VIOLATION OF ARTICLE 145, PROVISION 7209 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS ITEM IN ANY WAY.

PLAN

AS-BUILT

(SSDS)

SYSTEM

SUB-SLAB DEPRESSURIZATION

TITLE

SSOCIATES, INC.

WHITESTONE

v Jersey 07059 908.754.5936 FAX

WARREN, NE 908.668.7777

35 TECHNOLOGY DRIVE

RP BY: **PROJECT** 

DATE:

MGR.:

PROJ.

RIVER PLAZA SHOPPING CENTER 130 WILDEY STREET TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

PROJECT:

FIGURE 7
Remedial Investigation Soil,
Groundwater, and Soil Vapor
Contamination Summary

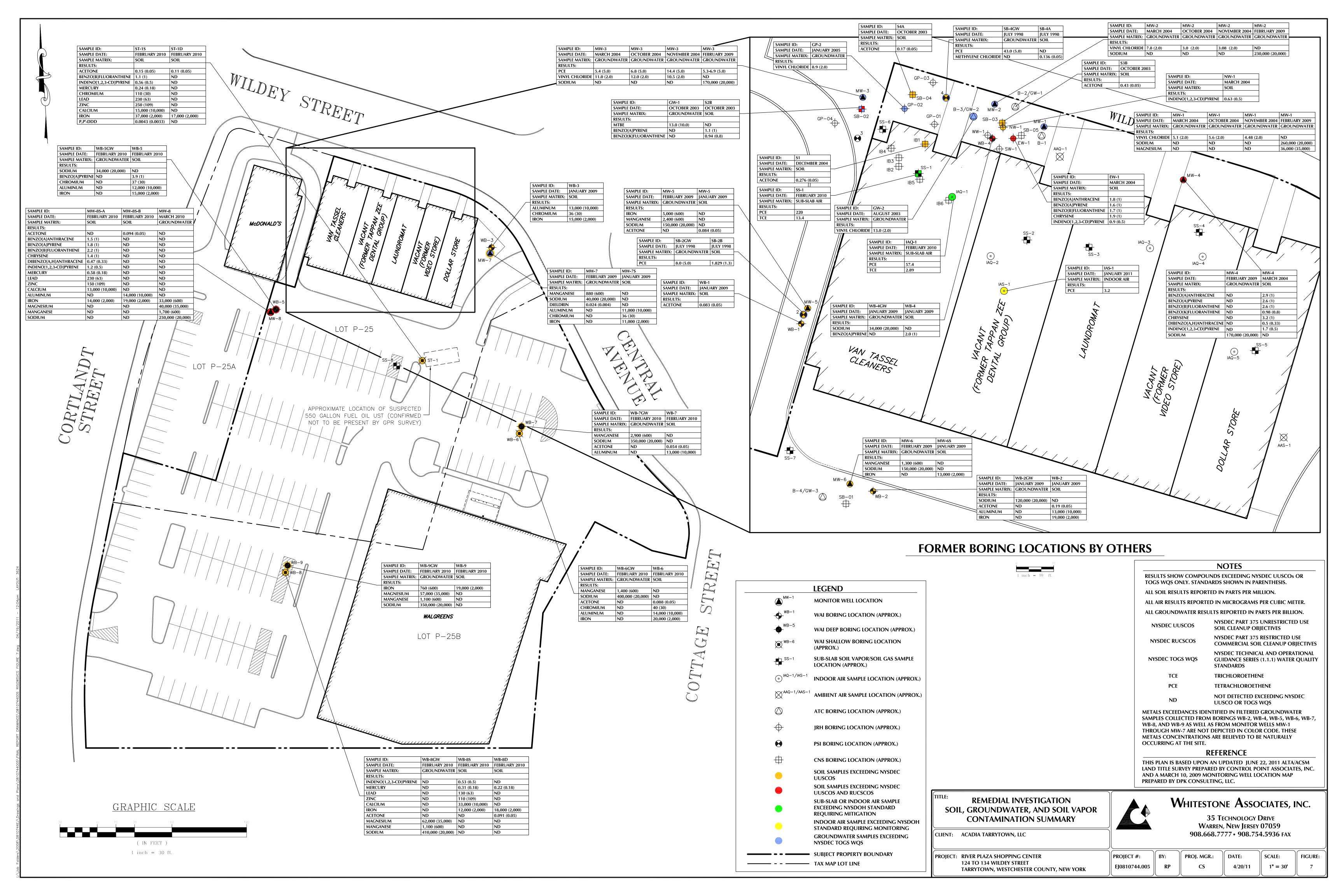
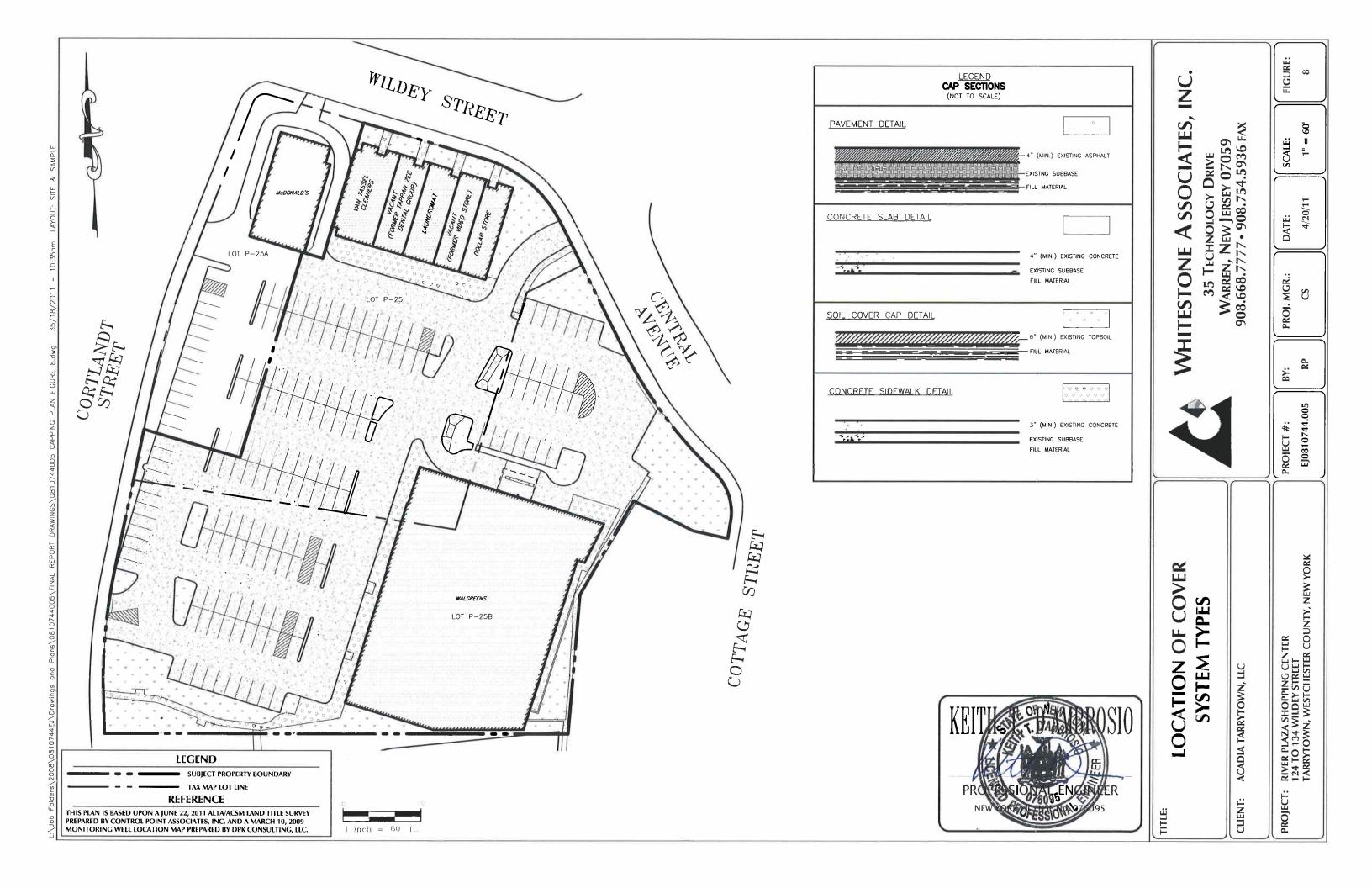


FIGURE 8
Location of Cover System Types



## APPENDIX A Metes and Bounds

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE VILLAGE OF TARRYTOWN, TOWN OF GREENBURGH, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, BOUNDED AND

BEGINNING AT THE POINT ON THE EASTERLY SIDE OF CORTLANDT STREET WHERE THE SAME IS INTERSECTED BY THE NORTHERLY LINE OF THE LAND NOW OR FORMERLY OF THE VILLAGE OF TARRYTOWN; RUNNING THENCE ALONG THE EASTERLY SIDE OF CORTLANDT STREET, THE FOLLOWING COURSES AND DISTANCES

- NORTH 01 DEGREES 42 MINUTES 20 SECONDS EAST, 28.84 FEET TO A POINT OF CURVE;
- ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 416.00 FEET, A DISTANCE OF 97.40 FEET TO A POINT OF TANGENCY:
- NORTH 15 DEGREES 07 MINUTES 15 SECONDS EAST, 113.66 FEET;

THENCE THE FOLLOWING COURSES AND DISTANCES:

- SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, 77.53 FEET;
- NORTH 20 DEGREES 09 MINUTES 07 SECONDS EAST, 167.00 FEET;
- SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, 16.58 FEET, AND

13.56 FEET TO THE NORTHERLY LINE OF LAND NOW OR FORMERLY OF MOTEN;

- NORTH 20 DEGREES 09 MINUTES 07 SECONDS EAST, 110.00 FEET TO THE SOUTHERLY SIDE OF WILDEY

THENCE ALONG THE SOUTHERLY SIDE OF WILDEY STREET, SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, 98.32 FEET TO A POINT OF CURVE:

THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 95.00 FEET, A DISTANCE OF 77.83 FEET TO THE SOUTHWESTERLY SIDE OF CENTRAL AVENUE; THENCE ALONG THE SOUTHWESTERLY SIDE OF CENTRAL AVENUE, SOUTH 22 DEGREES 54 MINUTES 22 SECONDS

EAST, 112.04 FEET TO A POINT OF CURVE AND ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 334.00 FEET, A DISTANCE OF 117.33 FEET TO A POINT OF REVERSE CURVE;

THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 44.00 FEET, A DISTANCE OF 42.89 FEET TO A POINT ON THE WESTERLY SIDE OF COTTAGE PLACE; THENCE ALONG THE WESTERLY SIDE OF COTTAGE PLACE, SOUTH 12 DEGREES 49 MINUTES 20 SECONDS WEST,

THENCE ALONG THE SAID NORTHERLY LINE OF LAND NOW OR FORMERLY OF MOTEN, NORTH 73 DEGREES 35 MINUTES 40 SECONDS WEST, 27.64 FEET AND NORTH 59 DEGREES 41 MINUTES 10 DEGREES WEST, 51.46 FEET TO THE WESTERLY LINE OF SAID LAND NOW OR FORMERLY OF MOTEN;

THENCE IN PART ALONG THE WESTERLY LINE OF LAND NOW OR FORMERLY OF MOTEN AND IN PART ALONG THE WESTERLY LINE OF LAND NOW OR FORMERLY OF MONTI, SOUTH 33 DEGREES 15 MINUTES 24 SECONDS WEST,

THENCE CONTINUING IN PART ALONG THE WESTERLY LINE OF LAND NOW OR FORMERLY OF MONTI AND IN PART ALONG THE WESTERLY LINE OF LAND NOW OR FORMERLY OF ALPINE, SOUTH 08 DEGREES 21 MINUTES 21 SECONDS WEST, 108.91 FEET TO THE NORTHERLY LINE OF LAND NOW OR FORMERLY OF ASBURY TERRACE; THENCE IN PART ALONG THE NORTHERLY LINE OF LAND NOW OR FORMERLY OF ASBURY TERRACE AND IN PART ALONG THE NORTHERLY LINE OF LAND NOW OR FORMERLY OF THE VILLAGE OF TARRYTOWN, NORTH 86 DEGREES 25 MINUTES 00 SECONDS WEST, 358.16 FEET TO THE EASTERLY SIDE OF CORTLANDT STREET AND THE POINT OR PLACE OF BEGINNING.

TOGETHER WITH THE BENEFITS AND SUBJECT TO THE BURDENS OF AN EASEMENT CONTAINED IN INSTRUMENT RECORDED IN LIBER 7295 PAGE 427 AND MODIFIED BY INSTRUMENT IN LIBER 7588 PAGE 568.

### ENVIRONMENTAL EASEMENT DESCRIPTION (SITE ID 360084) METES AND BOUNDS DESCRIPTION OTS P-25 & P-25B, SHEET 2, SECTION

VILLAGE OF TARRYTOWN (TOWN OF GREENBURGH) WESTCHESTER COUNTY, NEW YORK

ALL THAT CERTAIN PARCEL OF LAND SITUATED AND LYING IN THE VILLAGE OF TARRYTOWN (TOWN OF GREENBURGH), WESTCHESTER COUNTY, NEW YORK, BEING KNOWN AS LOTS P-25 & P-25B AS SHOWN ON SHEET 2 OF SECTION 1 OF THE TAX MAP OF THE VILLAGE OF TARRYTOWN (TOWN OF GREENBURGH), WESTCHESTER COUNTY, NEW YORK, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A POINT FORMED BY THE INTERSECTION OF THE EASTERLY SIDELINE OF CORTLANDT STREET (A.K.A. FRANKLIN STREET - VARIABLE WIDTH RIGHT-OF-WAY) WITH THE DIVIDING LINE BETWEEN LOT P-25B AND LOT P-3, SHEET 2, SECTION 1, SAID POINT ALSO BEING MEASURED 508.35 FEET SOUTHERLY ON VARIOUS COURSES ALONG THE FASTERLY SIDELINE OF CORTLANDT STREET FROM THE SOUTHERLY TERMINUS OF A CURVE CONNECTING THE EASTERLY SIDELINE OF CORTLANDT STREET WITH THE SOUTHERLY SIDELINE OF WILDEY STREET (VARIABLE WIDTH RIGHT-OF-WAY) AND FROM SAID BEGINNING POINT RUNNING, THENCE; ALONG THE EASTERLY SIDELINE OF CORTLANDT STREET THE

NORTH 01 DEGREE - 42 MINUTES - 20 SECONDS EAST, A DISTANCE OF 28.84 FEET TO A POINT OF CURVATURE, THENCE;

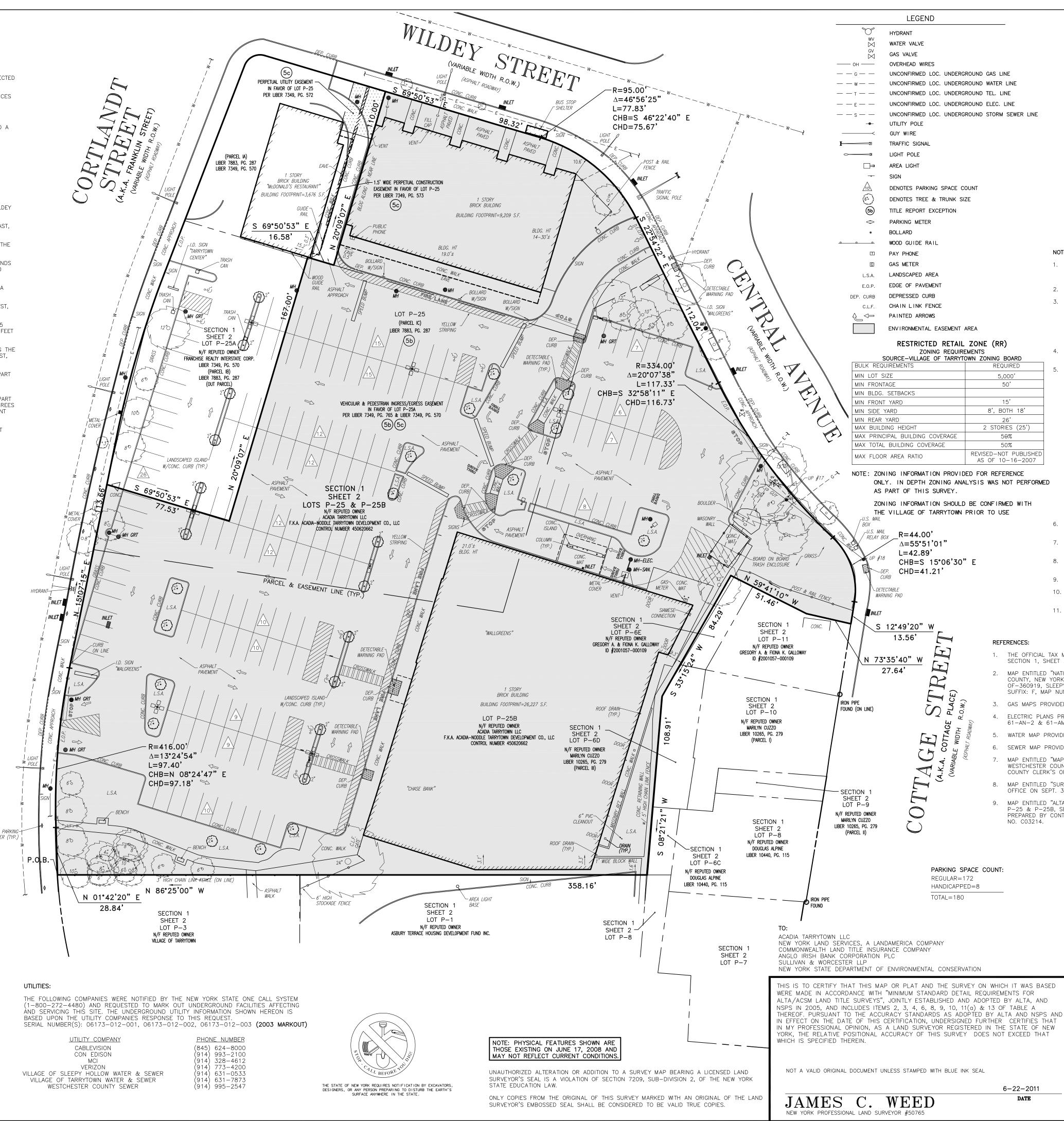
FOLLOWING THREE (3) COURSES:

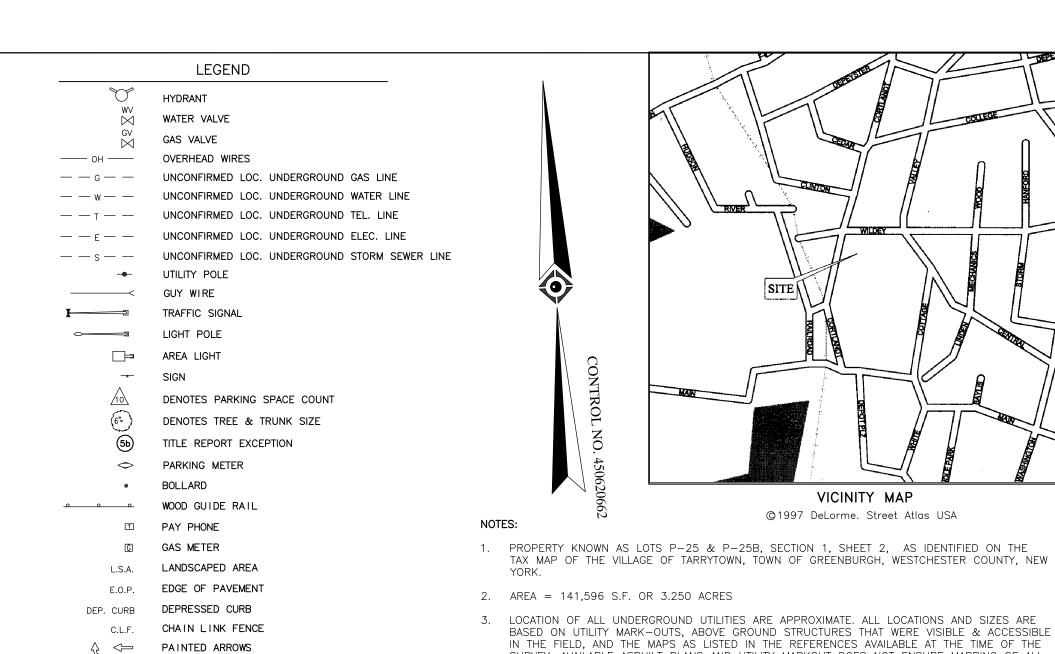
SECTION 1 THE FOLLOWING FOUR (4) COURSES:

- 2. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 416.00 FEET, TURNING A CENTRAL ANGLE OF 13 DEGREES - 24 MINUTES - 54 SECONDS, AN ARC LENGTH OF 97.40 FEET, THE CHORD OF WHICH BEARS NORTH 08 DEGREES - 24 MINUTES - 47 SECONDS EAST, A CHORD DISTANCE OF 97.18 FEET TO A POINT OF TANGENCY, THENCE;
- 3. NORTH 15 DEGREES 07 MINUTES 15 SECONDS EAST, A DISTANCE OF 113.66 FEET TO A POINT, THENCE; ALONG THE DIVIDING LINE BETWEEN LOT P-25 AND LOT P- 25A, SHEET 2,
- 4. SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 77.53 FEET TO A POINT. THENCE:
- 5. NORTH 20 DEGREES 09 MINUTES 07 SECONDS EAST, A DISTANCE OF 167.00 FEET TO A POINT. THENCE:
- 6. SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 16.58 FEET TO A POINT. THENCE;
- NORTH 20 DEGREES 09 MINUTES 07 SECONDS EAST, A DISTANCE OF 110.00 FEET TO A POINT ON THE SOUTHERLY SIDELINE OF WILDEY STREET, THENCE; ALONG THE SOUTHERLY SIDELINE OF WILDEY STREET (VARIABLE WIDTH R.O.W.) THE FOLLOWING TWO (2) COURSES:
- 8. SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 98.32 FEET TO A POINT OF CURVATURE, THENCE;
- 9. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 95.00 FEET, TURNING A CENTRAL ANGLE OF 46 DEGREES - 56 MINUTES - 25 SECONDS, AN ARC LENGTH OF 77.83 FEET, THE CHORD OF WHICH BEARS SOUTH 46 DEGREES - 22 MINUTES - 40 SECONDS EAST, A CHORD DISTANCE OF 75.67 FEET TO A POINT OF TANGENCY, THENCE; ALONG THE SOUTHWESTERLY SIDELINE OF CENTRAL AVENUE (VARIABLE WIDTH RIGHT-OF-WAY), THE FOLLOWING THREE (3) COURSES:
- 10. SOUTH 22 DEGREES 54 MINUTES 22 SECONDS EAST, A DISTANCE OF 112.04 FEET TO A POINT OF CURVATURE, THENCE;
- 11. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 334.00 FEET, TURNING A CENTRAL ANGLE OF 20 DEGREES - 07 MINUTES - 38 SECONDS, AN ARC LENGTH OF 117.33 FEET, THE CHORD OF WHICH BEARS SOUTH 32 DEGREES - 58 MINUTES - 11 SECONDS EAST, A CHORD DISTANCE OF 116.73 FEET TO A POINT OF REVERSE CURVATURE, THENCE;
- 12. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 44.00 FEET, TURNING A CENTRAL ANGLE OF 55 DEGREES - 51 MINUTES - 01 SECOND, AN ARC LENGTH OF 42.89 FEET. THE CHORD OF WHICH BEARS SOUTH 15 DEGREES - 06 MINUTES - 30 SECONDS EAST, A CHORD DISTANCE OF 41.21 FEET TO A POINT OF TANGENCY. THENCE:
- 13. ALONG THE WESTERLY SIDELINE OF COTTAGE STREET (A.K.A. COTTAGE PLACE, VARIABLE WIDTH RIGHT-OF-WAY), SOUTH 12 DEGREES - 49 MINUTES - 20 SECONDS WEST, A DISTANCE OF 13.56 FEET TO A POINT, THENCE; ALONG THE DIVIDING LINE BETWEEN LOT P-25B, LOT P-11 AND LOT P-6E, SHEET 2, SECTION 1 THE FOLLOWING TWO (2) COURSES:
- 14. NORTH 73 DEGREES 35 MINUTES 40 SECONDS WEST, A DISTANCE OF 27.64 FEET TO A
- 15. NORTH 59 DEGREES 41 MINUTES 10 SECONDS WEST, A DISTANCE OF 51.46 FEET TO A POINT. THENCE:
- 16. ALONG THE COMMON DIVIDING LINE BETWEEN LOT P-25B, LOT P-6E AND LOT P-6D, SHEET 2, SECTION 1, SOUTH 33 DEGREES - 15 MINUTES - 24 SECONDS WEST, A DISTANCE OF 84.29
- 17. ALONG THE COMMON DIVIDING LINE BETWEEN LOT P-25B, LOT P-6D AND LOT P-6C, SHEET 2, SECTION 1, SOUTH 08 DEGREES - 21 MINUTES - 21 SECONDS WEST, A DISTANCE OF 108.91 FEET TO A POINT, THENCE:
- 18. ALONG THE COMMON DIVIDING LINE BETWEEN LOT P-25B, LOT P-1 AND LOT P-3, SHEET 2, SECTION 1, NORTH 86 DEGREES - 25 MINUTES - 00 SECONDS WEST, A DISTANCE OF 358.16 FEET TO THE POINT AND PLACE OF BEGINNING.

BEING THE SAME PREMISES AS DESCRIBED IN THE RECORD DESCRIPTION. CONTAINING 141,596 SQUARE FEET OR 3.250 ACRES.

THIS DESCRIPTION IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY NEW YORK AND SERVICES, AGENT FOR COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NUMBER 11NYW11645, WITH AN EFFECTIVE DATE OF JANUARY 3, 2011.





ENVIRONMENTAL EASEMENT AREA

R = 44.00

L=42.89

13.56

CHB=S 15°06'30" E

RESTRICTED RETAIL ZONE (RR)

ZONING REQUIREMENTS

8', BOTH 18'

2 STORIES (25')

50%

50%

AS OF 10-16-2007

IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE ASBUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL JNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.

4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.

THIS SURVEY IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY NEW YORK LAND SERVICES, AGENT FOR COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. 11NYW11645, WITH AN EFFECTIVE DATE OF JANUARY 3, 2011 WHERE THE FOLLOWING SURVEY RELATED EXCEPTIONS APPEAR IN SCHEDULE B:

(5a) COVENANTS, CONDITIONS, AGREEMENTS AND RESTRICTIONS SET FORTH IN BOUNDARY LINE AGREEMENT IN LIBER 150, PG. 96 AND LIBER 426, PG. 347 - UNABLE TO PLOT, DESCRIPTION VAGUE, DOCUMENTS ILLEGIBLE.

(5b) TERMS, COVENANTS, RESTRICTIONS, REVERSION, EASEMENTS AND CONDITIONS WITH RIGHT OF REVERTER AS SET FORTH IN: LIBER 7295, PG. 427 - DEED OF SALE FROM TARRYTOWN URBAN RENEWAL AGENCY TO

ROBERT MARTIN CORP. FOR P-25, P-25A & P-25B. LIBER 7349, PG. 765 - VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS EASEMENT IN

FAVOR OF P-25A - SHOWN LIBER 7588, PG. 568 AND LIBER 8032, PG. 248 - CERTIFICATE OF COMPLETION FOR LOT

(5c) COVENANTS AND EASEMENTS SET FORTH IN LIBER 7349, PG. 570; AS MODIFIED IN LIBER 7651, PG. 385; AND LIBER 7699, PG. 690 AND LIBER 7883, PG. 274 - MAINTENANCE

6. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF

7. BY GRAPHIC PLOTTING ONLY, PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS

8. PROPERTY IS LOCATED IN ZONE RR (RESTRICTED RETAIL DISTRICT) PER VILLAGE OF TARRYTOWN

DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2.

9. ENCROACHMENTS AND VAULTS, IF ANY, BELOW SURFACE NOT SHOWN HEREON.

10. PER AVAILABLE RECORDS THE SURVEY IDENTIFIES THE CURRENT OWNERS OF PROPERTIES NEAR

11. THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE

SITE MANAGEMENT PLAN, A COPY OF WHICH CAN BE OBTAINED FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233., AND MUST BE MAINTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY.

REFERENCES:

1. THE OFFICIAL TAX MAP OF THE VILLAGE OF TARRYTOWN, TOWN OF GREENBURGH, WESTCHESTER COUNTY, NEW YORK, SECTION 1, SHEET 2.

2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, FOR WESTCHESTER COUNTY, NEW YORK, (ALL JURISDICTIONS) CONTAINS: GREENBURGH, TOWN OF—360911, MOUNT PLEASANT, TOWN OF—360919, SLEEPY HOLLOW, VILLAGE OF—360515, TARRYTOWN, VILLAGE OF—360933, PANEL 253 OF 426, MAP SUFFIX: F, MAP NUMBER 36119C0253F, EFFECTIVE DATE SEPTEMBER 28, 2007.

3. GAS MAPS PROVIDED BY CONSOLIDATED EDISON CO. OF N.Y. - WESTCHESTER, PLATE NO. 61-AN-B & 61-AM-D. 4. ELECTRIC PLANS PROVIDED BY CONSOLIDATED EDISON CO. OF N.Y. - WESTCHESTER, PLATE NO. 61-AN-B, 61-AM-D, 61-AN-2 & 61-AM-4.

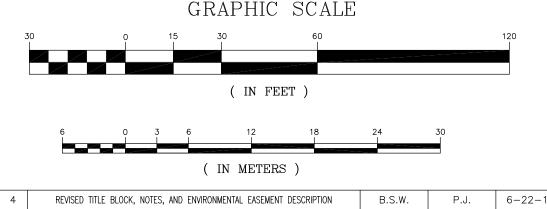
5. WATER MAP PROVIDED BY TARRYTOWN DPW, DATED 01/04/1991.

6. SEWER MAP PROVIDED BY TARRYTOWN DPW, DATED 01/04/1991.

MAP ENTITLED "MAP OF LOTS SURVEYED FOR VINCENT CECCOLINI, VILLAGE OF TARRYTOWN, TOWN OF GREENBURGH, WESTCHESTER COUNTY, N.Y." PREPARED BY WULFF ENGINEERIG CO., DATED 6-12-22, FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON JULY 3, 1922 AS MAP #2418.

8. MAP ENTITLED "SURVEYED FOR JAMES BIRD" DATED FEB. 5, 1907, FILED IN THE WESTCHESTER COUNTY REGISTER'S OFFICE ON SEPT. 30, 1910 IN MAP VOL. 32, PG. 46.

9. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, NODDLE DEVELOPMENT COMPANY, CORTLANDT & WILDEY STREET, LOTS P-25 & P-25B, SÉCTION 1, VILLAGE OF TARRYTOWN, TOWN OF GREENBURGH, WESTCHESTER COUNTY, NEW YORK, PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 7-11-03, LAST REVISED 2-14-05 AS REVISION NO. 3, FILE



REVISE PER UPDATED TITLE REPORT AND DEPT. OF ENV. CONSERVATION REQUIREMENTS E.S.E. P.J. 2-14-1 REVISE TO ADD RECORD DESCRIPTION P.J. 10-22-07 REVISE PER ATTORNEY REVIEW T.J.D. P.J. 10-16-07 DESCRIPTION OF REVISION DRAWN: APPROVED: DATE

ALTA/ACSM LAND TITLE SURVEY FIELD BOOK NO. 124-134 WILDEY STREET LOTS P-25 & P-25B, SECTION 1, SHEET 2 VILLAGE OF TARRYTOWN, TOWN OF GREENBURGH

WESTCHESTER COUNTY, NEW YORK 35 TECHNOLOGY DRIVE

10-2-2007

CONTROL POINT ASSOCIATES, INC NEW BRITAIN CORPORATE CENTER 1600 MANOR DRIVE, SUITE 120 WARREN, NJ 07059 CHALFONT, PA 18914 215.712.9800 - 215.712.9802 FAX 908.668.0099 - 908.668.9595 FAX DWG. NO.

C03214.01/DE0

OF 1

1"=30'

NOT A VALID ORIGINAL DOCUMENT UNLESS STAMPED WITH BLUE INK SEAL 6-22-2011 DATE APPROVED:

PARKING SPACE COUNT:

REGULAR=172

TOTAL=180

HANDICAPPED=8

JAMES C. WEED NEW YORK PROFESSIONAL LAND SURVEYOR #50765



35 Technology Drive Warren NJ, 07059 Tel. 908.668.0099 Fax. 908.668.9595 www.cpasurvey.com

> AUGUST 16, 2011 C03214.01

### ENVIRONMENTAL EASEMENT DESCRIPTION (SITE ID 360084)

METES AND BOUNDS DESCRIPTION

LOTS P-25 & P-25B, SHEET 2, SECTION 1 VILLAGE OF TARRYTOWN (TOWN OF GREENBURGH) WESTCHESTER COUNTY, NEW YORK

ALL THAT CERTAIN PARCEL OF LAND SITUATED AND LYING IN THE VILLAGE OF TARRYTOWN (TOWN OF GREENBURGH), WESTCHESTER COUNTY, NEW YORK, BEING KNOWN AS LOTS P-25 & P-25B AS SHOWN ON SHEET 2 OF SECTION 1 OF THE TAX MAP OF THE VILLAGE OF TARRYTOWN (TOWN OF GREENBURGH), WESTCHESTER COUNTY, NEW YORK, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT FORMED BY THE INTERSECTION OF THE EASTERLY SIDELINE OF CORTLANDT STREET (A.K.A. FRANKLIN STREET - VARIABLE WIDTH RIGHT-OF-WAY) WITH THE DIVIDING LINE BETWEEN LOT P-25B AND LOT P-3, SHEET 2, SECTION 1, SAID POINT ALSO BEING MEASURED 508.35 FEET SOUTHERLY ON VARIOUS COURSES ALONG THE EASTERLY SIDELINE OF CORTLANDT STREET FROM THE SOUTHERLY TERMINUS OF A CURVE CONNECTING THE EASTERLY SIDELINE OF CORTLANDT STREET WITH THE SOUTHERLY SIDELINE OF WILDEY STREET (VARIABLE WIDTH RIGHT-OF-WAY) AND FROM SAID BEGINNING POINT RUNNING, THENCE; ALONG THE EASTERLY SIDELINE OF CORTLANDT STREET THE FOLLOWING THREE (3) COURSES:

- 1. NORTH 01 DEGREE 42 MINUTES 20 SECONDS EAST, A DISTANCE OF 28.84 FEET TO A POINT OF CURVATURE, THENCE;
- 2. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 416.00 FEET, TURNING A CENTRAL ANGLE OF 13 DEGREES 24 MINUTES 54 SECONDS, AN ARC LENGTH OF 97.40 FEET, THE CHORD OF WHICH BEARS NORTH 08 DEGREES 24 MINUTES 47 SECONDS EAST, A CHORD DISTANCE OF 97.18 FEET TO A POINT OF TANGENCY, THENCE;
- 3. NORTH 15 DEGREES 07 MINUTES 15 SECONDS EAST, A DISTANCE OF 113.66 FEET TO A POINT, THENCE; ALONG THE DIVIDING LINE BETWEEN LOT P-25 AND LOT P-25A, SHEET 2, SECTION 1 THE FOLLOWING FOUR (4) COURSES:
- 4. SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 77.53 FEET TO A POINT, THENCE;
- 5. NORTH 20 DEGREES 09 MINUTES 07 SECONDS EAST, A DISTANCE OF 167.00 FEET TO A POINT, THENCE;
- 6. SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 16.58 FEET TO A POINT, THENCE;



- 7. NORTH 20 DEGREES 09 MINUTES 07 SECONDS EAST, A DISTANCE OF 110.00 FEET TO A POINT ON THE SOUTHERLY SIDELINE OF WILDEY STREET, THENCE; ALONG THE SOUTHERLY SIDELINE OF WILDEY STREET (VARIABLE WIDTH RIGHT-OF-WAY), THE FOLLOWING TWO (2) COURSES:
- 8. SOUTH 69 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 98.32 FEET TO A POINT OF CURVATURE, THENCE;
- 9. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 95.00 FEET, TURNING A CENTRAL ANGLE OF 46 DEGREES 56 MINUTES 25 SECONDS, AN ARC LENGTH OF 77.83 FEET, THE CHORD OF WHICH BEARS SOUTH 46 DEGREES 22 MINUTES 40 SECONDS EAST, A CHORD DISTANCE OF 75.67 FEET TO A POINT OF TANGENCY, THENCE; ALONG THE SOUTHWESTERLY SIDELINE OF CENTRAL AVENUE (VARIABLE WIDTH RIGHT-OF-WAY), THE FOLLOWING THREE (3) COURSES:
- 10. SOUTH 22 DEGREES 54 MINUTES 22 SECONDS EAST, A DISTANCE OF 112.04 FEET TO A POINT OF CURVATURE, THENCE;
- 11. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 334.00 FEET, TURNING A CENTRAL ANGLE OF 20 DEGREES 07 MINUTES 38 SECONDS, AN ARC LENGTH OF 117.33 FEET, THE CHORD OF WHICH BEARS SOUTH 32 DEGREES 58 MINUTES 11 SECONDS EAST, A CHORD DISTANCE OF 116.73 FEET TO A POINT OF REVERSE CURVATURE, THENCE;
- 12. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 44.00 FEET, TURNING A CENTRAL ANGLE OF 55 DEGREES 51 MINUTES 01 SECOND, AN ARC LENGTH OF 42.89 FEET, THE CHORD OF WHICH BEARS SOUTH 15 DEGREES 06 MINUTES 30 SECONDS EAST, A CHORD DISTANCE OF 41.21 FEET TO A POINT OF TANGENCY, THENCE;
- 13. ALONG THE WESTERLY SIDELINE OF COTTAGE STREET (A.K.A. COTTAGE PLACE, VARIABLE WIDTH RIGHT-OF-WAY), SOUTH 12 DEGREES 49 MINUTES 20 SECONDS WEST, A DISTANCE OF 13.56 FEET TO A POINT, THENCE; ALONG THE DIVIDING LINE BETWEEN LOT P-25B, LOT P-11 AND LOT P-6E, SHEET 2, SECTION 1, THE FOLLOWING TWO (2) COURSES:
- 14. NORTH 73 DEGREES 35 MINUTES 40 SECONDS WEST, A DISTANCE OF 27.64 FEET TO A POINT, THENCE;
- 15. NORTH 59 DEGREES 41 MINUTES 10 SECONDS WEST, A DISTANCE OF 51.46 FEET TO A POINT, THENCE;
- 16. ALONG THE COMMON DIVIDING LINE BETWEEN LOT P-25B, LOT P-6E AND LOT P-6D, SHEET 2, SECTION 1, SOUTH 33 DEGREES 15 MINUTES 24 SECONDS WEST, A DISTANCE OF 84.29 FEET TO A POINT, THENCE;
- 17. ALONG THE COMMON DIVIDING LINE BETWEEN LOT P-25B, LOT P-6D AND LOT P-6C, SHEET 2, SECTION 1, SOUTH 08 DEGREES 21 MINUTES 21 SECONDS WEST, A DISTANCE OF 108.91 FEET TO A POINT, THENCE;
- 18. ALONG THE COMMON DIVIDING LINE BETWEEN LOT P-25B, LOT P-1 AND LOT P-3, SHEET 2, SECTION 1, NORTH 86 DEGREES 25 MINUTES 00 SECONDS WEST, A DISTANCE OF 358.16 FEET TO THE POINT AND PLACE OF BEGINNING.



AUGUST 16, 2011 C03214.01 PAGE 3

8-16-11 DATE

THIS DESCRIPTION IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY NEW YORK LAND SERVICES, AGENT FOR COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NUMBER 11NYW11645 WITH AN EFFECTIVE DATE OF JANUARY 3, 2011.

CONTROL POINT ASSOCIATES, INC.

JAMES C. WEED

STATE OF NEW YORK
PROFESSIONAL LAND SURVEYOR #50765

P:\surveys\2003\C032:4\C03214:0\M6B's\M6B-Lots P-25 & P-25B 8-16-11.doc Prepared By: \_\_\_\_\_\_\_

APPENDIX B
Boring/Well Logs



### RECORD OF SUBSURFACE EXPLORATION

Boring No.: MW-8

(Page 1 of 1)

Project	1	River Plaza Shopping Center		WAI Project N	lo.:	EJ081074	4.004			
Locatio	n:	124 to 134 Wildey Street, Tarrytown, Ne	w York	Cli	ient:	Acadia Ta	rrytown, LI	.C		
Surface	Elevation	non: Not Surveyed	Date Started:	2-17-10		Wate	r Depths / I		ons	
Γermin	ation De	pth: 15.0 feet bgs	Date Completed:	2-17-10	_		(feet / feet-			
Drilling	g Method	f: Geoprobe	Logged By:	D. Kapson	- 1	While Dril			<u>V</u> 0.	
Test M	ethod:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	- 1	At Completion:			7.31 🗸	
			Machine:	Geoprobe 7720 DT		24 Hours:	PID	N	A Ţ	
Depth (feet)	Strata		DESCRIPTION OF M (Classification				Readings (ppm)	Rec. (in.)	Dep	
0.0	P	Six Inches Asphalt and Subbase					0.0		0.0	
_	FILL	Brownish-Gray Medium to Fine Sand, Some Grav	el, Little Silt and Debris (	Brick, Concrete, and Wood Fragments)			0.0		F	
100	5						0.0		-	
-							0.0	51	F	
_		*					0,0		-	
									F	
_							0,0		-	
5.0							0.0		5.0	
_	SAND	Dark Grayish-Brown Fine Sand, Some Silt, Trace	Fine Gravel, Dense				0.0		H	
-							200		L	
_	$\nabla$						0,0	48	-	
_	Ā	Wet at 8.0 fbgs		*			0.0			
_							0.0		-	
-							0.0		10	
0.0 —		39					0.0		-	
-		E製					0.0			
							0.0	53	-	
-	SILT	Dark Brownish-Gray Clayey Silt, Trace Fine Grav Density Increasing with Depth	rel				0.0	) )		
_		Belishy mercusing with septi					0.0		-	
_	MM	Dark Brownish-Black Fibrous Peat, Little Silt, Ve	ry Dense				0.0			
150	IVIIVI								$\int_{-15}$	
15.0 —		Boring MW-8 Terminated at a Depth of 15.0 fbgs Soil Sample MW-8S-A Collected at 1.5 fbgs to 2.	0 fbgs at 9:04						-	
-		Soil Sample MW-85-A Collected at 1.5 fbgs to 2	4.0 fbgs at 9:12						F	
-		Boring Completed as a Monitor Well							-	
-									L	
_									-	
-									F	
- 20.0 —									-20	
-									L	
-									-	
-										
_		*							-	
-										
-		1							F	
25.0									-25	
	D N. P	countered, NA = Not Applicable, PID = Photoionization D	etector	RE	CORD O	F SUBSURFA	CE EXPLORAT	ION Logs	wpd 00/	



### RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-5

(Page 1 of 2)

124 to 134 Wildey Street, Tarr tion: Not Surveyed Depth: 30.0 feet bgs od: Geoprobe Macro-Core  Six Inches Asphalt and Subbase Brownish-Gray Medium to Fine Sand, O Dark Grayish-Brown Fine Sand, Some	Date Started: Date Completed: Logged By: Contractor: Machine:  DESCRIPTION OF M (Classification) Some Gravel, Little Silt and Debris	on)	Wł At 24	adia Tarrytown,  Water Depths (feet / feet) hile Drilling: Completion: Hours:  PID Reading: (ppm)  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0	/ Elevation / Elev	.0 ¥
Depth: 30.0 feet bgs od: Geoprobe Macro-Core  Six Inches Asphalt and Subbase Brownish-Gray Medium to Fine Sand,	Date Completed: Logged By: Contractor Machine:  DESCRIPTION OF M (Classification) Some Gravel, Little Silt and Debris	2-17-10 D. Kapson Enviroprobe Services, Inc. Geoprobe 7720 DT  MATERIALS on)	At 24	(feet / feet / f	8. 7.3 NA S Rec. (in.)	Dept (fee
Six Inches Asphalt and Subbase Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some	Logged By: Contractor: Machine:  DESCRIPTION OF M (Classification)  Some Gravel, Little Silt and Debris	D. Kapson Enviroprobe Services, Inc. Geoprobe 7720 DT  MATERIALS on)	At 24	Completion: Hours: PID Readings (ppm)  0.0 0.0 0.0 0.0 0.0 0.0	7.3 N. s Rec. (in.)	Dep (fee - 0.0
Macro-Core  Six Inches Asphalt and Subbase  Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some	Contractor Machine:  DESCRIPTION OF M (Classificati	Enviroprobe Services, Inc. Geoprobe 7720 DT  MATERIALS on)	At 24	Completion: Hours: PID Readings (ppm)  0.0 0.0 0.0 0.0 0.0 0.0	7.3 N. s Rec. (in.)	Dep (fee
Six Inches Asphalt and Subbase Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some	Machine:  DESCRIPTION OF M (Classification)  Some Gravel, Little Silt and Debris	Geoprobe 7720 DT  MATERIALS on)	24	Hours: PID Readings (ppm)  0.0 0.0 0.0 0.0 0.0 0.0 0.0	Rec. (in.)	Dep (fee
Six Inches Asphalt and Subbase  Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some	DESCRIPTION OF M (Classificati Some Gravel, Little Silt and Debris	AATERIALS on)		PID Readings (ppm)  0.0  0.0  0.0  0.0  0.0  0.0  0.0	s Rec. (in.)	Dep (fee
Six Inches Asphalt and Subbase  Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some	(Classification) Some Gravel, Little Silt and Debris	on)	nts)	Readings (ppm)  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0	(in.)	(fee
Six Inches Asphalt and Subbase  Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some	Some Gravel, Little Silt and Debris		nts)	0.0 0.0 0.0 0.0 0.0		- 0.0 - - - - - -
Brownish-Gray Medium to Fine Sand,  Dark Grayish-Brown Fine Sand, Some		(Brick, Concrete, and Wood Fragmer	nts)	0.0 0.0 0.0 0.0 0.0	47	
Dark Grayish-Brown Fine Sand, Some				0.0 0.0 0.0 0.0	47	
	e Silt, Trace Fine Gravel, Dense		-	0.0	47	
	e Silt, Trace Fine Gravel, Dense			0.0		-
	e Silt, Trace Fine Gravel, Dense			0.0		E
	e Silt, Trace Fine Gravel, Dense		-	0.0		-
	e Silt, Trace Fine Gravel, Dense			0.0		<u></u>
	e Silt, Trace Fine Gravel, Dense					
	e Silt, Trace Fine Gravel, Dense			0.0		[-3.
Wet at 8.0 fbgs				0.0	1	-
Wet at 8.0 fbgs				- 1		<b>†</b>
Wet at 8.0 fbgs				0.0		E
					52	-
				0,0		-
				0.0		E
						10
				0.0		-
				0.0		E
						-
Dark Brownish-Gray Clayey Silt, Tra	ce Fine Gravel			0.0	53	-
				0.0	33	
						1
Dark Brownish-Black Fibrous Peat, L	ittle Silt Very Dense			0.0		-
				0.0		15
				0.0		-
				0.0	56	
4				0.0		ŀ
				0,0		-
	<u></u>					1 20
Dark Gray Silty Clay, Trace Fine San	d			0.0		-
				0.0		
				0.0	51	-
				0.0	51	_
D Dark Brownish-Gray Fine Sand, Som	e Silt, Trace Clay and Fine gravel			0.0		-
D Dark Brownish-Gray Fine Sand, Som	e Silt, Trace Clay and Fine gravel			1 00		lane.
D Dark Brownish-Gray Fine Sand, Som	e Silt, Trace Clay and Fine gravel			0.0	1	F
	Dark Gray Silty Clay, Trace Fine San	Dark Gray Silty Clay, Trace Fine Sand  Dark Brownish-Gray Fine Sand, Some Silt, Trace Clay and Fine gravel			0.0 0.0	Dark Gray Silty Clay, Trace Fine Sand  0.0  0.0  0.0  Dark Brownish-Gray Fine Sand, Some Silt, Trace Clay and Fine gravel



### **RECORD OF** SUBSURFACE EXPLORATION

Boring No.: WB-5

(Page 2 of 2)

Project		River Plaza Shopping Center		WAI Project No.:	EJ081074	4.004		
Locatio		124 to 134 Wildey Street, Tarrytown, Ne	w York	Client:	Acadia T	arrytown, LI	LC	
	Elevation		Date Started:	2-17-10	Wate	r Depths / 1		ons
Termin	ation De	epth: 30.0 feet bgs	Date Completed:	2-17-10		(feet / feet-		
Drilling	Method	d: Geoprobe	Logged By:	D. Kapson	While Dri		8.	
Test M	ethod:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	At Comple	etion:	7.3	
			Machine:	Geoprobe 7720 DT	24 Hours:	PID	N/	A 🕎
Depth (feet)	Strata	]	DESCRIPTION OF M (Classification			Readings (ppm)	Rec. (in,)	Depth (feet)
25.0	SILT	Brownish-Gray Silt, Trace Clay and Fine Sand				0.0		25.0
-						0.0	40	_
1						0.0	49	_
Ξ						0.0		-
-						0.0		Ė
	CLAY	Light Gray Silty Clay, Trace Fine Sand, Very Dens	se			0,0		1
30.0		Boring WB-5 Terminated at a Depth of 30.0 fbgs						30.0
_		Soil Sample WB-5 Collected at 22.5 fbgs to 23.0 f						H
1-		Groundwater Sample WB-5GW Collected at 12:09	)					L
								-
9-								-
_								
_								-
35.0								35.0
-								-
<del></del>								
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-								F
19-20								-
-								40.
40.0 —								-
-								
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_								-
-		,						F
45.0								-45.
_		*						
_								
-								
-								_
								-
-								_
50.0								50.0
	E = Not En	countered, NA = Not Applicable, PID = Photoionization De	tector	RECORD	OF SUBSURFA	CE EXPLORATI	ON Logs.w	/pd 00/00



## RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-6

(Page 1 of 1)

Project:	River Plaza Shopping Center		V	VAI Project No.:	EJ081074	4.004		
Location:	124 to 134 Wildey Street, Tarrytown, Ne	w York		Client:	Acadia Ta	arrytown, LI	.C	
Surface Elevat	ion: Not Surveyed	Date Started:	2-17-10			r Depths / I (feet / feet-		ons
Termination D		Date Completed: Logged By:	2-17-10 D. Kapson		While Dril		8.	5 <b>Y</b>
Drilling Metho	· ·	Contractor:	Enviroprobe Services,	Inc	At Comple		8.1	
Test Method:	Macro-Core	Machine:	Geoprobe 7720 DT	The.	24 Hours:		N.	
	I	Wideline.	Geoprose			PID		
Depth (feet) Strata	1	DESCRIPTION OF M (Classificati				Readings (ppm)	Rec. (in.)	Depth (feet)
0.0 P	Six Inches Asphalt and Subbase					0.0		0.0
FILL	Dark Grayish-Brown Medium to Fine Sand, Some	Gravel, Little Debris (Br	rick and Concrete), Trace Silt			0.0		
	ē					0.0	46	F
						0.0		Ē
								-
-						0,0		5.0
5.0						0.0		L
7						0.0		L
						0.0	50	-
- <del>1</del>	Wet at 8.5 feet					0.0		-
SAND	Brownish-Gray Fine Sand, Some Silt, Trace Fine C	Gravel				0.0		F
10.0						0.0		10.0
	D it C Cl Cit Two Fire Crowd D	DW 40				0.0		-
SILT	Brownish-Gray Clayey Silt, Trace Fine Gravel, De	ense				0.0	47	-
						0.0		-
SAND	Gray Medium to Fine Sand, Some Silt, Little Fine	Gravel						L
7						0.0		÷
15.0	Boring WB-6 Terminated at a Depth of 15.0 fbgs							15.0
1	Soil Sample WB-6 Collected at 10.5 fbgs to 11.0	fbgs at 13:26						
-	Groundwater Sample WB-6GW Collected at 13:5	,						L
1 <del></del>	1							-
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-	1							L
J	-							-
20.0	Ì							-20.
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100	1							-
-	-							
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-								-
25.0								- 25.
	ncountered, NA = Not Applicable, PID = Photoionization De	etector		RECORD	OF SUBSURFA	CE EXPLORAT	ON Logs.v	wpd 00/00



## RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-7

(Page 1 of 2)

Project:	River Plaza Shopping Center		WAI Project No	o.: <b>EJ08107</b> 4	14.004		
Location;	124 to 134 Wildey Street, Tarrytown, N	lew York	Clie	nt: Acadia T	arrytown, LI	LC	
Surface Elevation		Date Started:	2-17-10	Wate	er Depths / 1		ons
Termination De	pth: 30.0 feet bgs	Date Completed:	2-17-10		(feet / feet-	msl)	
Drilling Method	: Geoprobe	Logged By:	D. Kapson	While Dri	lling.	8.	
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	At Compl		7.9	
		Machine:	Geoprobe 7720 DT	24 Hours:		N.	A ¥
Depth (feet) Strata		DESCRIPTION OF M			PID Readings (ppm)	Rec.	Depth (feet
0.0 — P	Six Inches Asphalt and Subbase				0.0		0.0
FILL	Dark Grayish-Brown Medium to Fine Sand, Sor	ne Gravel, Little Debris (Br	ick and Concrete), Trace Silt		1		F
7					0,0		-
-					0.0	44	F
4					0.0		H
-					0.0		Ĺ
					0.0		-
5.0					0.0		5.0
							_
-	<i>II</i>				0.0		<del>.</del>
-					0.0	47	F
$\frac{\Lambda}{\Delta}$	Wet at 8.5 fbgs				0.0		-
SAND	Brownish-Gray Fine Sand, Some Silt, Trace Fin	e Gravel					
7					0.0		2
10.0					0.0		T 10.0
					0.0		-
SILT	Brownish-Gray Clayey Silt, Trace Fine Gravel,	Dense			0.0		L
_					0.0	51	-
SAND	Gray Medium to Fine Sand, Some Silt, Little Fin	ne Gravel			0.0		-
- SAND	Gray Medium to Pine Sand, Some Sin, Little V.	ic Graves					L
_					0.0		F
15.0	14				0.0		15.
					0.0		-
-							
7 1	Light Brownish-Gray Coarse to Fine Sand, Littl	e Silt, Trace Gravel			0,0	50	÷
-					0.0	"	
					0.0		_
4					0.0		L 20.
20.0					0.0		20.
_					0.0		-
1600 1612-1		7					
	Light Brown Fine Sand, Some Silt, Trace Fine C	Gravel			0.0	56	-
-					0.0		_
					0.0		-
-					0.0		L
25,0					0.0		25.0



### RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-7

(Page 2 of 2)

Project:		River Plaza Shopping Center		WAI Proj	Client:	EJ081074	arrytown, L		
ocatio		124 to 134 Wildey Street, Tar		0.15.10	Chent.		r Depths / I		ne
	Elevation	•	Date Started:	2-17-10		vvate	(feet / feet-	msl)	1115
	ation De	<del>-</del>	Date Completed:	2-17-10		While Dril		8.:	5 Y
Orilling	g Method	<del>-</del>	Logged By:	D. Kapson			0		
Test Me	ethod:	Macro-Core	Contractor:	Enviroprobe Services, Inc.		At Comple 24 Hours:	etion:	NA NA	
			Machine:	Geoprobe 7720 DT		24 Hours.	PID		T
Depth (feet)	Strata		DESCRIPTION OF M (Classificat	MATERIALS ion)			Readings (ppm)	Rec. (in.)	Dep (fee
25.0		Light Brown Fine Sand, Some Silt, 7	Trace Fine Gravel				0.0		-25.
							0.0		-
4							0.0		-
11 <del>1</del>							0.0	48	-
_							0.0		
-									
							0.0		-
0.0		Boring WB-7 Terminated at a Depth	of 30.0 fbgs	- P			S 7-		30
-		Soil Sample WB-7 Collected at 13.0	) fbgs to 13.5 fbgs at 14:06						-
_		Groundwater Sample WB-7GW Col	llected at 14:41						-
-									Γ
									-
-									L
V. 1									
5.0 —									- 3:
-									L
									-
12.7									
+									-
50 m									H
***									
40.0									-40
40.0 <del>-</del>									-
									F
-	1								-
1									
-				15					-
									-
-	1								L <sub>4</sub>
45.0									+
_									
_		-							L
2									-
10									F
	1								_
-	1								-
	T .	I .					1	1	-5



## RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-8

(Page 1 of 1)

Project:	River	Plaza Shopping Center		WAI P	roject No.:	EJ081074	4.004		
ocation:		134 Wildey Street, Tarryto	wn, New York		Client	Acadia Ta	ırrytown, LL	C	
Surface Elev		Not Surveyed	Date Started:	2-17-10		Wate	r Depths / E		ons
ermination		17.0 feet bgs	Date Completed;	2-17-10			(feet / feet-i	msl)	
Orilling Me		Geoprobe	Logged By:	D. Kapson		While Dril	ling:	8.	
est Method		Macro-Core	Contractor:	Enviroprobe Services, Inc.		At Comple	etion:	7.6	
			Machine:	Geoprobe 7720 DT		24 Hours:		N.	A ¥
Depth feet) Stra	ata		DESCRIPTION OF M (Classificati				PID Readings (ppm)	Rec.	Dept (fee
0.0 P		ch Asphalt and Subbase					0.0		0.0
FIL	L Brown	hish-Gray Coarse to Fine Sand, Son	ne Gravel, Little Debris (Brick Fra	gments) and Silt			0.0		-0
-							0.0		L
<del></del>							0.0	43	-
-							0.0		
							0.0		-
7	Four	nches of Concrete					0.0		5.
5.0 FIL	LL Brown	hish-Gray Coarse to Fine Sand, Son	ne Gravel, Little Debris (Brick Fra	gments) and Silt			0.0		F .
							0.0		
SAN	ND Light	Gray Fine Sand, Some Silt, Trace F	ine Gravel				0.0	52	-
$\frac{3}{2}$							0.0	32	Ė
- 4	4						0.0		F
4							0.0		-
-								-	F-10
0.0							0.0		-
-							0.0		_
1							0.0	49	-
SII	LT Dark	Grayish-Brown Clayey Silt, Trace l	Fine Gravel						L
_							0.0		F
( <del>1 )</del>							0.0		F
15.0							0.0		<del>+</del> 15
-								22	L
							0.0	22	-
M		Brownish-Black Fibrous Peat, Littl g WB-8 Terminated at a Depth of I							
-	Soil S	ample WB-8S Collected at 1.0 fbg	s to 1.5 fbgs at 15:39						-
4	Soil S	sample WB-8D Collected at 16.0 fb	ogs to 16.5 fbgs at 15:50						
4	Grou	ndwater Sample WB-8GW Collecte	ed at 16:20						
=									- 2
0.0									-
_									~
-									
-									
-									-
		a							-
									-
-									- 2:
25.0							ACE EXPLORAT	_	-



### RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-9

(Page 1 of 2)

Project:	LV	River Plaza Shopping Center		W	AI Project No.:	EJ081074	4.004		
Location		124 to 134 Wildey Street, Tarrytown, Ne	w York		Client:	Acadia T	arrytown, L	LC	
Surface		·	Date Started:	2-17-10		Wate	r Depths / I (feet / feet-		ns
Termina			Date Completed:	2-17-10		While Dri		8.0	) <u>A</u>
Drilling		- · · · · · · · · · · · · · · · · · · ·	Logged By:	D. Kapson	_			7.51	
Test Me	ethod:	Macro-Core	Contractor!	Enviroprobe Services,	Inc.	At Comple 24 Hours:	euon:	NA	
			Machine:	Geoprobe 7720 DT		24 Hours.	PID	117	<u> </u>
Depth (feet)	Strata	1	DESCRIPTION OF M (Classificati				Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	Six Inches Asphalt and Subbase					0.0		0.0
t	FILL	Brownish-Gray Coarse to Fine Sand, Some Gravel	, Little Debris (Brick Fra	gments) and Silt					_
_							0.0	46	-
-							0.0		
									_
_							0.0		-
i -							0.0		<u> </u>
5.0	С	Four Inches of Concrete							5.0
3.0	FILL	Brownish-Gray Coarse to Fine Sand, Some Gravel	, Little Debris (Brick Fra	agments) and Silt			0.0		
-							0.0		
	SAND	Light Gray Fine Sand, Some Silt, Trace Fine Grave	el				0.0		L
_	Ā						0.0	55	-
, —	Ā						0.0		_
									_
							0.0		20
10.0							0.0		10.
									-
_							0.0		-
-							0.0		
_	SILT	Dark Grayish-Brown Clayey Silt, Trace Fine Grav	el					49	-
							0.0		-
-							0.0		
1.50		ļ							15.
15.0							0.0		H
_							0.0		
-	MM	Dark Brownish-Black Fibrous Peat, Little Silt, De	nse						-
-							0.0	53	-
_							0.0		
-	ľ								-
). <del></del>							0.0		-
20.0	SAND	Dark Brownish-Gray Fine Sand, Some Silt, Trace	Clay and Fine Gravel				0.0		20.
-	DIMED	2	,				2.0		$\vdash$
							0.0		-
_							0.0	51	
-									_
-							0.0		-
_							0.0		-
-									-25.0
25.0		countered, NA = Not Applicable, PID = Photoionization De			DECOR	OF SUBSUBE	0.0 ACE EXPLORAT:	ION Loos w	100



### RECORD OF SUBSURFACE EXPLORATION

Boring No.: WB-9

(Page 2 of 3)

Project		River Plaza Shopping Center		WAI Pr	oject No.:	EJ081074	4.004		
Locatio		124 to 134 Wildey Street, Tarrytown, Ne	w York		Client:	Acadia T	arrytown, L	LC	
Surface	Elevation	on: Not Surveyed	Date Started:	2-17-10			r Depths / I		ns
Termin	ation De	pth: 30.0 feet bgs	Date Completed:	2-17-10			(feet / feet-		
Drilling	Method	d: Geoprobe	Logged By:	D. Kapson		While Dril	-	8.6	
Test M	ethod:	Macro-Core	Contractor:	Enviroprobe Services, Inc.		At Comple	etion:	7.5	
			Machine:	Geoprobe 7720 DT		24 Hours:	PID	N/	<u> </u>
Depth (feet)	Strata	Ī	DESCRIPTION OF M (Classification				Readings (ppm)	Rec. (in.)	Dept (fee
25.0	SAND	Dark Brownish-Gray Fine Sand, Some Silt, Trace (	Clay and Fine Gravel				0.0		25.
	SILT	Brownish-Gray Silt, Trace Clay and Fine Sand					0,0	40	F
4							0.0	48	-
									E
-							0.0		-
							0.0		F
30.0		Boring WB-9 Terminated at a Depth of 30.0 fbgs							<del>  3</del> 0
		Soil Sample WB-9 Collected at 20.0 fbgs to 20.5 f	bgs at 16:58						L
		Groundwater Sample WB-9GW Collected at 17:36	5						-
-									
									L
-									L
									-
35.0									35
Ξ							i		-
_									-
-									-
_									
=									_
_									7
10.0									40
_									-
-									
-									-
_									_
_									_
-									L.
40.0									-45
-									-
-		_							F
_									-
-									F
_									-
2									L.
50.0							CE EXPLORATI		50



### RECORD OF SUBSURFACE EXPLORATION

Boring No.: ST-1

(Page 1 of 1)

Project:	Rive	r Plaza Shopping Center		WAI	Project No.:	EJ081074	4.004		
Location:	124 t	to 134 Wildey Street, Tarrytown, Ne	w York		Client:	Acadia T	arrytown, L	LC	
Surface Ele	evation:	Not Surveyed	Date Started:	2-17-10		Wate	r Depths / I		ons
Γerminatio	on Depth:	15.0 feet bgs	Date Completed:	2-17-10			(feet / feet-	msl)	
Drilling M	ethod:	Geoprobe	Logged By:	D. Kapson		While Dri	lling:	8.	
Test Metho	od:	Macro-Core	Contractor:	Enviroprobe Services, Inc	•	At Comple	etion:	7.2	
			Machine:	Geoprobe 7720 DT		24 Hours		N.	A ¥
Depth		1	DESCRIPTION OF M				PID Readings	Rec.	Dept
	rata		(Classification	on)			(ppm)	(in.)	(fee
0.0		ches Asphalt and Subbase					0.0		F 0.0
F	ill Brown	nish-Gray Medium to Fine Sand, Some Grave	el and Debris (Brick, Glas	s, and Wood Fragments), Little Sil	t		0.0		F
7							0.0	48	-
7							0.0		F
4							0.0		F
5.0							0.0		5.0
									L
SA		Grayish-Brown Fine Sand, Some Silt, Trace l	Fine Gravel				0.0		
	☑ ☑ Weta	t 8.0 feet					0.0	53	L
7							0.0		L
7							0.0		١.
0.0							0,0		<del> </del> 10.
=							0.0		F
							0.0	55	F
- SI	LT Light	Brownish-Gray Clayey Silt, Trace Fine Grav	el, Dense				0.0		F
-							0.0		F
.5.0									15
-		g ST-1 Terminated at a Depth of 15.0 fbgs ample ST-1S Collected at 1.5 fbgs to 2.0 fbg	s at 12:36						_
コ	Soil S	ample ST-1D Collected at 7.5 fbgs to 8.0 fbg							-
_	Groun	dwater Sample ST-1GW Collected at 13:11							H
4									L
									_
_									H
4									
0.0									<b>—</b> 20
									L
									-
						9			-
_									-
_									-
-									1
_									
7									_25
25.0							CE EXPLORATION		



### Whitestone Associates. Inc.

35 Technology Drive, Warren, NJ 07059 Phone: (908) 668-7777 Fax:(908) 754-5936 Job #: EJ0810744.004

> Well #: MW-5

Start Date: 02/17/10

Site: River Plaza Shopping Center

Well Permit #: NA

Completion Date: 02/17/10

Geologist: Dustin Kapson

Drilling Co.: Enviroprobe Services, Inc.

Driller/Helper: Jason Kuni

Drill Rig: Geoprobe 7720DT

								Obo 77	DODT						
Driller/H	lelper:		n Kuni					ig: Geoprobe 77	2001		WELL	1.00	ATION S	KETCH	(N.T.S)
Drilling	Metho	d: Ho	llow-St	em Au	ger		Type c	of Bit: Auger		Solid Rise			Allono		(VIIII)
Sample	r Type:	Split	Spoon					h	45.0	Screen Int			wno:	5.0' - 15.6	ר'
G.W. Er	counte	ered:	8.0'		I. Stabiliz		7.31	Well Depth:	15.0'				d Pack/Oper		
Depth t	o Rim:		0.0'	Bor	ehole Dia	meter:	6"	Well Diameter:	2"	Grout: 0.0	0 - 2.0	Sand	WELL	CONSTRU	ICTION DIAGRAM
БЕРТН (FT.)	SAMPLE 1D AND DEPTH	PID/FID/OUA (METER UNITS)	BLOWS/6.0	RECOVERY (INCHES)	SOIL TYPE	-	so	DIL/GEOLOGICAL I	DESCRIPTIO	N		ОЕРТН (FT.)	VVLLL		T.S)
		- 3			Р	6" Asphalt	and Subba	ase					100	100	Flush mount
1234		0.0		20	FILL	Brownish-G (Brick, Con	Gray Mediu crete, and	im to Fine Sand, Šome Wood Fragements)	e Gravel, Little S	Silt and Debris	S	1 2 3 4			manhole, locking cap Grout 0' -2'
5		0.0		22	SAND	Dark Gravi	sh-Brown	Fine Sand, Some Silt,	Trace Fine Gra	vel, Dense		5 6			
6 7		0.0			O/WYO	June Orași					-				
8 9		0.0		20		Wet @ 8.0	fbgs				-  -	9			5' Solid Riser of 2" PVC
10		0.0		22	=					,		11 11 12			
12 13 13		0.0		24	SILT	Dark Brow Density Ind		Clayey Silt, Trace Find ith Depth	e Gravel			13 14			Sand Pack from 2' - 15'
14		0.0	1	22	MM	Dark Brow	/nish-Black	Fibrous Peat, Little S	ilt, Very Dense		-				
15161718192021222222		0.0		10	IVIIVI	Total Dept	th of Well	15.0' Below Ground St -A Collected @ 1.5 fbg -B Collected @ 13.5 fb	ırface ıs to 2.0 fbgs @	9:04 @ 9:12		151617181920212122	6 7 8 8 9 0 1 1 2		10' 0.010 Slot 2" PVC Screen
- <sub>2</sub>	5	-	+									2	5		

# APPENDIX C Groundwater Field Sampling Data Summary Sheets

### River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York February 17, 2010

Parameter	WB-5	WB-6	WB-7	WB-8	WB-9	ST-1
Northing	818850	818768	818770	818642	818644	818819
Easting	667451	667655	667655	667476	667476	667572
PRE-PURGE*						
Depth to Water (feet)	7.32	8.12	7.94	7.67	7.51	7.21
Well Depth (feet)	30.0	15.0	30.0	15.0	30.0	15.0
Length of Water Column (feet)	22.68	6.88	22.06	7.33	22.49	7.79
Total Gallons Water	1.36	0.41	1.32	0.44	1.35	0.47
Total Gallons Purged	4.5	1.5	4.0	1.5	4.0	1.50
Temperature (°C)	14.79	10.36	14.88	11.31	14.78	10.75
pН	6.79	6.89	6.91	7.07	7.11	6.73
Conductivity (umhos/cm)	0.556	1.11	0.735	0.914	0.179	0.226
Turbidity	235	198	241	168	246	125
Dissolved Oxygen (ppm)	2.68	3.47	2.71	4.02	2.29	3.93
ORP (mV)	-179	-89	-110	-108	-117	41
POST-PURGE*						
Depth to Water (feet)	8.31	9.17	8.89	8.91	8.44	8.03
Temperature (°C)	14.31	10.21	14.36	11.06	14.48	10.67
рН	6.84	7.02	7.22	7.03	6.98	6.85
Conductivity (umhos/cm)	0.551	1.03	0.717	0.886	0.194	0.223
Turbidity	82.6	77.4	66.9	93.4	96.7	57.8

### River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York February 17, 2010

Parameter	WB-5	WB-6	WB-7	WB-8	WB-9	ST-1
Dissolved Oxygen (ppm)	2.26	3.31	2.68	4.01	2.11	3.67
ORP (mV)	-169	-80	-116	-107	-103	-15
Time Sampled	12:09	13:57	14:41	16:20	17:36	13:11
POST-SAMPLING*						
Depth to Water (feet)	8.29	9.14	8.89	8.90	8.43	8.01
Temperature (°C)	14.33	10.12	14.35	11.06	14.47	10.66
рН	6.84	7.01	7.21	7.03	6.99	6.85
Conductivity (umhos/cm)	0.552	1.04	0.716	0.886	0.194	0.222
Turbidity	82.1	74.7	65.7	93.5	90.7	57.4
Dissolved Oxygen (ppm)	2.26	3.29	2.67	3.91	2.08	3.49
ORP (mV)	-175	-80	-115	-106	-101	-15

### NOTES:

\*

Measurements from top of PVC casing

°C ppm Degrees Celsius parts per million

mV

millivolts

umhos/cm

micromhos per centimeter

L:\Job Folders\2008\0810744EJ\0810744.003\WellSamplingData.wpd

## River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York March 9, 2010

March 9, 2010			
PARAMETER	MW-8		
Northing	818849		
Easting	667449		
PRE-PURGE*			
Depth to Water (feet)	6.73		
Well Depth (feet)	15.0		
Length of Water Column (feet)	8.27		
Total Gallons of Water	1.32		
Total Gallons Purged	4.5		
Temperature (°C)	14.42		
pH	6.20		
Conductivity (umhos/cm)	2.47		
Turbidity	71.9		
Dissolved Oxygen (ppm)	4.23		
ORP (mV)	-91		
POST-PURGE*			
Depth to Water (feet)	7.31		
Temperature (°C)	11.34		
рН	6.59		
Conductivity (umhos/cm)	2.64		
Turbidity	6.2		
Dissolved Oxygen (ppm)	1.46		
ORP (mV)	-131		
Time Sampled	14:41		
POST-SAMPLING*			
Depth to Water (feet)	7.33		
Temperature (°C)	11.31		
рН	6.59		
Conductivity (umhos/cm)	2.64		
Turbidity	6.0		
Dissolved Oxygen (ppm)	1.44		

### River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York March 9, 2010

17441 647 57 2020				
PARAMETER		MW-8		
ORP (mV)		-131		
NOTES:				
*	Measurements from top of PVC casing			
°C ppm	Degrees Celsius parts per million			
mV	millivolts			
umhos/cm	micromhos per centimeter			

 $L: \label{local_$ 

APPENDIX D
Laboratory Analytical Data
(On Disk)

## APPENDIX E Data Validation Reports



### ANALYTICAL & FIELD ENVIRONMENTAL SERVICES

May 13, 2010

Mr. Dustin A. Kapson Whitestone Associates 35 Technology Drive Warren, New Jersey 07059

RE: EJ0810744.003 - HCV project 0021909 (AC49930)

Dear Mr. Kapson:

At your request, I have reviewed the Volatile Organic (VO) data for the above referenced project to determine if the Acetone reported in the soil samples were a result of laboratory contamination. Based on the following information, it is reasonable to assume that this is the case:

Acetone and Methylene chloride are common laboratory contaminants because they are solvents used in the Organic prep lab. All of the soil samples in this project have both Methylene chloride and Acetone present in them. The Methylene chloride concentrations are not reported because they fall below our Reporting Limit (RL). In addition, the soil VO samples received at the laboratory were received in 2-ounce jars. Upon receipt at the laboratory, the samples are taken out of the cooler and placed on a counter during the receipt and login process. The seal on the glass jars is not airtight; therefore, it is very easy to pick up the contamination during this time. Although we try to minimize the time the sample jars for VO remain in the Sample Receiving area, it doesn't take long to pick up ppb levels of these solvents from the air. Acetone (and Methylene chloride) contamination of this nature is common when VO is collected in 2ounce jars.

I hope this information helps. If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Jeri Rossi

**QA** Director Hampton-Clarke/Veritech

973-244-700 ext 109

dri Rassi

jeri@hampton-clarke.com

Project Site: Sample Matrix: **Tarrytown Site** 

Sample Matrix: Laboratory:

Indoor and Outdoor Air York Analytical Laboratories

Lab Project Number(s):

08030973

### INTRODUCTION

A total of five (5) air samples found in Laboratory Project Number 08030973 were collected from the Tarrytown Site on 3/26/08. All of these samples were analyzed for Volatiles via method TO-15.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies and a screening validation, based upon the summarized laboratory results, was performed in accordance with the method and the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Case No.	Client ID	<u>Lab ID</u>	<u>Matrix</u>
08030973:	Monitoring Pt.#1	-01	Air
€	Monitoring Pt.#2	-02	Air
	Monitoring Pt.#3	-03	Air
	Indoor Ambient	-04	Air
	<b>Outdoor Ambient</b>	-05	Air

### **TO-15 VOLATILES**

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- ♦ Holding Time
- ♦ Matrix Spike, Laboratory Duplicate and Laboratory Control Sample (MS, LDUP, LCS)
- ♦ Surrogate Recovery
- ♦ Blank Contamination
- ♦ Mass Spectrometer Tuning (BFB)
- ♦ Initial and Continuing Calibration
- ♦ Internal Standards
- ♦ Compound Identification
- ♦ Diluted or Re-analyzed Sample Results
- ♦ Laboratory Problems/Non-conformance Issues
- ♦ Overall Assessment

**SAMPLE INTEGRITY** - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**Project Site:** 

Tarrytown Site

Sample Matrix:

Indoor and Outdoor Air

Lab Project Number(s):

08030973

MS, LDUP and LCS - The LCS serves as a monitor of the overall precision and accuracy of each step during the analysis, including the sample preparation. The MS and LCS criteria have been reviewed, there were no samples affected. It should be noted that 1,2-dichloroethane showed low recovery and 1,1,2,2-tetrachlorothane show high recovery in the MS sample, however the LCS was within criteria, therefore no further action was required. All data are considered to be valid and acceptable for these criteria.

The LDUP showed a high RPD for methylene chloride, therefore this analyte was qualified estimated "J" unknown bias in the associated samples:

Methylene chloride "J" unknown bias - Monitoring Pt.#1

Monitoring Pt.#1 Monitoring Pt.#2 Monitoring Pt.#3 Indoor Ambient Outdoor Ambient

SURROGATE RECOVERY - All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

BLANK CONTAMINATION - Quality assurance (QA) blanks, i.e., method blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation. Method blanks measure laboratory contamination. The blank criteria have been reviewed. The samples/analytes affected are listed below:

Methylene chloride "U" non-detect -

Monitoring Pt.#1 Monitoring Pt.#2 Monitoring Pt.#3 Indoor Ambient Outdoor Ambient

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene. The tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL AND CONTINUING CALIBRATION - Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The Initial calibration criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

The continuing calibration criteria have been reviewed. The samples/analytes affected are listed below:

**Project Site:** 

**Tarrytown Site** 

Sample Matrix:

Indoor and Outdoor Air

Lab Project Number(s):

08030973

### **INITIAL AND CONTINUING CALIBRATION (continued)**

The %D for dichlorodifluoromethane, 1,2-dichlorotetrafluoromethane, trichlorofluoromethane, carbon tetrachloride, cis-1,2-dichloropropylene, 1,3-butadiene, bromodichloromethane and bromoform were >25 in CCC 4/3/08 @1203, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

dichlorodifluoromethane,
1,2-dichlorotetrafluoromethane,
trichloro-fluoromethane,
carbon tetrachloride,
cis-1,2-dichloropropylene, 1,3-butadiene,
bromodichloromethane and bromoform
"UJ" unknown bias -

Monitoring Pt.#1 Monitoring Pt.#2 Outdoor Ambient

The %D for dichlorodifluoromethane, trichloro-fluoromethane, 1,1,1-trichloroethane, cis-1,2-dichloropropylene, trans-1,3-dichloropropylene, p&m xylenes, o-xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2-dichlorobenzene, hexachloro-1,3-butadiene, 1,3-butadiene, acetone, methyl ethyl ketone and bromodichloromethane were >25 in CCC 4/4/08 @1321, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

dichlorodifluoromethane, trichloro-fluoromethane, 1,1,1-trichloroethane, cis-1,2-dichloropropylene, trans-1,3-dichloropropylene, p&m xylenes, o-xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2-dichlorobenzene, hexachloro-1,3-butadiene, 1,3-butadiene, acetone, methyl ethyl ketone and bromodichloromethane "UJ" unknown bias -

Monitoring Pt.#3 Indoor Ambient

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

COMPOUND IDENTIFICATION - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds. The compound identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**DILUTED OR RE-ANALYZED SAMPLE RESULTS** – The data packages contained some samples that were diluted due to results being out of linear range. Upon reviewing the QA results, the following samples/results were identified for use:

It should be noted that the canisters were pressurized with humidified ultra-high purity nitrogen, which was necessary to allow proper introduction of the sample into the system. Due to this requirement the samples became slightly diluted and the dilution factors have been noted.

**Project Site:** 

Tarrytown Site

Sample Matrix:

Indoor and Outdoor Air

Lab Project Number(s):

08030973

### LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

<u>CONCLUSIONS</u> - The data generated for the Tarrytown Site were reviewed. From the data validation performed, it was determined that over 95% of the qualified data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 25, 2009

Project Site:

Tarrytown

Sample Matrix: Laboratory:

Soil and Aqueous

Analysis:

Hampton Clark - Veritech Volatiles and Semi-volatiles

Lab Project No(s):

9011430

Lab SDG:

AC42169

### INTRODUCTION

A total of two (2) soil and one (1) aqueous environmental samples, one (1) field blank and one (1) trip blank, found in Laboratory Project Number 9011430 were collected from the Tarrytown site on 1/13/09. Five (5) of these samples were analyzed for Volatiles via SW-846 8260B and four (4) of these samples were analyzed for Semi-Volatiles via SW-846 8270C.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies, and a screening validation, based upon the summarized information in the NYDOH Category B laboratory package, was performed in accordance with the method and using the current USEPA Region II Data Validation Guidelines as guidance, as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Project No.	Client ID	<u>Lab ID</u>	<u>Matrix</u>
9011430:	WB-1	AC42169-001	soil
	WB-1GW	AC42169-003	aqueous
	MW-5	AC42169-005	soil
	FB	AC42169-007	aqueous
	TB	AC42169-008	aqueous

### **VOLATILES and SEMI-VOLATILES**

The following quality control indicators, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- Holding Time
- Surrogate Recovery
- ♦ Laboratory Control Sample (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ♦ Blank Contamination
- Mass Spectrometer Tuning (BFB and DFTPP)
- ♦ Initial and Continuing Calibration
- ♦ Internal Standards
- ♦ Compound Identification
- Diluted or Re-analyzed Sample Results
- ♦ Laboratory Problems/Non-conformance Issues
- ♦ Overall Assessment

**SAMPLE INTEGRITY** - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

Project Site: Tarrytown

Analysis: Volatiles and

Volatiles and Semi-volatiles

Lab SDG: AC42169

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Volatiles and Semi-volatiles

The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**SURROGATE RECOVERY** - All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Volatiles and Semi-volatiles

The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LCS and MS/MSD - The LCS and MS/MSD serves as a monitor of the overall performance of each step during the analysis, including the sample preparation.

Volatiles and Semi-volatiles

The LCS and MS/MSD criteria have been reviewed, there were no samples affected. It should be noted that the MS/MSD samples were not designated by the client and therefore my not be indicative of the matrix at the site. The LCS were within range therefore all data are considered to be valid and acceptable for these criteria.

**BLANK CONTAMINATION** - Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations.

**Volatiles** 

The blank criteria have been reviewed, there were no samples affected. It should be noted that methylene chloride was found in the field blank (2.3ug/L), however the associated results were all non-detect, therefore no action was required. All data are considered to be valid and acceptable for these criteria.

Semi-volatiles

The blank criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatile organics is Decafluorotriphenyl-phosphine (DFTPP).

Volatiles and Semi-volatiles

The tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site: Tarrytown

Analysis:

Volatiles and Semi-volatiles

AC42169 Lab SDG:

INITIAL AND CONTINUING CALIBRATION - Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The calibration criteria have been reviewed, the samples/analytes affected are listed below:

**Volatiles** 

It should be noted that the RRF criteria of <0.05 was not met in the associated IC's and CCC's for acrolein, t-butyl alcohol and 1,4 dioxane. These analytes are known to be poor performers and were within the >0.01 criteria, as well as being not detected in the associated samples, therefore no further action was deemed necessary.

The RRF for bromomethane was <0.05 in IC 1/13/09 associated with sample WB-1GW, therefore this analyte, which was non-detect, was rejected:

Bromomethane "R" - WB-1GW

The %D for trichlorofluoromethane, acrolein, acrylonitrile and 1,2,3-trichloropropane were >25 in CCC 1/15/09 @0721, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

trichlorofluoromethane, acrolein, acrylonitrile and 1,2,3-trichloropropane

"UJ" unknown bias -

FB

TB

The %D for 2-hexanone was >25 in CCC 1/15/09 @0739, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

2-hexanone "UJ" unknown bias -

WG-1GW

The %D for bromomethane, chloroethane and acrolein were >25 in CCC 1/15/09 @1608, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

bromomethane, chloroethane, acrolein "UJ" unknown bias -

**WB-1** 

**MW-5** 

Semi-Volatiles

The %D for benzoic acid, 4-chloroaniline, 2,4-dinitrophenol and 3,3-dichlorobenzidine were >25 In CCC 1/16/09 @1109, therefore the associated results, which were non-detect, were qualified estimated "J" unknown bias:

benzoic acid, 4-chloroaniline, 2,4-dinitrophenol, 3,3-dichlorobenzidine **WB-1** "UJ" unknown bias -

MW-5

All other data results, not qualified above, are considered to be valid and acceptable for these criteria.

Project Site: Tarrytown

Analysis: Volatiles

Volatiles and Semi-volatiles

Lab SDG: AC42169

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run.

Volatiles and Semi-volatiles

The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**COMPOUND IDENTIFICATION** - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds.

Volatiles and Semi-volatiles

The compound identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**DILUTED OR RE-ANALYZED SAMPLE RESULTS** – The data packages contained some samples that were diluted due to results being out of linear range. Upon reviewing the QA results, the following samples/results were identified for use:

Volatiles and Semi-volatiles

There were no dilutions or re-analyses required. All data are considered to be valid and acceptable for these criteria.

### LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

CONCLUSIONS

The data generated for the Tarrytown site were reviewed. From the data validation performed, it was determined that over 95% of the qualified environmental sample data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 21, 2009

Project Site:

Tarrytown

Sample Matrix:

Soil and Aqueous

Laboratory:

Hampton Clark – Veritech Volatiles and Semi-volatiles

Analysis: Lab Project No(s):

9012114

Lab SDG:

AC42279

### INTRODUCTION

A total of one (1) aqueous environmental sample, one (1) field blank and one (1) trip blank, found in Laboratory Project Number 9012114 were collected from the Tarrytown site on 1/20/09. Three (3) of these samples were analyzed for Volatiles via SW-846 8260B and two (2) of these samples were analyzed for Semi-Volatiles via SW-846 8270C.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies, and a screening validation, based upon the summarized information in the NYDOH Category B laboratory package, was performed in accordance with the method and using the current USEPA Region II Data Validation Guidelines as guidance, as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Project No	Client ID	<u>Lab ID</u>	<u>Matrix</u>
9012114:	MW-5	AC42279-001	aqueous
	FB	AC42279-003	aqueous
	TB	AC42279-004	aqueous

### **VOLATILES and SEMI-VOLATILES**

The following quality control indicators, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- ♦ Holding Time
- ♦ Surrogate Recovery
- ♦ Laboratory Control Sample (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ♦ Blank Contamination
- Mass Spectrometer Tuning (BFB and DFTPP)
- ♦ Initial and Continuing Calibration
- ♦ Internal Standards
- ♦ Compound Identification
- ♦ Diluted or Re-analyzed Sample Results
- ♦ Laboratory Problems/Non-conformance Issues
- ♦ Overall Assessment

**SAMPLE INTEGRITY** - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site: Tarrytown

Analysis: Volatiles a

Volatiles and Semi-volatiles

Lab SDG: AC42279

### **HOLDING TIME (CONTINUED)**

Volatiles and Semi-volatiles

The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**SURROGATE RECOVERY -** All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Volatiles and Semi-volatiles

The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LCS and MS/MSD - The LCS and MS/MSD serves as a monitor of the overall performance of each step during the analysis, including the sample preparation.

Volatiles and Semi-volatiles

The LCS and MS/MSD criteria have been reviewed, there were no samples affected. It should be noted that the MS/MSD samples were not designated by the client and therefore my not be indicative of the matrix at the site. The LCS were within range therefore all data are considered to be valid and acceptable for these criteria.

**BLANK CONTAMINATION** - Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations.

Volatiles and Semi-volatiles

The blank criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatile organics is Decafluorotriphenyl-phosphine (DFTPP).

Volatiles and Semi-volatiles

The tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

- Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The calibration criteria have been reviewed, the samples/analytes affected are listed below:

**Volatiles** 

It should be noted that the RRF criteria of <0.05 was not met in the associated IC's and CCC's for t-butyl alcohol and 1,4 dioxane. These analytes are known to be poor performers and were within the >0.01 criteria, as well as being not detected in the associated samples, therefore no further action was deemed necessary.

Project Site: Tarrytown

Analysis: Volatiles

Volatiles and Semi-volatiles

Lab SDG:

AC42279

#### INITIAL AND CONTINUING CALIBRATION (CONTINUED)

**Volatiles** 

The RRF for bromomethane was <0.05 in IC 1/13/09 associated with all of the samples, therefore this analyte, which was non-detect, was rejected:

Bromomethane "R" - MW-5

TB

FB

The %D for dichlorofluoromethane, t-butyl alcohol, 4-methyl-2-pentanone and 2-hexanone were >25 in CCC 1/22/09 @0719, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

diichlorofluoromethane, t-butyl alcohol, 4-methyl-2-pentanone and 2-hexanone

"UJ" unknown bias -

FB

ТВ

The %D for dichlorofluoromethane, acrylonitrile, 1,3-dichloropropane, styrene, o-xylene, m&p xylenes and xylenes (total) were >25 in CCC 1/23/09 @0816, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

diichlorofluoromethane, acrylonitrile, 1,3-dichloropropane, styrene, o-xylene, m&p xylenes and xylenes (total) "UJ" unknown bias -

MW-5

All other data results, not qualified above, are considered to be valid and acceptable for these criteria.

Semi-Volatiles

All data results are considered to be valid and acceptable for these criteria.

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run.

Volatiles and Semi-volatiles

The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**COMPOUND IDENTIFICATION** - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds.

Volatiles and Semi-volatiles

The compound identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site: Tarrytown

Analysis: Vol

Volatiles and Semi-volatiles

Lab SDG:

AC42279

**DILUTED OR RE-ANALYZED SAMPLE RESULTS** – The data packages contained some samples that were diluted due to results being out of linear range. Upon reviewing the QA results, the following samples/results were identified for use:

Volatiles and Semi-volatiles

There were no dilutions or re-analyses required. All data are considered to be valid and acceptable for these criteria.

## LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

CONCLUSIONS

The data generated for the Tarrytown site were reviewed. From the data validation performed, it was determined that over 95% of the qualified environmental sample data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR; Valerie A. Smith DATE: April 27, 2009

Project Site:

Tarrytown

Sample Matrix: Laboratory:

Soil and Aqueous

Laborato

Hampton Clark - Veritech

Analysis:

TCL Volatiles +10, TCL Semi-volatiles +25, TCL Pesticides/PCBs,

TAL Metals including Cyanide

Lab Project No(s):

9022301

Lab SDG:

AC42868

#### INTRODUCTION

A total of five (5) environmental soil samples, three (3) environmental aqueous samples, one (1) field blank and one (1) trip blank, found in Laboratory Project Number 9022301 were collected from the Tarrytown site between 2/17/09 and 2/20/09. These samples were analyzed for TCL Volatiles via SW-846 8260B (soils) and 624 (aqueous); TCL Semi-volatiles via SW-846 8270C (soils) and 625 (aqueous); TCL Pesticides via SW-846 8082 (soils) and 608 (aqueous); TCL PCBs via SW-846 8081A (soils) and 608 (aqueous); TAL Metals via SW-846 6010B/7471A (soils) and 200.7/245.1 (aqueous); and Cyanide via SW-846 9012B (soils) and 335.4 (aqueous).

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies, and a screening validation, based upon the summarized information in the NYDOH Category B laboratory package, was performed in accordance with the method and using the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

<u>Project No.</u> 9022301:	Client ID WB-2 WB-3 WB-4 MW-6S MW-7S WB-2-GW U WB-2-GW F WB-3-GW WB-4-GW U WB-4-GW F	Lab ID AC42868-001 AC42868-002 AC42868-003 AC42868-004 AC42868-005 AC42868-006 AC42868-007 AC42868-008 AC42868-009 AC42868-010 AC42868-010	Matrix Soil Soil Soil Soil Aqueous Aqueous Aqueous Aqueous Aqueous Aqueous Aqueous Aqueous Aqueous	Analysis VOC, SVOC, Pest/PCB, TAL & CN TAL VOC, SVOC VOC, SVOC, Pest/PCB, TAL & CN TAL VOC, SVOC, Pest/PCB, TAL & CN TAL VOC, SVOC, Pest/PCB, TAL & CN
8				

#### TAL METALS AND CYANIDE

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- Holding Time
- Initial, Continuing Calibration Verification (ICV and CCV) and CRDL Standards
- Initial, Continuing Calibration, Method and Field Blank (ICB, CCB, MB) Contamination
- Interference Check Sample (ICS)
- Laboratory Control Samples (LCS)
- Laboratory Duplicate Sample Analyses
- ♦ Spike Sample Analysis
- ♦ ICP Serial Dilution
- Unfiltered versus Filtered Samples
- Laboratory Problems/Non-conformance Issues
- Overall Assessment

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42868

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability and degradation, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL CALIBRATION, CONTINUING CALIBRATION VERIFICATION and CRDL STANDARDS -Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for metals and cyanide. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an analytical sequence. Continuing calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. The ICV, CCV Standards criteria have been reviewed, there were no samples affected. It should be noted that no CRDL Standards were performed. All data are considered to be valid and acceptable for these criteria.

ICB, CCB, MB and FIELD BLANK CONTAMINATION - The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory or field activities. The ICB, CCB, MB and field blank criteria have been reviewed, there were no sample affected. It should be noted that iron was found in the soil method blank, however the associated results were greater than five times the amount found in the blank therefore no action was required. All data are considered to be valid and acceptable for these criteria.

INTERFERENCE CHECK SAMPLE - The ICS verifies the laboratory inter-element and background correction factors. The ICS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY CONTROL SAMPLE - The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY DUPLICATE SAMPLE ANALYSIS - Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory, at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method and various matrices. The Laboratory Duplicate criteria have been reviewed, the samples/analytes affected are listed below.

The RPD for copper and zinc in the soil laboratory duplicate was out of criteria, therefore the associated sample results were qualified estimated "J" unknown bias:

Copper and Zinc "J" unknown bias - WB-2

WB-3

**WB-4** 

**MW-6S** 

**MW-7S** 

**Project Site:** 

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42868

SPIKE SAMPLE ANALYSIS - is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The Spike Sample criteria have been reviewed, there were no samples affected. It should be noted that the MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site and therefore these results were not used to validate the associated data. All data are considered to be valid and acceptable for these criteria.

ICP SERIAL DILUTION - Samples quantitated by ICP determines whether or not significant physical or chemical interference exists due to sample matrix. The ICP Serial Dilution criteria have been reviewed, the samples/analytes affected are listed below.

The percent difference was greater than ten in the soil ICP serial dilution sample for beryllium, cadmium, chromium, cobalt and potassium, therefore associated results greater than ten times the IDL were qualified estimated "J" unknown bias:

Chromium, Cobalt and Potassium "J" unknown bias - V

WB-3

WB-4

MW-6S

**MW-7S** 

UNFILTERED VERSUS FILTERED SAMPLES – The filtered results should be less than the unfiltered results. If the filtered result is greater than the unfiltered result by more than 10% then both results should be considered estimated. The Unfiltered Versus Filtered criteria have been reviewed, the samples/analytes affected are listed below.

Mercury "J" unknown bias -

WB-4 GW F WB-4-GW U

## TCL VOLATILES, TCL SEMI-VOLATILES, TCL PESTICIDES AND TCL PCBs

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- ♦ Holding Time
- ♦ Surrogate Recovery
- ♦ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ♦ Blank Contamination
- ♦ Mass Spectrometer Tuning (BFB and DFTPP)
- ♦ Initial and Continuing Calibration
- Internal Standards
- ♦ Compound Identification
- Diluted or Re-analyzed Sample Results
- Laboratory Problems/Non-conformance Issues
- ♦ Overall Assessment

**SAMPLE INTEGRITY** - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42868

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

SURROGATE RECOVERY - All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

MATRIX SPIKE/SPIKE DUPLICATE - The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The MS/MSD criteria have been reviewed, there were no samples affected. It should be noted that some of the MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site. No specific action is required based solely upon MS/MSD results. All data are considered to be valid and acceptable for these criteria.

**BLANK CONTAMINATION** - Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations.

#### Volatiles and Pesticides/PCBs

The blank criteria have been reviewed, there were no sample affected. All data are considered to be valid and acceptable for these criteria. There was no method, trip or field blank contamination.

#### Semi-Volatiles

Three tentative identified compounds (TICs) were found in the soil method blank and therefore rejected in the associated samples:

Unk TIC at R.T. 3.7 and 4.75.

2-pentanone,4-hydroxy-4-methyl R.T. 4.04 "R" rejected -

WB-2

**WB-3** 

**WB-4** 

MW-6S

**MW-7S** 

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatile organics is Decafluorotriphenyl-phosphine (DFTPP).

#### Volatiles and Semi-volatiles

The BFB tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**Project Site:** 

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42868

INITIAL AND CONTINUING CALIBRATION - Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The calibration criteria have been reviewed, the samples/analytes affected are listed below:

#### **Volatiles**

It should be noted that the RRF criteria of <0.05 was not met in the associated soil and aqueous IC's and CCC's for acrolein, t-butyl alcohol and 1,4 dioxane. These analytes are known to be poor performers and were within the >0.01 criteria, as well as being not detected in the associated samples, therefore no further action was deemed necessary.

It should be noted that the RSD was greater than 30 in the soil IC 2/6/09 for trichlorofluoromethane, however the associated results were non-detect therefore no action was required.

The %D for chloroethane, t-butyl alcohol, trans-1,2-dichloroethene, trichloroethene, 2-chloroethylvinylether, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 4-methyl-2-pentanone and 2-hexanone were >25 in the aqueous CCC 2/24/09 @0720, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

chloroethane, t-butyl alcohol, trans-1,2-dichloroethene, trichloroethene, 2-chloroethylvinylether, cis-1,3-dichloropropene, trans-1,3-dichloropropene, 4-methyl-2-pentanone and 2-hexanone "UJ" unknown bias -

WB-2 GW U WB-3 GW WB-4 GW U FB

TB

The %D for dichlorodifluoromethane, bromomethane, 1,2-trichloro-1,2,2-trifluoromethane, 2-butanone and 2-chloroethylvinylether were >25 in the soil CCC 2/25/09 @0831, therefore the associated non-detect results were qualified estimated "UJ" and positive results were qualified estimated "J" unknown bias:

dichlorodifluoromethane, bromomethane, 2-butanone and 2-chloroethylvinylether "UJ" unknown bias and 1,2-trichloro-1,2,2-trifluoromethane

WB-3 MW-6S WB-4 MW-7S

"J" unknown bias

The %D for chloromethane, bromomethane chloroethane, 1,2-trichloro-1,2,2-trifluoromethane, 1,3,5-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene and n-butylbenzene were >25 in the soil CCC 2/26/09 @0807, therefore the associated non-detect results were qualified estimated "UJ" and positive results were qualified estimated "J" unknown bias:

chloromethane, bromomethane chloroethane, 1,3,5-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene and n-butylbenzene "UJ" unknown bias and 1,2-trichloro-1,2,2-trifluoromethane,

"J" unknown bias -

**WB-2** 

**Project Site:** 

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42868

#### INITIAL AND CONTINUING CALIBRATION (CONTINUED)

#### Semi-volatiles

It should be noted that the RSD was greater than 30 in the soil and aqueous IC for 2,4-dinitrophenol, however the associated results were non-detect therefore no action was required.

The %D for benzoic acid and 3,3-dichlorobenzidine were >25 in the soil CCC 2/24/09 @1104, therefore the associated non-detect results were qualified estimated "UJ" and positive results were qualified estimated "J" unknown bias:

Benzoic acid and 3,3-dichlorobenzidine

"UJ" unknown bias -

WB-2

WB-3

**WB-4** 

MW-6S

MW-7S

#### Pesticides/PCBs

The IC and CCC criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

COMPOUND IDENTIFICATION - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds. The identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**DILUTED OR RE-ANALYZED SAMPLE RESULTS** – The data packages did not contained any samples that were diluted due or re-analyzed.

#### LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

#### CONCLUSIONS

The data generated for the Tarrytown site were reviewed. From the data validation performed, it was determined that over 95% of the qualified environmental data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 27, 2009

Project Site:

Tarrytown

Sample Matrix: Laboratory:

Aqueous

Amphiain

Hampton Clark – Veritech

Analysis:

TCL Volatiles +10, TCL Semi-volatiles +25, TCL Pesticides/PCBs,

TAL Metals including Cyanide

Lab Project No(s):

9022527

Lab SDG:

AC42940

#### INTRODUCTION

A total of seven (7) environmental aqueous samples, two (2) field duplicates, one (1) field blank and one (1) trip blank, found in Laboratory Project Number 9022527 were collected from the Tarrytown site between 2/23/09 and 2/24/09. These samples were analyzed for TCL Volatiles via 624 (aqueous); TCL Semi-volatiles via 625 (aqueous); TCL Pesticides/PCBs via 608 (aqueous); TAL Metals via 200.7/245.1 (aqueous); and Cyanide via 335.4 (aqueous).

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies, and a screening validation, based upon the summarized information in the NYDOH Category B laboratory package, was performed in accordance with the method and using the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Project No.	Client ID	Lab ID	<u>Matrix</u>	<u>Analysis</u>
9022527:	MW-1 U	AC42940-001	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
	MW-1 F	AC42940-002	Aqueous	TAL
	MW-2 U	AC42940-003	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
€:	MW-2F	AC42940-004	Aqueous	TAL
	MW-3 U	AC42940-005	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
	MW-3 F	AC42940-006	Aqueous	TAL
	MW-4U	AC42940-007	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
	MW-4 F	AC42940-008	Aqueous	TAL
r * e	MW-5 U	AC42940-009	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
281	MW-5 F	AC42940-010	Aqueous	TAL
	MW-6 U	AC42940-011	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
	MW-6 F	AC42940-012	Aqueous	TAL
	MW-7 U	AC42940-013	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
	MW-7 F	AC42940-014	Aqueous	TAL
	DUP-A U	AC42940-0153	Aqueous	Pesticides
	DUP-E U	AC42940-004	Aqueous	VOC
	FB-U	AC42940-029	Aqueous	VOC, SVOC, Pest/PCB, TAL & CN
	FB-F	AC42940-030	Aqueous	TAL
	TB	AC42940-031	Aqueous	VOC

### TAL METALS AND CYANIDE

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- ♦ Holding Time
- ♦ Initial, Continuing Calibration Verification (ICV and CCV) and CRDL Standards
- ♦ Initial, Continuing Calibration, Method and Field Blank (ICB, CCB, MB) Contamination
- ♦ Interference Check Sample (ICS)
- **♦** Laboratory Control Samples (LCS)
- ♦ Laboratory Duplicate Sample Analyses

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42940

- ♦ Spike Sample Analysis
- ♦ ICP Serial Dilution
- ♦ Unfiltered versus Filtered Samples
- ♦ Laboratory Problems/Non-conformance Issues
- ♦ Overall Assessment

**SAMPLE INTEGRITY** - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability and degradation, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL CALIBRATION, CONTINUING CALIBRATION VERIFICATION and CRDL STANDARDS - Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for metals and cyanide. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an analytical sequence. Continuing calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. The ICV, CCV Standards criteria have been reviewed, there were no samples affected. It should be noted that no CRDL Standards were performed. All data are considered to be valid and acceptable for these criteria.

ICB, CCB, MB and FIELD BLANK CONTAMINATION - The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory or field activities. The ICB, CCB, MB and field blank criteria have been reviewed, there were no sample affected. All data are considered to be valid and acceptable for these criteria.

INTERFERENCE CHECK SAMPLE – The ICS verifies the laboratory inter-element and background correction factors. The ICS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY CONTROL SAMPLE – The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY DUPLICATE SAMPLE ANALYSIS - Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory, at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method and various matrices. The Laboratory Duplicate criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

SPIKE SAMPLE ANALYSIS - is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The Spike Sample criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42940

ICP SERIAL DILUTION - Samples quantitated by ICP determines whether or not significant physical or chemical interference exists due to sample matrix. The ICP Serial Dilution criteria have been reviewed, the samples/analytes affected are listed below.

The percent difference was greater than ten in the aqueous ICP serial dilution sample for zinc, therefore associated results greater than ten times the IDL were qualified estimated "J" unknown bias:

zinc "J" unknown bias - MW-7 U

UNFILTERED VERSUS FILTERED SAMPLES – The filtered results should be less than the unfiltered results. If the filtered result is greater than the unfiltered result by more than 10% then both results should be considered estimated. The Unfiltered Versus Filtered criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

## TCL VOLATILES, TCL SEMI-VOLATILES, TCL PESTICIDES AND TCL PCBs

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- ♦ Sample Integrity
- ♦ Holding Time
- Surrogate Recovery
- ♦ Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- ♦ Blank Contamination
- ♦ Mass Spectrometer Tuning (BFB and DFTPP)
- ♦ Initial and Continuing Calibration
- ♦ Internal Standards
- ♦ Compound Identification
- **♦** Field Duplicate Samples
- ♦ Diluted or Re-analyzed Sample Results
- ♦ Laboratory Problems/Non-conformance Issues
- Overall Assessment

**SAMPLE INTEGRITY** - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

SURROGATE RECOVERY - All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42940

MATRIX SPIKE/SPIKE DUPLICATE - The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The MS/MSD criteria have been reviewed, there were no samples affected. It should be noted that some of the MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site. No specific action is required based solely upon MS/MSD results. All data are considered to be valid and acceptable for these criteria.

BLANK CONTAMINATION - Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure crosscontamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. The blank criteria have been reviewed, there were no sample affected. All data are considered to be valid and acceptable for these criteria. There was no method, trip or field blank contamination.

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatile organics is Decafluorotriphenyl-phosphine (DFTPP).

Volatiles and Semi-volatiles

The DFTPP tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL AND CONTINUING CALIBRATION - Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The calibration criteria have been reviewed, the samples/analytes affected are listed below:

Volatiles

It should be noted that the RRF criteria of <0.05 was not met in the associated aqueous IC's and CCC's for acrolein, t-butyl alcohol and 1,4 dioxane. These analytes are known to be poor performers and were within the >0.01 criteria, as well as being not detected in the associated samples, therefore no further action was deemed necessary.

The RRF for bromomethane was <0.05 in IC 2/4/09 and CCC 2/27/09 @0706, therefore this analyte which was non-detect, was rejected in the associated samples:

Bromomethane "R" -	MW-1 U	MW-5 U
	MW-2 U	MW-6 U
	MW-3 U	MW-7 U
	MW-4 U	FB U
	TR	

It should be noted that the RSD was greater than 30 in the aqueous IC 2/4/09 for bromomethane and carbon tetrachloride, however the associated results were non-detect therefore no further action was required.

**Project Site:** 

Tarrytown

Laboratory:

Hampton Clark -- Veritech

Lab SDG:

AC42940

#### INITIAL AND CONTINUING CALIBRATION (CONTINUED)

#### Volatiles

It should be noted that the RSD was greater than 30 in the aqueous IC 3/4/09 for acrolein and 2-chloroethylvinylether, however the associated results were non-detect therefore no further action was required.

The %D for bromomethane, chloroethane, t-butyl alcohol, 2-chloroethylvinylether, trans-1,3-dichloropropene, 4-methyl-2-pentanone and 2-hexanone were >25 in the aqueous CCC 2/27/09 @0706, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

chloroethane, t-butyl alcohol, 2-chloroethylvinylether, trans-1,3-dichloropropene, 4-methyl-2-pentanone and 2-hexanone "UJ" unknown bias -

MW-1 U	MW-5 U
MW-2 U	MW-6 U
MW-3 U	MW-7 U
MW-4 U	FB U
TB	*5

It should be noted that bromomethane was previously rejected in all of the samples listed above, therefore no further action was required.

The %D for dichlorodifluoromethane and chloromethane were >25 in the aqueous CCC 3/9/09 @0717, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

Dichlorodifluoromethane and chloromethane "UJ" unknown bias -

DUP-E U

#### Semi-volatiles

The IC and CCC criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria. It should be noted that the RSD was greater than 30 in the aqueous IC for 2,4-dinitrophenol, however the associated results were non-detect therefore no action was required.

#### Pesticides/PCBs

The IC and CCC criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC42940

**COMPOUND IDENTIFICATION** - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds.

Volatiles, Semi-volatiles and PCBs

The identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**Pesticides** 

The %D was >25 when comparing pesticide results from both columns, therefore the associated analytes/samples were qualified estimated "J" unknown bias.

Endosulfan II "J" unknown bias -

DUP-A U

Beta-BHC "J" unknown bias -

MW-7 U

The %D was >100 when comparing pesticide results from both columns, therefore the associated analyte/sample was rejected "R".

Dieldrin "R" reject -

DUP-A U

#### FIELD DUPLICATE SAMPLES

Volatiles

Sample MW-3 U is associated with field duplicate sample DUP-E U. There were no gross deviations when comparing field duplicate results.

Semi-Volatiles and PCBs

There were no field duplicates associated with the Semi-Volatiles and PCBs.

**Pesticides** 

Sample MW-7 U is associated with field duplicate sample DUP-A U. There were deviations (>20% RSD) when comparing field duplicate results, therefore those results listed below were qualified estimated "J" unknown bias.

Beta-BHC, dieldrin, endosulfan II, Methoxychlor and p,p'-DDD

"J" unknown bias -

MW-7 U

DUP-A U

**DILUTED OR RE-ANALYZED SAMPLE RESULTS** – The data packages did not contained any samples that were diluted due or re-analyzed.

LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

CONCLUSIONS

The data generated for the Tarrytown site were reviewed. From the data validation performed, it was determined that over 95% of the qualified environmental data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 27, 2009

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Project Site:

Tarrytown, 130 Wildey Street Site

Sample Matrix:

Aqueous and Soil

Laboratory:

Hampton Clark - Veritech

Analysis:

TCL Volatiles or TCL Volatiles +10,

TCL Semi-volatiles or TCL Semi-volatiles +25,

TCL Pesticides/PCBs,

TAL Metals (unfiltered and/or filtered) and Cyanide

Lab Project No(s): 0021909

Lab SDG:

AC49930

## INTRODUCTION

A total of twelve (12) environmental soil and seven (7) environmental aqueous samples, one (1) field blank and one (1) trip blank, found in Laboratory Project Number 0021909 were collected from the Tarrytown, 130 Wildey Street Site between 12/16/09 and 12/17/09. These samples were analyzed for TCL Volatiles via SW-846 8260B; TCL Semi-volatiles via SW-846 8270C; TCL Pesticides/PCBs via SW-846 8081A/8082; TAL Metals via SW-846 6010B/7471A or 7470A; and Cyanide via SW-846 9012B.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies, and a screening validation, based upon the summarized information in the NYDOH Category B laboratory package, was performed in accordance with the method and using the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Project No. 0021909:	Client ID MW-8S-A MW-8S-B WB-5 WB-6 WB-7 WB-8S WB-9 ST-1D WB-5 GWU WB-6 GWU WB-7 GWU WB-9 GWU ST1-GW FB TB DS-1 DS-3 DS-1 GWU WB-5 GWF WB-6 GWF WB-7 GWF WB-7 GWF WB-7 GWF	Lab ID AC49930-001 AC49930-002 AC49930-003 AC49930-005 AC49930-006 AC49930-010 AC49930-011 AC49930-011 AC49930-012 AC49930-012 AC49930-015 AC49930-016 AC49930-016 AC49930-017 AC49930-017 AC49930-018 AC49930-021 AC49930-021 AC49930-021 AC49930-022 AC49930-025 AC49930-026 AC49930-026 AC49930-027	Matrix Soil Soil Soil Soil Soil Soil Soil Soil	Analysis VOC+10, SVOC+25, Pest/PCB, TAL & CN VOC, SVOC VOC, SVOC, Pest/PCB, TAL & CN VOC+10 VOC+10, SVOC+25, Pest/PCB, TAL & CN TAL (filtered) TAL (filtered) TAL (filtered) TAL (filtered)
	DS-1 GWF	AC49930-028	Aqueous	TAL (filtered)

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

## TAL METALS AND CYANIDE

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- Sample Integrity
- **Holding Time**
- Initial, Continuing Calibration Verification (ICV and CCV) and CRDL Standards
- Initial, Continuing Calibration, Method and Field Blank (ICB, CCB, MB) Contamination
- Interference Check Sample (ICS)
- Laboratory Control Samples (LCS)
- Laboratory Duplicate Sample Analyses
- Spike Sample Analysis
- ICP Serial Dilution
- Unfiltered versus Filtered Samples
- Laboratory Problems/Non-conformance Issues
- **Overall Assessment**

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained. It should be noted that samples WB-5 GWF and DS-1 GWF were filtered and preserved in the laboratory as per the clients' request. No further action was required.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability and degradation, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL CALIBRATION, CONTINUING CALIBRATION VERIFICATION and CRDL STANDARDS -Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for metals and cyanide. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an analytical sequence. Continuing calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. The ICV, CCV Standards criteria have been reviewed, there were no samples affected. It should be noted that no CRDL Standards were performed. All data are considered to be valid and acceptable for these criteria.

ICB, CCB, MB and FIELD BLANK CONTAMINATION - The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory or field activities. The ICB, CCB, MB and field blank criteria have been reviewed, there were no sample affected. All data are considered to be valid and acceptable for these criteria.

INTERFERENCE CHECK SAMPLE - The ICS verifies the laboratory inter-element and background correction factors. The ICS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY CONTROL SAMPLE - The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

LABORATORY DUPLICATE SAMPLE ANALYSIS - Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory, at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method and various matrices. The Laboratory Duplicate criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below.

The RPD for Barium was 45 in batch 11042. The criteria of RPD<35 was exceeded therefore Barium was qualified estimated "J" unknown bias in the associated samples:

Barium "J" unknown bias -

DS-1

DS-3

SPIKE SAMPLE ANALYSIS - is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The Spike Sample criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below.

The % recovery for Zinc in the soil MSD was high (133%) in batch 11013. This sample was not designated by the client and therefore may not be indicative of the matrix at the site. The LCS was within criteria therefore no further action was deemed necessary.

The % recovery for Antimony in the soil MS and MSD was low (71/73%, respectively) in batch 11042, therefore the associated sample results, which were non-detect, were qualified estimated "UJ" bias low:

Antimony "UJ" bias low - DS-1

DS-3

The % recovery for Chromium in the soil MSD was low (54%) in batch 11042; therefore the associated sample results were qualified estimated "J" bias low:

Chromium "J" bias low - DS-1

DS-3

The % recoveries for Manganese, Magnesium and Mercury in the soil MS or MSD were high (772/136%/135%, respectively) in batch 11042; therefore the associated sample results were qualified estimated "J" bias high:

Manganese, Magnesium

And Mercury "J" bias high -

DS-1

DS-3

The % recoveries for Calcium in the soil MS was high (380%) and the soil MSD was low (72%) in batch 11042, therefore the associated sample results were qualified estimated "J" bias unknown:

Calcium "J" bias unknown -

**DS-1** 

DS-3

It should be noted that the aqueous MS/MSD in batch 11041 was within criteria, however this sample was not designated by the client and therefore may not be indicative of the matrix at the site. The LCS was also within criteria therefore no action was deemed necessary.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

It should be noted that two aqueous and two soil MS/MSD samples were analyzed for Mercury and were all within criteria, however one of the aqueous and two of the soil MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site. The LCS was also within criteria therefore no action was deemed necessary.

It should be noted that three aqueous and two soil MS/MSD samples were analyzed for Cyanide and were all within criteria, however two of the aqueous and two of the soil MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site. The LCS was also within criteria therefore no action was deemed necessary.

ICP SERIAL DILUTION - Samples quantitated by ICP determines whether or not significant physical or chemical interference exists due to sample matrix. The ICP Serial Dilution criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below.

The percent difference was greater than ten for Chromium, Vanadium and Zinc (21/18/12%, respectively) in the soil ICP serial dilution sample in batch 11013, therefore associated positive results greater than ten times the IDL were qualified estimated "J" unknown bias:

Chromium, Vanadium and Zinc "J" unknown bias - MW-8S-A MW-8S-B WB-5 WB-6 WB-7 WB-8S WB-8D WB-9 ST-1S ST-1D

The percent difference was greater than ten for Vanadium (27%) in the aqueous ICP serial dilution in batch 11010, therefore associated results greater than ten times the IDL were qualified estimated "J" unknown bias:

Vanadium "J" unknown bias - WB5-GWU

The percent difference was greater than ten for Barium and Magnesium (17/20%, respectively) in the aqueous ICP serial dilution in batch 11041, therefore associated positive results greater than ten times the IDL were qualified estimated "J" unknown bias:

Barium "J" unknown bias - DS-1 GWU

Magnesium "J" unknown bias - DS-1 GWU
DS-1 GWF

UNFILTERED VERSUS FILTERED SAMPLES – The filtered results should be less than the unfiltered results. If the filtered result is greater than the unfiltered result by more than 10% then both results should be considered estimated. The Unfiltered Versus Filtered criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

# TCL VOLATILES, TCL SEMI-VOLATILES, TCL PESTICIDES AND TCL PCBs

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- Sample Integrity
- **Holding Time**
- Surrogate Recovery
- Matrix Spike/Matrix Spike Duplicate and Laboratory Control Sample (MS/MSD and LCS)
- **Blank Contamination**
- Mass Spectrometer Tuning (BFB and DFTPP)
- Initial and Continuing Calibration
- Internal Standards
- Compound Identification
- Field Duplicate Samples
- Diluted or Re-analyzed Sample Results
- Laboratory Problems/Non-conformance Issues
- **Overall Assessment**

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below.

The samples listed below were on hold when received at the laboratory and later activated for analysis, as per the clients" request, even though they were out of holding time criteria. Therefore all analytes in these samples should be considered estimated "J" bias low:

Volatiles:

All analytes "J" bias low -

DS-1 GWU

Semi-volatiles, Pesticides and PCBs:

All analytes "J" bias low -

**DS-1** 

DS-3

SURROGATE RECOVERY - All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

MS/MSD and LCS- The MS/MSD and LCS data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The MS/MSD and LCS criteria have been reviewed, there were no samples affected. It should be noted that some of the MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site. No specific action is required based solely upon MS/MSD results and all of the LCS were within criteria therefore all data are considered to be valid and acceptable for these criteria.

BLANK CONTAMINATION - Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure crosscontamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. The blank criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below:

Semi-volatiles

The Tentatively Identified Compound (TIC) 2-propanol,1-butoxy @ Retention Time (R.T.) 5.01 was found in the field blank, therefore this analyte was rejected in the associated samples:

2-propanol,1-butoxy "R" -

WB-5 WB-8D

WB-6 WB-9

WB-7 DS-1 GWU

Various TICs were found in the method blanks and therefore rejected in the associated samples listed below:

R.T. 3.78, 4.02, 4.07, 4.42, 5.04 and 6.08 "R" - WB-5

R.T. 3.78, 4.08, 4.37, 4.42, 5.04 and 6.80 "R" - WB-6

R.T. 3.78, 4.05, 4.09, 4.40, 4.43, 5.04 and 6.80 "R" - WB-8D

R.T. 3.78, 4.03, 4.09, 4.43, 5.04 and 6.80 "R" - WB-9

R.T. 3.41 and 3.78 "R" - MW-8S-A

R.T. 3.09, 3.42, 3.81, 4.55 and 6.35 "R" - MW-8S

R.T. 3.41 and 3.78 "R" - ST-1S

R.T. 3.48, 3.78, 4.14, 4.80 and 6.57 "R" - MW-8S-B

R.T. 3.48, 3.78, 4.16, 4.80 and 6.57 "R" – WB-7

R.T. 3.48, 3.80, 4.16, 4.80 and 6.57 "R" - ST-1D

R.T. 3.56 and 4.36 "R" - DS-1

R.T. 3.57 and 4.36 "R" - DS-3

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatile organics is Decafluorotriphenyl-phosphine (DFTPP).

Volatiles and Semi-volatiles

The BFB and DFTPP tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

**Project Site:** 

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

INITIAL AND CONTINUING CALIBRATION - Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The calibration criteria have been reviewed, the samples/analytes affected are listed below:

#### Volatiles

It should be noted that the RRF criteria of <0.05 was not met in the associated IC's 1/27/10, 1/28/10 and 3/5/10 and/or CCC's 2/22/10 @1136, 2/23/10 @0711, 2/22/10 @0734, 2/23/10 @0732 or 3/9/10 @0652 for acrolein, acetone, chloroethane, TBA and/or 1,4 dioxane. These analytes are known to be poor performers and were within the >0.01 (>.001 for 1,4-dioxane) minimum criteria, as well as being not detected in the associated samples, therefore no further action was deemed necessary.

The RRF criteria of <0.05 was not met in the associated IC 1/27/10 and CCC's 2/22/10 @1136 and 2/23/10 @0711 for TBA. This analyte is known to be a poor performer and was not within the >0.01 minimum criteria, therefore the associated sample results, all of which were non-detect were rejected "R" unusable:

TBA "R" unusable –	MW-8S-A MW-8S-B	WB-8D WB-9
	WB-5	ST-1S
	WB-6	ST-1D
	WB-7	DS-1
	WB-8S	DS-3

The %D for trans-1,3-dichloropropene and bromoform were >25 in the CCC 2/22/10 @1136, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

trans-1,3-dichloropropene and bromoform "UJ" unknown bias -	MW-8S-A MW-8S-B WB-5 WB-6 WB-7 WB-8S	WB-8D WB-9 ST-1D DS-1 DS-3
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The %D for dichlorodifluoromethane was >25 in the CCC 2/23/10 @0711, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

Dichlorodifluoromethane "UJ" unknown bias -

**ST-1S** 

It should be noted that the RSD was greater than 30 in the aqueous IC 1/28/10 for bromomethane and carbon tetrachloride, however the associated results were non-detect therefore no further action was required.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

## INITIAL AND CONTINUING CALIBRATION (CONTINUED)

The %D for dichlorodifluoromethane and TBA were >25 in the CCC 2/22/10 @0734, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

Dichlorodifluoromethane

and TBA "UJ" unknown bias -

WB-5 GWU WB-6-GWU WB-7 GWU WB-8 GWU WB-9 GWU ST-1 GW FB

The %D for dichlorodifluoromethane, chloroethane and 1,2-dichloroethane were >25 in the CCC 2/23/10 @0732, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

Dichlorodifluoromethane, Chloroethane and 1.2-dichloroethane "UJ" unknown bias -

TB

The %D for chloromethane, trichlorofluoromethane, 4-methyl-2-pentanone and 2-hexanone were >25 in the CCC 3/9/10 @0652, therefore the associated results, which were nondetect, were qualified estimated "UJ" unknown bias:

Chloromethane, trichlorofluoromethane, 4-methyl-2-pentanone and 2-hexanone DS-1 GWU "UJ" unknown bias -

Semi-volatiles

It should be noted that the RSD was greater than 30 in the IC 1/25/10 for 2,4-dinitrophenol; in the IC 2/12/10 for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol; and in the IC 3/1/10 for hexachlorocyclopentadiene, however the associated results were non-detect therefore no action was required.

The %D for hexachlorocyclopentadiene was >25 in the CCC's 2/23/10 @1019 and 3/8/10 @0855, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

Hexachlorocyclopentadiene

"UJ" unknown bias -

MW-8S-A **WB-8S** ST-1S DS-1 DS-3

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC49930

# INITIAL AND CONTINUING CALIBRATION (CONTINUED)

The %D for 3-nitroaniline, 2,4-dinitrophenol and 4,6-dinitro-2-metylphenol were >25 in the CCC 2/23/10 @0957, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

3-nitroaniline, 2,4-dinitrophenol and 4.6-dinitro-2-methylphenol "UJ" unknown bias -

WB-5

**WB-9** 

WB-6

WB-5 GWU

WB-8D

WB-6 GWU

## Pesticides/PCBs

The IC and CCC criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria. It should be noted that the %D was >20 in the IC 3/5/10 for 4,4-DDT however the associated sample results were nondetect therefore no further action was required.

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

COMPOUND IDENTIFICATION - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds.

# Volatiles, Semi-volatiles and PCBs

The identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

## **Pesticides**

The %D was >25 when comparing pesticide results from both columns, therefore the associated analytes/samples were qualified estimated "J" unknown bias.

Chlordane "J" unknown bias - DS-1

## FIELD DUPLICATE SAMPLES

There were no field duplicates associated with these samples.

DILUTED OR RE-ANALYZED SAMPLE RESULTS - The data packages did not contained any samples that were diluted due or re-analyzed.

# LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

The data generated for the Tarrytown site were reviewed. From the data validation performed, it was determined that over 95% of the qualified environmental data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 26, 2010

Project Site:

Tarrytown, 130 Wildey Street Site

Sample Matrix:

Aqueous

Laboratory: Analysis:

Hampton Clark - Veritech

TCL Volatiles +10,

TCL Semi-volatiles +25, TCL Pesticides/PCBs,

TAL Metals (unfiltered and/or filtered) and Cyanide

Lab Project No(s):

Lab SDG:

0031013 AC50253

## INTRODUCTION

A total of two (2) environmental aqueous samples, one (1) field blank and one (1) trip blank, found in Laboratory Project Number 0031013 were collected from the Tarrytown, 130 Wildey Street Site between These samples were analyzed for TCL Volatiles via SW-846 8260B; TCL Semi-3/8/10 and 3/9/10. volatiles via SW-846 8270C; TCL Pesticides/PCBs via SW-846 8081A/8082; TAL Metals via SW-846 6010B/7471A or 7470A; and Cyanide via SW-846 9012B.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies, and a screening validation, based upon the summarized information in the NYDOH Category B laboratory package, was performed in accordance with the method and using the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Project No. 0031013:	Client ID MW-8 U MW-8 F DS-8GW U DS-8GW F FB U FB F TB	Lab ID AC50253-001 AC50253-002 AC50253-003 AC50253-004 AC50253-005 AC50253-006 AC49930-007		Analysis VOC+10, SVOC+25, Pest/PCB, TAL & CN TAL (filtered) VOC+10, SVOC+25, Pest/PCB, TAL & CN TAL (filtered) VOC+10, SVOC+25, Pest/PCB, TAL & CN TAL (filtered) VOC+10
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## TAL METALS AND CYANIDE

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- Sample Integrity
- **Holding Time**
- Initial, Continuing Calibration Verification (ICV and CCV) and CRDL Standards
- Initial, Continuing Calibration, Method and Field Blank (ICB, CCB, MB) Contamination
- Interference Check Sample (ICS)
- Laboratory Control Samples (LCS)
- Laboratory Duplicate Sample Analyses
- Spike Sample Analysis
- ICP Serial Dilution
- Unfiltered versus Filtered Samples
- Laboratory Problems/Non-conformance Issues
- **Overall Assessment**

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained. It should be noted that samples MW-8F, DS-8GW F and FB F were filtered and preserved in the laboratory as per the clients' request. No further action was required.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC50253

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability and degradation, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL CALIBRATION, CONTINUING CALIBRATION VERIFICATION and CRDL STANDARDS - Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for metals and cyanide. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an analytical sequence. Continuing calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. The ICV, CCV Standards criteria have been reviewed, there were no samples affected. It should be noted that no CRDL Standards were performed. All data are considered to be valid and acceptable for these criteria.

ICB, CCB, MB and FIELD BLANK CONTAMINATION - The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory or field activities. The ICB, CCB, MB and field blank criteria have been reviewed, there were no sample affected. All data are considered to be valid and acceptable for these criteria.

INTERFERENCE CHECK SAMPLE – The ICS verifies the laboratory inter-element and background correction factors. The ICS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY CONTROL SAMPLE – The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LABORATORY DUPLICATE SAMPLE ANALYSIS - Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory, at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method and various matrices. The Laboratory Duplicate criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

SPIKE SAMPLE ANALYSIS - is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The Spike Sample criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below.

The % recovery for Mercury in the aqueous MS was low (74%); therefore the associated sample results, which were non-detect, were qualified estimated "UJ" bias low:

Mercury "UJ" bias low - MW-8 U

DS-8GW F

MW-8 F

FB U

DS-8GW U

FB F

ICP SERIAL DILUTION - Samples quantitated by ICP determines whether or not significant physical or chemical interference exists due to sample matrix. The ICP Serial Dilution criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below.

The percent difference was greater than ten for Beryllium (464%) in the aqueous ICP serial dilution sample, however there were no positive results found in the associated samples therefore no further action was required.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC50253

UNFILTERED VERSUS FILTERED SAMPLES - The filtered results should be less than the unfiltered results. If the filtered result is greater than the unfiltered result by more than 10% then both results should be considered estimated. The Unfiltered Versus Filtered criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

# TCL VOLATILES, TCL SEMI-VOLATILES, TCL PESTICIDES AND TCL PCBs

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- Sample Integrity
- **Holding Time**
- Surrogate Recovery
- Matrix Spike/Matrix Spike Duplicate and Laboratory Control Sample (MS/MSD and LCS)
- **Blank Contamination**
- Mass Spectrometer Tuning (BFB and DFTPP)
- Initial and Continuing Calibration
- Internal Standards
- Compound Identification
- Field Duplicate Samples
- Diluted or Re-analyzed Sample Results
- Laboratory Problems/Non-conformance Issues
- **Overall Assessment**

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed. All data are considered to be valid and acceptable for these criteria.

SURROGATE RECOVERY - All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The surrogate recovery criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

MS/MSD and LCS- The MS/MSD and LCS data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The MS/MSD and LCS criteria have been reviewed, there were no samples affected. It should be noted that some of the MS/MSD samples were not designated by the client and therefore may not be indicative of the matrix at the site. No specific action is required based solely upon MS/MSD results and all of the LCS were within criteria therefore all data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC50253

BLANK CONTAMINATION - Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure crosscontamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. The blank criteria have been reviewed. All data are considered to be valid and acceptable for these criteria, with the exceptions noted below:

Semi-volatiles

The Tentatively Identified Compound (TIC) 2-propanol,1-butoxy @ Retention Time (R.T.) 4.96 was found in the field blank, therefore this analyte was rejected in the associated samples:

2-propanol,1-butoxy "R" -

MW-8 U

DS-8GW U

Various TICs were found in the method blanks and therefore rejected in the associated samples listed below:

R.T. 11.77 and 11.79 "R" -

MW-8 U DS-8GW U

MASS SPECTROMETER TUNING - Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatile organics is Decafluorotriphenyl-phosphine (DFTPP).

Volatiles and Semi-volatiles

The BFB and DFTPP tuning and performance criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INITIAL AND CONTINUING CALIBRATION - Satisfactory instrument calibration (IC) is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks (CCC) document that the instrument is giving satisfactory daily performance. The calibration criteria have been reviewed, the samples/analytes affected are listed below:

**Volatiles** 

It should be noted that the RRF criteria of <0.05 was not met in the associated IC 3/5/10 and CCC's 3/11/10 @0730 and 3/12/10 @0640 for TBA and 1,4 dioxane. These analytes are known to be poor performers and were within the >0.01 (>.001 for 1,4-dioxane) minimum criteria, as well as being not detected in the associated samples, therefore no further action was deemed necessary.

The %D for chloroethane and acetone were >25 in the CCC 3/11/10 @0730, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

chloroethane and acetone "UJ" unknown bias -

DS-8GW U

FB U

TB

Project Site:

Tarrytown

Laboratory:

Hampton Clark - Veritech

Lab SDG:

AC50253

# INITIAL AND CONTINUING CALIBRATION (CONTINUED)

The %D for dichlorodifluoromethane, acetone, 4-methyl-2-pentanone and bromoform were >25 in the CCC 3/12/10 @0640, therefore the associated results, which were non-detect, were qualified estimated "UJ" unknown bias:

Dichlorodifluoromethane, acetone, 4-methyl-2-pentanone and bromoform "UJ" unknown bias - MW-8 U

## Semi-volatiles

It should be noted that the RSD was greater than 30 in the IC 2/17/10 for benzoic acid, however the associated results were non-detect therefore no action was required.

## Pesticides/PCBs

The IC and CCC criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

INTERNAL STANDARDS PERFORMANCE GC/MS - Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The IS criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

COMPOUND IDENTIFICATION - Compound identification and ion spectra match, chromatogram quality and evaluation of retention time windows were evaluated to determine whether there are any interfering unknowns present which prevent identification of the target compounds.

## Volatiles, Semi-volatiles and Pesticides/PCBs

The identification criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

## FIELD DUPLICATE SAMPLES

There were no field duplicates associated with these samples.

DILUTED OR RE-ANALYZED SAMPLE RESULTS - The data packages did not contained any samples that were diluted due or re-analyzed.

# LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

## CONCLUSIONS

The data generated for the Tarrytown site were reviewed. From the data validation performed, it was determined that over 95% of the qualified environmental data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 28, 2010

Project Site:

Tarrytown, 130 Wildey Street Site

Sample Matrix:

Indoor and Outdoor Air Alpha Analytical

Laboratory: Lab Project Number(s):

L1002578

#### INTRODUCTION

A total of fourteen (14) air samples found in Laboratory Project Number L1002578 were collected from the Tarrytown, 130 Wildey Street Site on 2/18/10. All of these samples were analyzed for Volatiles via method TO-15.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies and a screening validation, based upon the summarized laboratory results, was performed in accordance with the method and the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Case No.	Client ID	<u>L</u> :	ab ID	<u>Matrix</u>
L1002578:	SS-1	-0	)1	Air
21002070.	SS-2	-(	)2	Air
	SS-3	-(	)3	Air
		·(	)4	Air
	SS-5	-(	05	Air
	SS-6		06	Air
			07	Air
	SS-7		08	Air
	SS-8		09	Air
	IAQ-1			Air
	IAQ-2		10	Air
	IAQ-3		11	
	IAQ-4		12	Air
	IAQ-5	-	13	Air
	AAQ-1	-	14	Air

## **TO-15 VOLATILES**

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- Sample Integrity
- **Holding Time**
- Laboratory Duplicate and Laboratory Control Sample (LDUP, LCS)
- ♦ Blank Contamination
- Diluted or Re-analyzed Sample Results
- Laboratory Problems/Non-conformance Issues
- Overall Assessment

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

Project Site:

Tarrytown Site

Sample Matrix:

Indoor and Outdoor Air

Lab Project Number(s):

L1002578

LDUP and LCS – The LCS serves as a monitor of the overall precision and accuracy of each step during the analysis, including the sample preparation. The LDUP and LCS criteria have been reviewed.

1,2,4-dichlorobenzene showed high recovery in the LCS sample, therefore the positive results for this analyte were qualified estimated "J" high bias in the associated samples listed below:

1,2,4-dichlorobenzene "J" high bias -

SS-1

SS-2 SS-3

SS-4

**SS-5** 

BLANK CONTAMINATION - Quality assurance (QA) blanks, i.e., method blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation. Method blanks measure laboratory contamination. The blank criteria have been reviewed. There was no blank contamination found.

**DILUTED OR RE-ANALYZED SAMPLE RESULTS** – The data packages contained some samples that were diluted due to results being out of linear range. Upon reviewing the QA results, the following samples/results were identified for use:

It should be noted that sample SS-8 was re-analyzed at a dilution due to Isopropanol exceeding linear range. Therefore the original results shall be used for all analytes with the exception of Isopropanol where the diluted result shall be used.

## LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no problems/non-conformance issues related to the data that was validated.

<u>CONCLUSIONS</u> - The data generated for the Tarrytown Site were reviewed. From the data validation performed, it was determined that over 95% of the qualified data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: April 27, 2010

**Project Site:** 

EJ0810744.005, Tarrytown, NY

Sample Matrix:

Air

Laboratory:

Alpha Analytical

Lab Project Number(s):

L1100816

#### INTRODUCTION

A total of two (2) air samples found in Laboratory Project Number L1100816 were collected from the EJ0810744.005 Tarrytown, NY Site on 1/18/11. All of these samples were analyzed for Volatiles via method TO-15.

Valerie Smith, a certified USEPA Region II data validator, reviewed the laboratory data. The data were evaluated for compliance with the appropriate methodologies and a screening validation, based upon the summarized laboratory results, was performed in accordance with the method and the current USEPA Region II Data Validation Guidelines as per the NYSDEC DUSR document.

The samples, matrix and type of analyses performed are as follows:

Case No.	Client ID	<u>Lab ID</u>	<u>Matrix</u>
11100816:	IAS-1	-01	Air
2	AAS-1	-02	Air

## TO-15 VOLATILES

The following quality control indicators, where applicable, were used to evaluate the usability of this data:

- Sample Integrity
- **Holding Time**
- Laboratory Duplicate and Laboratory Control Sample (LDUP, LCS)
- **Blank Contamination**
- Diluted or Re-analyzed Sample Results
- Laboratory Problems/Non-conformance Issues
- ♦ Overall Assessment

SAMPLE INTEGRITY - Samples were received at the laboratory intact, in the appropriate sample bottles showing no evidence of tampering. Sample paperwork was reviewed to determine that the samples being validated were indeed the ones collected from the site. The Chain of Custody was properly filled out including sampler's signature, date and time of sampling and analyses requested. Custody transfers between different parties was maintained.

HOLDING TIME - The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The holding time criteria have been reviewed, there were no samples affected. All data are considered to be valid and acceptable for these criteria.

LDUP and LCS - The LCS serves as a monitor of the overall precision and accuracy of each step during the analysis, including the sample preparation. The LDUP and LCS criteria have been reviewed.

2-Butanone showed high recovery in the LCS sample (147%); therefore the associated positive results were qualified estimated "J" high bias:

2-Butanone "J" high bias -

IAS-1 AAS-2

Project Site:

EJ0810744.005, Tarrytown, NY

Laboratory:

Alpha Analytical

Lab Project Number(s):

L1100816

BLANK CONTAMINATION - Quality assurance (QA) blanks, i.e., method blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation. Method blanks measure laboratory contamination. The blank criteria have been reviewed. There was no blank contamination found.

DILUTED OR RE-ANALYZED SAMPLE RESULTS - There were no dilutions or re-analyses performed.

## LABORATORY PROBLEMS/NON-CONFORMANCE ISSUES

There were no non-conformance issues related to the data that was validated.

The laboratory noted in their Case Narrative that the results for acetone should be considered estimated due to co-elution with a non-target peak. This could not be verified by the validator as this was a screening validation and the raw data was not provided for review.

<u>CONCLUSIONS</u> - The data generated for the EJ1011466.001, Tarrytown, NY Site were reviewed. From the screening data validation performed, it was determined that over 95% of the qualified data generated is considered usable, and therefore adequate to support any recommendations and conclusions pertaining to this site.

DATA VALIDATOR: Valerie A. Smith DATE: March 11, 2011

Whitestone Associates 35 Technology Drive. Warren, NJ 07059

RE: Statement of Qualifications (SOQ)

## Dear Dustin Kapson:

Enclosed is my Statement of Qualifications as requested. I have been performing data validation since 1989. I started working privately from my home office in 1995 and have been consulting for a variety of engineering firms. I would like to state, for your records, that I am not associated with the responsible party, its consultant or the laboratory. Please call if you have any questions.

Sincerely,

Valerie A. Smith

2015 N Gibson Peak Pl

Payson, AZ 85541

Tele#: 928-468-9100

EMAIL: tufguy96@usa.com

## Valerie A. Smith 2015 N Gibson Peak Place Payson, AZ 85541 (928) 468-9100

# DATA VALIDATION

# STATEMENT OF QUALIFICATIONS

Certified on April 10, 1989 by the U.S. EPA Region II in the validation of Contract Laboratory Program (CLP) data for organic analyses.

Certified on October 23, 1990 by the U.S. EPA Region II in the validation of CLP data for inorganic analyses.

Perform data validations, as per:

USEPA CLP Organic Format
USEPA CLP Inorganic Format
NJDEP CLP I Format
NJDEP Reduced Deliverable Format
NYSDEC Analytical Protocol Category B
Region III Innovative Approaches to Data Validation
Specific methods, for wet chemistry and physical parameters
Radiological (gamma spec., alpha spec., alpha/beta proportional counting)

## **EXPERIENCE**

PRIVATE CONSULTANT, Payson, AZ, NJ (Home Office), NJ – 1996 - present Data Validation – 10/96 - present

MALCOLM PIRNIE, INCORPORATED, Cranbury, NJ – 1991 - 1996 Data Validation – 6/91 to 10/96

HALLIBURTON NUS CORPORATION, Edison, NJ - 1983 – 1991 <u>Data Validation</u> - 3/88 to 6/91

# REFERENCES and PROJECT EXPERIENCE

CLIENT NAME: Malcolm Pirnie, Inc., Fairlawn, NJ

PROJECT NAME: Multiple Projects - May 1998 thru present

PROJECT MANAGER: Lisa Szegedi

CLIENT NAME: Killam Associates, Inc., Millburn, NJ PROJECT NAME: Hertel Landfill – 2002 thru present PROJECT MANAGER: Roy Redmond (973) 912-2446

CLIENT NAME: URS Greiner Woodward Clyde, Wayne, NJ

PROJECT NAME: Dynapac - 1998 thru 2004

PROJECT MANAGER: Jacek Leznicki (973) 812-6818

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Edison, Kew Jersey

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Valerie A. Smici

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Organic Data Validation

Edison, New Jerscy

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## APPENDIX F Disposal Documents

## BROOKSIDE ENVIRONMENTAL WWW.BROOKSIDEWEB.COM

#### 7 WILLIS COURT HICKSVILLE, NEW YORK 11801 PHONE: 516.377.6300 FAX: 516.377.6846

Transporter Permit #1A-644 EPA ID #NYR000081661

NON-HAZARDOUS MANIFEST 1.0	Customers US EPA ID NO.  NOT REQUIRED.	Dacume			Page 1	123	6
L Customer's Name and Mailing Address. ACADIN TARRYTOWN 1311 MNMARONECK LUHITE PLAINS, N.Y. 10	AVE. SUME 260 THE	MILDEY	NY	B.	State ID  State Transporter's	10 K/Y //	9-644
Transporter 1 Company Name  BRICK SIDE ENVINCAMENTAL	6, US EPA ID Numbe   M/R OCO?				State Transporter's Transporter's Phone	3/6 3/	7-6300
. Vansporter 2 Company Name	8, US EPA ID Numbe	1		F.	State Transporter's Transporter's Phone		
Designated Facility Name and Site Address LENNINTER OF NEW YORK 3249 RICHTARY TERRACE STATEN ISLAND, N.Y. 1030	10. US EPA ID Numb			L	State Facility's ID	1-4600	
US DOT Description (Including Proper Shipping Name, Has			12. Contain	Тура	13. Total Quantity	14. Unit Wi/Yol	t. Waste No.
NON. DOT / NON. RCKA HAZALA			14	0	40	G	
WASTE PETROLEUM MIXTURE,			2	D	800	P	
	i Kr	*					
Additional Descriptions for Materials Listed Above				K. Ha	ndiling Codes for Wa	astee Listed Abo	ws
		=				- 14	5
5. Special Handling Instructions and Additional Information							
			<b>,</b> *1₹				
lebeled, and are in all respects in proper condition for trains	sport by righted according to appropri	/	above by produced and the state of the state	reger remm	thipping name and a tragulations		DATE  Month Say
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7. Tansporter 1 Acknowledgement of Receipt of Materials	Signature Signature Signature	Hyd.	Ma	roper e	thipping name and a tregulations.		Month 9ay DATE  Month 9ay DATE

## APPENDIX G Well Search Information

#### GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY.

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min:

> 77 inches

Depth to Watertable Min.

> 0 inches

No Layer Information available.

#### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

LOCATION

#### WELL SEARCH DISTANCE INFORMATION

DATABASE

SEARCH DISTANCE (miles)

Federal USGS

1.000

Federal FRDS PWS

Nearest PWS within 1 mile

State Database

1.000

#### FEDERAL USGS WELL INFORMATION

FROM TP WELL ID MAP ID 1/2 - 1 Mile NNW USGS2128268 1/2 - 1 Mile ENE USGS2128620 2

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

LOCATION FROM TP WELL ID MAP ID

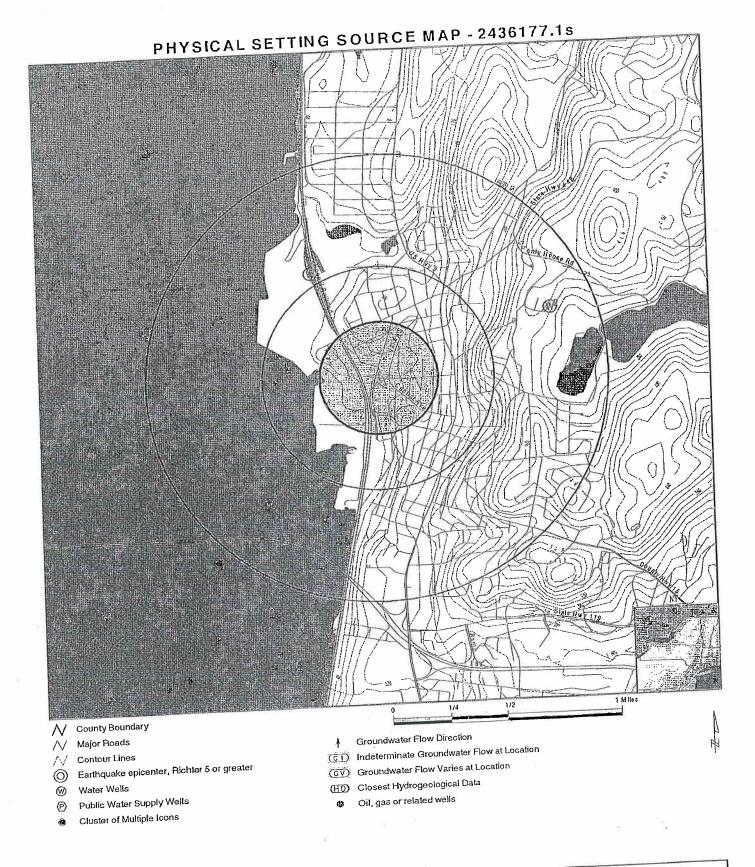
No PWS System Found

Note: PWS System location is not always the same as well location.

#### STATE DATABASE WELL INFORMATION

LOCATION FROM TP WELL ID MAP ID

No Wells Found



SITE NAME: Existing Dry Cleaners
ADDRESS: 140 Wildey Street
Tarrytown NY 10591
LAT/LONG: 41.0801 / 73.8640

CLIENT: Whitestone Associates, Inc.
CONTACT: Melissa Bartley
INQUIRY #: 2436177.1s
March 06, 2009 2:51 pm
Copyright © 2008 EDR, Inc. © 2006 Table Atlas Rel. 07/2007.

## GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction		= 2		
Distance			Database	EDR ID Number
Elevation				H0000128268
1			FED USGS	USGS2128268
NNW				
1/2 - 1 Mile Lower				
	USGS	Site no:	410819073521101	
Agency cd:	WE 116			
Site name:	410513		41.08704083	
Latitude:	0735211	Dec lat.	M	
Longitude: Dec lon:	-73.86930205	Coor meth:	NAD27	
Coor accr:	F	Latlong datum:	36	
Dec lationg datum:	NAD83	District:	119	
State:	36	County:	Not Reported	
Country:	US	Land net:	Not Reported	
Location map:	BULL GW-35	Map scale:		
Altitude:	5.00	_		
Altitude method:	Interpolated from topographic ma	p		
Altitude accuracy:	5	of 1929		
Altitude datum:	National Geodetic Vertical Datum Lower Hudson, Connecticut, Nev	Jersey New York, Area = 720	sq.mi.	
Hydrologic:	Lower Hudson, Connecticut, Nev	vaciooy, riem		
Topographic:	Not Reported	Date construction:	Not Reported	
Site type:	Ground-water other than Spring	Mean greenwich time offset:	EST	
Date inventoried:	Not Reported	Modif great		
Local standard time flag:	N Single well, other than collector of	or Ranney type		
Type of ground water site:	Single Well, Other than concern	, <b>,</b> 3,		
Aquifer Type:	Not Reported			
Aquifer:	SAND	Hole depth:	Not Reported	
Well depth:	14.0			
Source of depth data:	Not Reported BULLGW-35		.=	
Project number:	Not Reported	Dally flow data begin date:	Not Reported	
Real time data flag:	Not Reported	Daily flow data count:	Not Reported	
Daily flow data end date:	· Not Reported	Peak flow data end date:	Not Reported	
Peak flow data begin date	Not Reported	Water quality data begin date	: Not Reported	
Peak flow data count:	Not Reported	Water quality data count:	Not Reported	
Water quality data end data Ground water data begin of	tata: Not Reported	Ground water data end date:	Not Reported	
Ground water data begin	Not Reported			
Ground water data count:	Not reported			
Ground-water levels, Num	her of Measurements: 0	\$ 100 miles		
Ground-water levels, runt				
2			FED USGS	USGS2128620
ENE				
1/2 - 1 Mile				
Higher		Site no:	410503073510001	
Agency cd:	USGS	One no.		
Site name:	WE 766			
Latitude:	410503	Dec lat:	41.08426312	
Longitude:	0735100	Coor meth:	M	
Dec Ion:	-73.84957923	Latlong datum:	NAD27	
Coor accr:	F NAD93	District:	36	
Dec latlong datum:	NAD83	County:	119	¥0
State:	36 US	Land net:	Not Reported	
Country:	BULL GW-35	Map scale:	Not Reported	
Location map:	DOLL OW 00			

#### GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:

260.00

Altitude method:

Interpolated from topographic map

Altitude accuracy:

National Geodetic Vertical Datum of 1929 Lower Hudson. Connecticut, New Jersey, New York. Area = 720 sq.mi.

Altitude datum: Hydrologic:

Not Reported Ground-water other than Spring Date construction: Not Reported

Topographic:

Not Reported

EST Mean greenwich time offset:

Site type:

Date inventoried: Local standard time flag:

Single well, other than collector or Ranney type Not Reported

Type of ground water site: Aquifer Type: Aquifer:

BEDROCK 200

Hole depth:

Not Reported

Well depth: Source of depth data: Project number: Real time data flag:

Daily flow data end date:

Peak flow data count:

Not Reported BULLGW-35

Not Reported Not Reported

Peak flow data begin date: Not Reported

Not Reported Water quality data end date:Not Reported Daily flow data begin date: Daily flow data count: Peak flow data end date: Water quality data begin date: Not Reported Water quality data count:

Not Reported Not Reported Not Reported Ground water data end date:

Not Reported

Not Reported

Ground water data begin date: Not Reported Ground water data count: Not Reported

Ground-water levels, Number of Measurements: 0

APPENDIX H
Community Air Monitoring
Reports

		MONITOI a Shopping Center			2/17/10
Project Name:	130 Wilde			Project No.:	EJ0810744.004
Project Location:	A <del>lexander and the second and the se</del>	, New York			
	2.44				
ISTRUMENT CALIB	RATION:	Control of the Section 1999 (1999)	BURLES!	Tim	e(c)
Instrument		Calibrated By:	Date	Marilla de la companya della company	12:25
(iniRae 2000 PID		DK	2-17-10	07:30	12.25
			1		
Perimeter and Pe	From Provide Eived, Which	N/A			
			9		6
OCIC		°F Win	d Direction		umidity: 20 %
METEOROLOGICA Temperature:		sty, Rain, Snow,	Sun, Etc.)	Overcast, Slight I	3reeze
Temperature: Weather Condit	ion (e.g., Gu				
Temperature:	ion (e.g., Gu	- 37			
Temperature: Weather Condit	ion (e.g., Gu				
Temperature: Weather Condit	ion (e.g., Gu				

	AIR MONI	TORING !	REPOR			٥	
D ' (Nama)	River Plaza Shopping	Center	Date: 2/17/10				
Project Name:	130 Wildey Street		Proj	ject No.	: <u>EJ081</u>	0744.004	
Project Location:	Tarrytown, New Yor	k	<u>.</u>				
OPERATION MONITO	ORED: (If instruments h Indicate response taken	ave recorders, a	ttach tape to	report.	Note who	en action	
levels are exceeded.	Sampling Location	Sample Time	Reading		n Level eded? No	Action(s) Taken	
Instrument		08:00	0.0		X	None	
MiniRae 2000 PID	Work Area	08:15	0.0		X	None	
		08:30	0.0		X	None	
		08:45	0.0		X	None	
		09:00	0.0		X	None	
		09:15	0.0		X	None	
		09:30	0.0		X	None	
		09:45	0.0		X	None	
		10:15	0.0		X	None	
		10:30	0.0		X	None	
		10:45	0.0		X	None	

11:00

11:15

11:30

11:45

12:00

12:45

WHITESTONE ASSOCIATES, INC. 35 Technology Drive & Warren, New Jersey 07059 908.668-7777 ♦ 908.754.5936 Fax ♦ www.whitestoneassoc.com

REPORT PREPARED BY:

(Printed Name)

(Date)

0.0

0.0

0.0

0.0

0.0

(Signature)

X

X

X

X

X

None

None

None

None

None

HSFORM-007/REV.4/9-05

	AIR MONIT	ORING	REPOR		. 2/17/1	10
Project Name:	River Plaza Shopping (	Center			: <u>2/17/1</u>	
Project Location:	130 Wildey Street		Pro	ject No.	: EJU8	10744.004
	Tarrytown, New York		<del>-</del> (1			
OPERATION MONITO levels are exceeded.	ORED: (If instruments have Indicate response taken.)  Sampling	ve recorders, a ) Sample	+	Action Exce	n Level eded?	en action  Action(s)  Taken
Instrument	Location	Time	Reading	Yes	No X	None
MiniRae 2000 PID	Work Area	13:00	0.0		X	None
	2	13:15	0.0		X	None
		13:30	0.0		X	None
		13:45	0.0		X	None
		14:15	0.0		X	None
		14:30	0.0		X	None
		14:45	0.0		X	None
		15:15	0.0		X	None
		15:30	0.0		X	None
		15.50				1

REPORT PREPARED BY: (Printed Name)

16:00

16:15

16:30

16:45

0.0

0.0

0.0

0.0

2-17-10

(Date)

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X

X

X

 $\mathbf{X}$ 

None

None

None

None

Project Name:	River Pla	aza Shopping Cente	er	Date:		
Project Location:	130 Wild	ley Street		Project No.: EJ0810744.0		
,	Tarrytov	vn, New York				
NSTRUMENT CALIB	RATION:		<b>.</b>	WHITE IS DO NOT BEEN	44.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.	
Instrument	A CENTRAL OF	Calibrated By:	Date		le(s)	
IiniRae 2000 PID		DK	2-18-10	07:40	12:35	
			+-	,		
Perimeter and Pe Sample Results I Previous Days (I Data When Rece	rom Provide	See Previous (	2/17)			
Indicate Date on Sample Was Co	Which					
	AL DATA:					

#### AIR MONITORING REPORT

	River Plaza Shopping	Center		Date	: 2/18/1	0
Project Name:		Project No.: EJ0810744.004				
Project Location:	130 Wildey Street	1				
	Tarrytown, New Yor	K	11), 			
PERATION MONITO	ORED: (If instruments h	ave recorders, a	ttach tape to	report.	Note who	en action
evels are exceeded.	Indicate response takes			Actio	n Level	Action(s)
	Sampling Location	Sample Time	Reading	Yes	No	Taken
Instrument	Work Area	08:00	0.0		X	None
MiniRae 2000 PID	WORKTHOW	08:15	0.0		X	None
		08:30	0.0		X	None
		08:45	0.0		X	None
		09:00	0.0		X	None
-11		09:15	0.0	*	X	None
		09:30	0.0		<u> X</u>	None
		09:45	0.0	-	X	None
		10:15	0.0		X	None
		10:30	0.0		X	None
		10:45	0.0		X	None
· · · · · · · · · · · · · · · · · · ·		11:00	0.0	_	X	None
		11:15	0.0		X	None
		11:30	0.0		X	None
		11:45	0.0		X	None
		12:00	0.0	_	X	None
		12:45	0.0		X	None
REPORT PREPARE	ED BY:					5.
(Printed Name)			Signature)			
(**************************************						

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	AIR MONIT	ORING	REPOR'	Γ		
Project Name:	River Plaza Shopping C	Date: <u>2/18/10</u>				
Project Location:	130 Wildey Street		Pro	ject No.	: <u>EJ08</u>	10744.004
110jeur 21	Tarrytown, New York		40			
OPERATION MONITO	ORED: (If instruments have Indicate response taken.)	e recorders, a	ttach tape to	Action	Note wh	
	Sampling	Sample	Reading	Yes	No	Action(s) Taken
Instrument	Location	Time	0.0	Les	X	None
MiniRae 2000 PID	Work Area	13:00	0.0		X	None
		13:30	0.0		X	None
		13:45	0.0		X	None
		14:00	0.0		X	None
		14:15	0.0		X	None
		14:30	0.0		X	None
		14:45	0.0		X	None
		15:15	0.0		X	None
		15:30	0.0		X	None
						None

15:45

16:00

16:15

16:30

16:45

0.0

0.0

0.0

0.0

REPORT PREPARED BY: Nustin Kapson (Printed Name)

2-18-10

(Date)

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X

X

X

X

None

None

None

None

				REPORT  Date:	7/28/10	
Project Name:		a Shopping Cente	<u> </u>		EJ0810744.004	
Project Location:	130 Wilde			* ^ -J		
	Tarrytown	ı, New York				
				*		
STRUMENT CALIB		m 111 shad Day	Date	Tin	ne(s)	
Instrument		Calibrated By:	7-28-10	07:40	12:15	
IiniRae 2000 PID		DK	7=20 10			
			-			
Perimeter and P Sample Results	from	See Previous (	2/17 and 2	2/18)		
Perimeter and P Sample Results Previous Days ( Data When Rec Indicate Date of Sample Was Co	from (Provide ceived, n Which	See Previous (	2/17 and 2	2/18)		
Sample Results Previous Days ( Data When Rec Indicate Date of Sample Was Co	from (Provide ceived, n Which collected):	30 °F Win	nd Directio			
Sample Results Previous Days ( Data When Rec Indicate Date of Sample Was Co	from (Provide ceived, n Which collected):	30 °F Win	nd Directio	on: East I	-lumidity: 65 %	
Sample Results Previous Days ( Data When Recomplicate Date of Sample Was Compared to the second of t	from (Provide ceived, n Which collected):	30 °F Win	nd Directio	on: East I		
Sample Results Previous Days ( Data When Recomplicate Date of Sample Was Compared to the second of t	from (Provide ceived, n Which collected):	30 °F Win	nd Directio	on: East I		

Project Name:	River Plaza Shopping	Center			7/28/1	
Project Location:	130 Wildey Street		Proj	ject No.	: <u>EJ081</u>	0744.004
Project Boomers	Tarrytown, New Yorl	ζ				
OPERATION MONITO evels are exceeded.	ORED: (If instruments had indicate response taker  Sampling.	ave recorders, and an arrangement of the sample of the sam	ttach tape to	Action	Note who had been been been been been been been bee	Action(s)
Instrument	Location	Time	0.0	100	X	None
MiniRae 2000 PID	Work Area	08:00	0.0		X	None
		08:15	0.0		X	None
		08:30	0.0		X	None
		08:45	0.0		X	None
		09:00	0.0		X	None
		09:30	0.0		X	None
		09:45	0.0		X	None
		10:15	0.0	1	X	None
		10:30	0.0		X	None
		10:45	0.0		X	None
		11:00	0.0		- X	None
		11:15	0.0		X	None
		11:30	0.0		X	None
		11:45	0.0		X	None
		12:00	0.0		X	None
A		12:45	0.0		X	None

(Signature) (Printed Name)

(Date)

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#### AIR MONITORING REPORT

	AIR MONITORING RE	
Project Name: Project Location:	River Plaza Shopping Center  130 Wildey Street  Tarrytown, New York	Date: 7/28/10  Project No.: EJ0810744.004
O TO THE OWN MONIT	ORED: (If instruments have recorders, attack	h tape to report. Note when action

OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action levels are exceeded. Indicate response taken.)

evels are exceeded.	Indicate response taker  Sampling	Sample Time	Reading	Action Exce Yes	a Level eded? No	Action(s) Taken
Instrument	Location	13:00	0.0		X	None
MiniRae 2000 PID	Work Area	13:15	0.0		X	None
		13:13	0.0		X	None
		13:45	0.0		X	None
		14:00	0.0		X	None
		14:15	0.0		X	None
		14:30	0.0		X	None
		14:45	0.0		X	None
		15:15	0.0		X	None
		15:30	0.0		X	None
		15:45	0.0		X	None
	-	16:00	0.0		X	None
		16:15	0.0		X	None
		16:30	0.0		X	None
		16:45	0.0		X	None

REPORT PREPARED BY:  (Printed Name)	(Signature)
(Timod Tosse)	
(Date)	
	A TO GY LINES INC

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Project Location: 130 W		MONITOI aza Shopping Cer dey Street		Date:	2/17/10 EJ0810744.004
Project Location.	- N	wn, New York	0.07		
NSTRUMENT CALIBRA	ATION:	C 12 4 of Date	Date	Tin	ie(s)
Instrument		Calibrated By:	2-17-10	07:50	
Oust Trak Model 8520		DK			
		£			
Previous Days (Pro	m ovide	Yes N/A			
Sample Results from Previous Days (Provide Data When Received, Indicate Date on Which Sample Was Collected):				E	
Data When Receive Indicate Date on W	<b>Vhich</b>				
Data When Receive Indicate Date on We Sample Was Colle	yhich ected): , DATA:		nd Directio , Sun, Etc.)	n: East F	fumidity: <u>20</u> % Breeze
Data When Receive Indicate Date on We Sample Was Colle	yhich ected): , DATA:				<b></b> .
Data When Receive Indicate Date on Weather Condition	yhich ected): , DATA:				<b></b> .

#### AIR MONITORING REPORT Date: 2/17/10 River Plaza Shopping Center Project No.: EJ0810744.004

130 Wildey Street Project Location: Tarrytown, New York

Project Name:

OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action

evels are exceeded. In	Sampling	Sample	Reading		n Level eeded?	Action(s) Taken
Instrument	Location	Time	0.005	100	X	None
Dust Trak Model 8520	Work Area	08:00			X	None
		08:15	0.004		X	None
		08:30	0.006			
		08:45	0.004		X	None
		09:00	0.007		X	None
		09:15	0.012		X	None
	1	09:30	0.018		X	None
		09:45	0.002		X	None
		10:15	0.008		X	None
		10:30	0.010		X	None
		10:45	0.003		X	None
		11:00	0.016		X	None
		11:15	0.009		X	None
E.		11:30	0.005		X	None
		11:45	0.001		X	None
		12:00	0.006		X	None
		12:45	0.008		X	None

REPORT PREPARED BY:	
(Printed Name)	(Signature)
(Date)	

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Project Name:	AIR MONIT			Date	: 2/17/1		
Project Location:	130 Wildey Street		Project No.: EJ0810744.004				
	Tarrytown, New Yo	-					
OPERATION MONITOR evels are exceeded. Inc	ED: (If instruments have dicate response taken.)	ve recorders, a	ttach tape to		Note who	en action	
	Sampling Location	Sample Time	Reading		eded?	Action(s) Taken	
Instrument	Work Area	13:00	0.005		X	None	
Dust Trak Model 8520	WOIR AICA	13:15	0.003		X	None	
		13:30	0.007		X	None	
		13:45	0.005		X	None	
		14:00	0.006		X	None	
		14:15	0.008		X	None	
		14:30	0.011		X	None	
		14:45	0.016		X	None	
		15:15	0.005		X	None	
		15:30	0.003		X	None	
		15:45	0.004		X	None	
		16:00	0.002		X	None	
		16:15	0.002		X	None	
		16:30	0.007		X	None	
		16:45	0.001		X	None	

Bustin Kapson (Signature) (Printed Name)

2-17-10 (Date)

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Noma:		MONITOR		Date:	2/18/10
Project Name:				Project No.:	EJ0810744.004
Project Location:		wn, New York			
STRUMENT CALIBR	ATION:				
Instrument		Calibrated By:	Date	g trial and the same	me(s)
ust Trak Model 8520		DK	2-18-10	07:45	
PERIMETER & PERS					
Perimeter Samples Collected:	i	100			
Perimeter and Per Sample Results fr	sonnel	See Previous (	2/17)		
Previous Days (Propagate Propagate Propagate Propagate Propagate Propagate Propagate Propagate Previous Days (Propagate Propagate Propag	rovide ved, Which		4		
Indicate Date on	Sample Was Collected):				
Sample Was Coll					32
Sample Was Coll  METEOROLOGICA  Temperature:	l <b>Data:</b> 4				Humidity: 23 %
Sample Was Coll  METEOROLOGICA  Temperature:	l <b>Data:</b> 4	2_ °F Wir usty, Rain, Snow			
Sample Was Coll  METEOROLOGICA  Temperature:  Weather Conditi	l <b>Data:</b> 4				Humidity: 23 %

	AIR MONIT			Date:	2/18/1	
Project Name:	130 Wildey Street		Proj	ect No.	EJ081	0744.004
Project Location:	Tarrytown, New Yo	ork	e F			
OPERATION MONITOR evels are exceeded. In	ED: (If instruments hadicate response taken		ttach tape to	Action	Note when Level eded?	Action(s)
	Sampling	Sample Time	Reading	Yes	* No	Taken
Instrument	Location	08:00	0.008		X	None
Dust Trak Model 8520 Work	Work Area	08:15	0.002		X	None
		08:30	0.004		X	None
		08:45	0.010		X	None
		09:00	0.003		X	None
		09:15	0.018		X	None
		09:30	0.005		X	None
		09:45	0.001		X	None
		10:15	0.003		X	None
		10:30	0.007		X	None
		10:45	0.002		X	None
		11:00	0.011		X	None
		11:15	0.005		X	None
		11:30	0.006		X	None
		11:45	0.001		X	None
		12:00	0.003		X	None
		12:45	0.008		X	None
REPORT PREPARE	D BY:	12.10	•			
			(Signature)			

(Date)

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#### AIR MONITORING REPORT

Project Name:

River Plaza Shopping Center

Date: 2/18/10

Project Location:

130 Wildey Street

Project No.: EJ0810744.004

Tarrytown, New York

OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action

DPERATION MONITORI evels are exceeded. Inc	licate response taken			Action Exce	ı Level eded?	Action(s)
	Sampling Location	Sample Time	Reading	Yes	No	Taken
Instrument	ST STATE OF THE ST	13:00	0.002		X	None
Dust Trak Model 8520 Work A	Work Area	13:15	0.009		X	None
		13:30	0.010		X	None
		13:45	0.016		X	None
			0.007		X	None
		14:00	0.004		X	None
		14:15	0.004		X	None
	1	14:30			X	None
		14:45	0.002	-	X	None
		15:15	0.008			None
		15:30	0.002	_	X	
		15:45	0.006		X	None
		16:00	0.004		X	None
		16:15	0.002		X	None
		16:30	0.007		X	None
			0.001		X	None
		16:45	0.001			

REPORT PREPARED BY:  Sustin Kapsan  (Printed Name)	(Signature)
2-18-10	

(Date)

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	Divor I	Plaza Shopping Ce	nter	Date:	7/28/10
Project Name:				Project No.:	EJ0810744.004
Project Location:		own, New York			
	_ Tairytt	JW11, 1101.			
ISTRUMENT CALIBRA	ATION:				
Instrument		Calibrated By:	Date		ne(s)
ust Trak Model 8520		DK	7-28-10	07:50	
Perimeter Samples Collected:		Yes			
Perimeter and Person Sample Results from Previous Days (Proposed When Received)	onnel m vide ed,		2/17 and 2/	/18)	
Collected:  Perimeter and Person Sample Results from Previous Days (Pro	onnel m vide ed, Thich	Yes	2/17 and 2/		
Perimeter and Person Sample Results from Previous Days (Production Data When Received Indicate Date on W	onnel m ovide ed, /hich cted): DATA:	See Previous (2	d Directior	n: <u>East</u> H	umidity: 65 %
Perimeter and Person Sample Results from Previous Days (Production Data When Received Indicate Date on Wasample Was Collect METEOROLOGICAL Temperature:	onnel m ovide ed, /hich cted): DATA:	See Previous (2	d Directior	n: <u>East</u> H	
Perimeter and Person Sample Results from Previous Days (Production Data When Receive Indicate Date on Was Collect Meteorological Temperature:  Weather Condition	onnel m ovide ed, /hich cted): DATA:	See Previous (2	d Directior	n: <u>East</u> H	
Perimeter and Person Sample Results from Previous Days (Production Data When Receive Indicate Date on Was Collect Meteorological Temperature:  Weather Condition	onnel m ovide ed, /hich cted): DATA:	See Previous (2	d Directior	n: <u>East</u> H	

#### AIR MONITORING REPORT Date: 7/28/10 River Plaza Shopping Center

Project Name: 130 Wildey Street Project Location:

Project No.: EJ0810744.004

Tarrytown, New York

OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action levels are exceeded. Indicate response taken.)

evels are exceeded. In	Sampling	Sample Time	Reading	n Level eded?	Action(s) Taken
Instrument	Location		0.002	X	None
Dust Trak Model 8520 Work Area	Work Area	08:00	0.007	X	None
		08:15	0.014	X	None
	-	08:45	0.003	X	None
	09:00	0.005	X	None	
		09:15	0.016	X	None
		09:30	0.004	X	None
		09:45	0.004	X	None
		10:15	0.011	X	None
		10:30	0.001	X	None
		10:45	0.002	X	None
		11:00	0.018	X	None
		11:15	0.006	X	None
		11:30	0.008	X	None
		11:45	0.009	X	None
		12:00	0.002	X	None
		12:45	0.001	X	None

REPORT PREPARED BY:		_
(Printed Name)	(Signature)	
(Date)		

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#### AIR MONITORING REPORT

	AIR MONITORING REP	CORT
Project Name:	River Plaza Shopping Center 130 Wildey Street	Date: <u>7/28/10</u> Project No.: EJ0810744.004
Project Location:	Tarrytown, New York	
MONTO	pen. (If instruments have recorders, attach	tape to report. Note when action

OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action

levels are exceeded. Inc	0.5				n Level eded?	Action(s)	
	Sampling Location	Sample Time	Reading	Yes	No	Taken	
Instrument 8520	Work Area	13:00	0.008		X	None	
Dust Trak Model 8520	Work / From	13:15	0.001		X	None	
		13:30	0.012		X	None	
	-	13:45	0.006		X	None	
		14:00	0.008		X	None	
		14:15	0.007		X	None	
		14:30	0.009		X	None	
		14:45	0.006		X	None	
		15:15	0.008		X	None	
		15:30	0.007		X	None	
		15:45	0.003		X	None	
			0.004		X	None	
		16:00	0.002		X	None	
		16:15	0.002		X	None	
		16:30	0.004		X	None	
		16:45	0,008				
				_			

REPORT PREPARED BY:  Out to Mapsol  (Printed Name)	(Signature)
7-28-10 (Date)	

WHITESTONE ASSOCIATES, INC.

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Project Name: Ri	iver Plaza	Shopping Center	r,	2	on RECORD  e: 2/17/10  EJ0810744.004		
project Location: 13	30 Wildey	Street		e.			
T:	arrytown,	New York	_				
ISTRUMENT CALIBRA	TION:	1 1 1 2 1 2 N 1 2 5 1 1 1	-CONTS.18		Time(s)		
Instrument	7,415	Calibrated By:	Date	07:45	12:30		
ulti-Gas Meter		DK	2/17/10	07:43			
			-				
PERIMETER & PERSO  Perimeter Samples  Collected:	)NNEL 3A	Yes					
Perimeter Samples Collected:							
Perimeter Samples Collected:  Perimeter and Perse Sample Results fro Previous Days (Pro	sonnel om ovide ved,	Yes					
Perimeter Samples Collected:  Perimeter and Personante Results fro	sonnel om ovide ved, Vhich	Yes					
Perimeter Samples Collected:  Perimeter and Personant Sample Results fro Previous Days (Production of the Production of	sonnel om ovide ved, Which ected):	Yes  N/A  10 °F Wi	nd Directi	on: East	Humidity: 20 %		
Perimeter Samples Collected:  Perimeter and Personant Sample Results fro Previous Days (Production of the Production of	sonnel om ovide ved, Which ected):	Yes  N/A  10 °F Wi	nd Directi		Humarty		
Perimeter Samples Collected:  Perimeter and Personant Sample Results fro Previous Days (Production of the Production of	sonnel om ovide ved, Which ected):	Yes  N/A  10 °F Wi	nd Directi	on: East	Humarty		

#### AIR MONITORING EQUIPMENT CALIBRATION RECORD Date: 2/17/10 River Plaza Shopping Center Project No.: <u>EJ0810744.004</u> Project Name: Project Location: 130 Wildey Street Tarrytown, New York OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action levels are exceeded. Indicate response taken.) Action Level Reading Exceeded? (ppm unless otherwise indicated) Action(s) Taken Sample No Yes Sample H.S CO % LEL % O Time Location None X Instrument 0 20.9 08:00 Work Area None X Multi-Gas Meter 0 0 20.9 0 08:15 Work Area None X Multi-Gas Meter 0 0 0 20.9 08:30 Work Area None X Multi-Gas Meter 0 1 0 20.9 08:45 Work Area None X Multi-Gas Meter 0 1 0 20.9 09:00 Work Area None X Multi-Gas Meter 0 0 0 20.9 09:15 Work Area None X Multi-Gas Meter 0 0 0 20.9 09:30 Work Area None X Multi-Gas Meter 0 2 0 20.9 09:45 Work Area None X Multi-Gas Meter 0 0 0 20.9 10:00 Work Area None X Multi-Gas Meter 0 1 0 20.9 10:15 Work Area None X Multi-Gas Meter 0 0 0 20.9 10:30 Work Area None X Multi-Gas Meter 0 2 0 20.9 10:45 Work Area None X Multi-Gas Meter 0 0 0 20.9 11:00 Work Area None X Multi-Gas Meter 0 1 0 20.9 11:15 Work Area None X Multi-Gas Meter 0 0 0 20.9 11:30 Work Area None X Multi-Gas Meter 0 0 20.9 11:45 Work Area None X Multi-Gas Meter 0 0 0 20.9 12:00 Work Area None X Multi-Gas Meter 0 2 0 20.9 12:45 Work Area None X Multi-Gas Meter 0 0 0 20.9 13:00 None Work Area X Multi-Gas Meter 0 1 0 20.9 13:15 Work Area None Х Multi-Gas Meter 0 0 0 20.9 13:30 Work Area Multi-Gas Meter REPORT PREPARED BY: (Signature) (Printed Name)

WHITESTONE ASSOCIATES, INC.

(Date)

35 Technology Drive & Warren, New Jersey 07069 908.668.7777 ♦ 908.754.5936 Fax ♦ www.whitestoneassoc.com

### AIR MONITORING EQUIPMENT CALIBRATION RECORD

AIR MUNI	Olding By ozza	
Project Name:	River Plaza Shopping Center	Date: 2/17/10
Project Location:	130 Wildey Street	Project No.: <u>EJ0810744.004</u>
	Tarrytown, New York	

**OPERATION MONITORED:** (If instruments have recorders, attach tape to report. Note when action levels are exceeded. Indicate response taken.)

evels are exceeded			ALCO TENANT	Readin	ng vise indi	catèd)	Action Exce	Level	Action(s)
Instrument	Sample Location	Sample Time	% O <sub>2</sub>	% LEL	со	H,S	Yes	No	Taken
Multi-Gas Meter	Work Area	13:45	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	14:00	20.9	0	2	0		X	None
	Work Area	14:15	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	14:30	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	14:45	20.9	0	1	0		X	None
Multi-Gas Meter	Work Area	15:00	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	15:15	20.9	0	0	0		X	None
Multi-Gas Meter		15:30	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	15:45	20.9	0	1	0		X	None
Multi-Gas Meter	Work Area		20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	16:00		0	2	0		x	None
Multi-Gas Meter	Work Area	16:15	20.9	0	1	0		X	None
Multi-Gas Meter	Work Area	16:30	20.9		1	0		Х	None
Multi-Gas Meter	Work Area	16:45	20.9	0	1	10			
						+		+	
		-					3		
					_	_			- 1
							_	-	
				_	-				

		1			
REPORT PREPARE	ED BY: Kapsen	 (Signature)	In t	8	
) - 17 - (Date)	-10				

WHITESTONE ASSOCIATES, INC.

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				ALIBRATION Date:	2/18/10
- · J		a Shopping Cente		Decidet No.	EJ0810744.004
Project Location:	130 Wilde	y Street			1300107711001
	Tarrytown	, New York			
NSTRUMENT CALI		places Charles Chil	D. i.	Tim	ie(s)
Instrumen		Calibrated By:	Date	07:35	12:40
Iulti-Gas Meter		DK	2/18/10	07.33	
Perimeter and Pe	ersonnel	See Previous (	2/17)		
Sample Results	trom				
Previous Days (	Provide eived,				
Previous Days ( Data When Recondicate Date or	Provide eived, 1 Which				
Previous Days (	Provide eived, 1 Which				
Previous Days ( Data When Reconstitute Date on Sample Was Constitute)  METEOROLOGIC Temperature:	Provide eived, Which bllected): AL DATA:				umidity: 23 %
Previous Days ( Data When Reconstruction Indicate Date or Sample Was Construction Indicate Date or Sample Was Constructed Indicate Date or Sample Date or Samp	Provide eived, Which bllected): AL DATA:				
Previous Days ( Data When Reconstitute Date on Sample Was Constitute)  METEOROLOGIC Temperature:	Provide eived, Which ollected):  AL DATA:  47  tion (e.g., Gr	usty, Rain, Snow,	Sun, Etc.)	Partly Cloudy	
Previous Days ( Data When Reconstruction Indicate Date or Sample Was Construction Indicate Date or Sample Was Constructed Indicate Date or Sample Date or Samp	Provide eived, Which ollected):  AL DATA:  47  tion (e.g., Gr		Sun, Etc.)	Partly Cloudy	

#### AIR MONITORING EQUIPMENT CALIBRATION RECORD Date: 2/18/10 River Plaza Shopping Center Project Name: Project No.: <u>EJ0810744.004</u> Project Location: 130 Wildey Street Tarrytown, New York OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action levels are exceeded. Indicate response taken.) Action Level Reading Exceeded? (ppm unless otherwise indicated) Action(s) Sample Sample Taken H,S Yes No CO % LEL % O. Location Time Instrument None 0 X 0 08:00 20.9 Work Area Multi-Gas Meter X None 0 0 0 20.9 08:15 Work Area Multi-Gas Meter None X 0 0 1 20.9 08:30 Work Area Multi-Gas Meter None X 0 2 0 20.9 08:45 Work Area Multi-Gas Meter X None 0 0 0 20.9 Work Area 09:00 Multi-Gas Meter None X 0 0 0 09:15 20.9 Work Area Multi-Gas Meter X None 0 0 0 20.9 09:30 Work Area Multi-Gas Meter X None 0 2 0 20.9 09:45 Work Area Multi-Gas Meter None X 0 0 20.9 10:00 Work Area Multi-Gas Meter X None 0 1 0 20.9 Work Area 10:15 Multi-Gas Meter X None 2 0 0 20.9 10:30 Work Area Multi-Gas Meter None 0 X 2 0 20.9 10:45 Work Area Multi-Gas Meter None Х 0 1 0 20.9 11:00 Work Area Multi-Gas Meter None X 0 0 20.9 0 11:15 Work Area Multi-Gas Meter None X 0 0 20.9 11:30 Work Area Multi-Gas Meter None X 0 0 20.9 11:45 Work Area Multi-Gas Meter X None 0 0 1 20.9 12:00 Work Area Multi-Gas Meter X None 0 0 0 12:45 20.9 Work Area Multi-Gas Meter None X 0 1 20.9 0 13:00 Work Area Multi-Gas Meter X None 0 0 0 20.9 13:15 Work Area Multi-Gas Meter None X 0 0 0 20.9 13:30 Work Area Multi-Gas Meter REPORT PREPARED BY: (Signature) (Printed Name) (Date)

WHITESTONE ASSOCIATES, INC.

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AIR MONIT	ORING	EQU.	IPME	ENT C.	ALH	3KA			
Project Name:	River Plaza	Shoppin	g Center					2/18/	10
Project Location:	130 Wildey	Street				Projec	et No.:	EJ08	10744.004
Project Education.	Tarrytown,		rk						
OPERATION MONIT levels are exceeded.	Indicate res	onse tak	en.)	Readi	ng	0 1 4	Action	Level	en action  Action(s)
Instrument	Sample Location	Sample Time	% O <sub>1</sub>	% LEL	СО	H <sub>2</sub> S	Yes	No	Taken
Multi-Gas Meter	Work Area	13:45	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	14:00	20.9	0	1	0		X	None
Multi-Gas Meter	Work Area	14:15	20.9	0	2	0	-	X	None
Multi-Gas Meter	Work Area	14:30	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	14:45	20.9	0	1	0	1	X	None
Multi-Gas Meter	Work Area	15:00	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	15:15	20.9	0	1	0	-	X	None
Multi-Gas Meter	Work Area	15:30	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	15:45	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	16:00	20.9	0	0	0		X	None
					١.	1 0	1	X	None
Multi-Gas Meter	Work Area	16:15	20.9	0	2	0		1	Tions

20.9

16:45

Work Area

REPORT PREPARED BY: (Printed Name) 2-18-10

None

0

(Date)

Multi-Gas Meter

Multi-Gas Meter

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Project Name:	River Plaz	a Shopping Cente	r	ALIBRATION  Date:	
Project Location:				Project No.:	EJ0810744.004
110,000	Tarrytown	ı, New York		9	
ISTRUMENT CALIB	RATION:	TANK AND SERVICE	Dota	Tim	e(s)
Instrument		Calibrated By:	7/28/10	07:45	12:25
ulti-Gas Meter		DK	1/28/10	07.43	
	2.2	1			
			-		
Perimeter and Pe	ersonnel	See Previous (	2/17 and 2	2/18)	
Sample Results f	from	See Previous (	2/17 and 2	2/18)	
Sample Results for Previous Days (In Data When Reco	from Provide eived,	See Previous (	2/17 and 2	2/18)	
Sample Results for Previous Days (In Data When Reconstruction Indicate Date on Previous Previ	from Provide eived, Which	See Previous (	2/17 and 2	2/18)	
Sample Results for Previous Days (In Data When Reco	from Provide eived, Which	See Previous (	2/17 and 2	2/18)	
Sample Results of Previous Days (I Data When Received Indicate Date on Sample Was Co	from Provide P	30 °F Wir	ad Directio	n: <u>East</u> H	difficiely.
Sample Results of Previous Days (I Data When Received Indicate Date on Sample Was Co	from Provide P	30 °F Wir	ad Directio		<del></del>
Sample Results of Previous Days (I Data When Received Indicate Date on Sample Was Co	from Provide P	30 °F Wir	ad Directio	n: <u>East</u> H	difficiely.
Sample Results of Previous Days (I Data When Reconstructed Indicate Date on Sample Was Compared Meteorological Temperature:  Weather Conditions	from Provide P	30 °F Wir	ad Directio	n: <u>East</u> H	difficiely.

#### AIR MONITORING EQUIPMENT CALIBRATION RECORD Date: 7/28/10 River Plaza Shopping Center Project Name: Project No.: <u>EJ0810744.004</u> Project Location: 130 Wildey Street Tarrytown, New York OPERATION MONITORED: (If instruments have recorders, attach tape to report. Note when action levels are exceeded. Indicate response taken.) Action Level Reading Exceeded? (ppm unless otherwise indicated) Action(s) Sample Sample Taken No Yes % LEL H,S CO % O, Time Location Instrument None X 0 0 0 20.9 Work Area 08:00 Multi-Gas Meter X None 0 2 0 20.9 08:15 Work Area Multi-Gas Meter None X 0 0 0 20.9 08:30 Work Area Multi-Gas Meter None X 0 2 0 20.9 08:45 Work Area Multi-Gas Meter X None 0 0 1 20.9 09:00 Work Area Multi-Gas Meter None X 0 2 0 20.9 09:15 Work Area Multi-Gas Meter None X 0 0 0 20.9 09:30 Work Area Multi-Gas Meter None X 0 0 2 20.9 09:45 Work Area Multi-Gas Meter None X 0 0 2 20.9 10:00 Work Area Multi-Gas Meter None X 0 0 0 20.9 10:15 Work Area Multi-Gas Meter X None 0 0 20.9 10:30 Work Area Multi-Gas Meter None X 0 1 0 20.9 10:45 Work Area Multi-Gas Meter None X 0 0 20.9 Work Area 11:00 Multi-Gas Meter None X 0 0 0 20.9 11:15 Work Area Multi-Gas Meter X None 0 2 0 20.9 11:30 Work Area Multi-Gas Meter None X 0 2 0 20.9 Work Area 11:45 Multi-Gas Meter X None 0 0 0 20.9 12:00 Work Area Multi-Gas Meter None X 0 2 0 20.9 Work Area 12:45 Multi-Gas Meter None Χ 0 0 0 20.9 13:00 Work Area Multi-Gas Meter None X 0 1 0 20.9 13:15 Work Area Multi-Gas Meter None X 0 0 20.9 13:30 Work Area Multi-Gas Meter REPORT PREPARED BY:

## (Printed Name) (Date) (Signature)

WHITESTONE ASSOCIATES, INC.

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Project Name:	River Plaza	Shoppin	g Center				Date:	7/28/	<u> </u>
	130 Wildey	Street		Project No.: <u>EJ0810744.004</u>					
Troject Ziviiii	Tarrytown,		rk						
OPERATION MONITO	ORED: (If ins	truments oonse tak	C11.)	Readi	ng		Action	Note who	
	Sample	Sample	STATE OF THE PARTY	mless other	CO	H <sub>i</sub> S	Yes	No	Action(s) Taken
Instrument	Location	Time	% O <sub>2</sub>		2	0		X	None
Iulti-Gas Meter	Work Area	13:45	20.9	0	$\frac{1}{0}$	0		X	None
Aulti-Gas Meter	Work Area	14:00	20.9	0		0		X	None
Multi-Gas Meter	Work Area	14:15	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	14:30	20.9	0		0		X	None
Multi-Gas Meter	Work Area	14:45	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	15:00	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	15:15	20.9	0	2			X	None
Multi-Gas Meter	Work Area	15:30	20.9	0	0	0		X	None
Multi-Gas Meter	Work Area	15:45	20.9	0	2	0		X	None
Multi-Gas Meter	Work Area	16:00	20.9	0	0	0	-	X	None
Multi-Gas Meter	Work Area	16:15	20.9	0	2	0		$\frac{1}{X}$	None
Multi-Gas Meter	Work Area	16:30	20.9	0	0	0	+		None
Multi-Gas Meter	Work Area	16:45	20.9	0	2	0	-	X	None
		1							
				-					
				_	-				
0									
			-						
REPORT PREPAR	RED BY:	- 1			2 Signature	- 1 N	1.2	5	-

7-28-10

(Date)

WHITESTONE ASSOCIATES, INC.

35 Technology Drive ♦ Warren, New Jersey 07069

908.668.7777 ♦ 908.754.5936 Fax ♦ www.whitestoneassoc.com

APPENDIX I
NYSDOH Indoor Air Quality
Questionnaire, Building Inventory
Forms, and COCs

### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Brengrer's Name Dustin Kaps	Date/Time Prepared 2-11-	10/2:15 pm
	Itant Phone No. 908-668-7777	
Purpose of Investigation_Soll	l Vapor Intrusion Investigation	
1. OCCUPANT:		
Interviewed: (Y) N		
Last Name: Kim	First Name: David	
	Tarrytown, New York	
County: Westchester		
Home Phone:	Office Phone: 201-446-6465	
Number of Occupants/persons	s at this location 6-10 Age of Occupants 25-75	A-01-6-10-8-10-8-10-8-10-8-10-8-10-8-10-8
2. OWNER OR LANDLOR	RD: (Check if same as occupant)	
Interviewed: (Y)/ N		
Last Name: Elkhof	First Name: Tom	•
Address: 3121 East Main Stre	eet, Suite 100, Mohegan Lake, New York	
County: Westchester		
Home Phone:	Office Phone: 914-526-4995	
•	¥	
3. BUILDING CHARACTI	ERISTICS	
Type of Building: (Circle ap	opropriate response)	
Residential	School Commercia Multi-use Church Other:	

f the property is residentia	al, type? (Circle appropriate	te response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how man	y? <u>5</u>	
If the property is commerc	ial, type?	
Business Type(s)	ycleaner ces (i.e., multi-use)? Y	If yes, how many?
Other characteristics:		
Number of floors 1  Is the building insulated		ding age 34 air tight? Tight / Average Not Tight
Airflow between floors	racer smoke to evaluate	
Airflow near source	oof-mounted exhaust fans a If the unit at the exhaust fan	s well as the drying machine vent located in the unit.  Is and is drawn toward the drying machine. Air can flow
the leaves the bac	k door of the building (north	the main entrance door on the south side of the unit. The  n) open when operating. The two roof-mounted exhaust  d on the west side of the unit.
Infiltration into air ducts NA		
The second secon		

		3		
BASEMENT AND CONSTRU	CTION CHARA	CTERISTICS	(Circle all that a	pply)
a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other None
c. Basement floor:	concrete	dirt	stone	other None
d. Basement floor:	uncovered	covered	covered with	None
e. Concrete floor:	unscaled	sealed	sealed with _	
f. Foundation walls:	poured	(block)	stone	other
g. Foundation walls:	Unsealed	sealed	scaled with	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially fini	shed
j. Sump present?	Y / (N)	_		
k. Water in sump?	N /hot applicabl	e)		D. I
Basement/Lowest level depth belo  Identify potential soll vapor entry  Utility penetrations and slab joints.	points and appr	oximate size (	e.g., erneks, utili	ty ports, drains)
6. HEATING, VENTING and A	AIR CONDITIO	NING (Circle s	all that apply)	
Type of heating system(s) used in	this building: (	circle all that a	pply – note prin	.d
Hot air circulation Space Heaters Electric baseboard	Heat pump Stream rad Wood stov	iation R	ot water baseboar adiant floor rutdoor wood boil	
The primary type of fuel used is:				
Natural Gas Electric Wood	Fuel Oil Propane Coal		erosene olar	

Main Floor

Outdoors

Other\_

Domestic hot water tank fueled by: 1/A

Basement

Boller/furnace located in:

Air	conditioning:
-----	---------------

Central Air

Window units Open Windows



Are there air distribution duets present?



Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan

here is a cold air retu liagram.	ed cold air return ductwork, and he cold- rn and the fightness of duct joints. Indica	· · · · · · · · · · · · · · · · · · ·
Air distribution ducts an	e not present in the unit. Two roof-mounted ex	haust fans are located in the the unit as
depicted on Figure 1.		
		The state of the s
7. OCCUPANCY	vol accupied? Eull-time Occasion	ally Seldom Almost Never
Is basement/lowest le	ral Use of Each Floor (e.g., familyroom,	bedroom, laundry, workshop, storage)
Level Gene	ral Use of Each Ploor (e.g., James)	
Basement		
1 <sup>st</sup> Floor Oper	ating Drycleaners Facility	
2 <sup>nd</sup> Floor		
3 <sup>rd</sup> Floor		
4 <sup>th</sup> Floor		
8. FACTORS THA	T MAY INFLUENCE INDOOR AIR QU	ALITY Y (N)
a. Is there an atta		Y/N/NA)
	e have a separate heating unit?	Y/N/NA
c. Are petroleum stored in the g	-powered machines or vehicles arage (e.g., lawnmower, atv, car)	Please specify
d. Has the build	ng ever had a fire?	Y (N) When?
e. Is a kerosene	or unvented gas space heater present?	•
f. Is there a wor	kshop or hobby/craft area?	Y/N Where & Type?
	ing in the building?	Y/N How frequently?
h. Have cleanin	g products been used recently?	(YY N When & Type: October )

an agod vacently?	Y(N) When & Type?
i. Have cosmetic products been used recently?	9
5	
j. Has painting/staining been done in the last 6 months?	Y (N) Where & When?
k. Is there new carpet, drapes or other textiles?	YN) Where & When:
l. Have air fresheners been used recently?	Y/N When & Type?
m. Is there a kitchen exhaust fan?	Y/N If yes, where vented?
n. Is there a bathroom exhaust fan?	WN If yes, is it vented outside? N
o. Is there a clothes dryer?	Y/ When & Type?
p. Has there been a pesticide application?	Y/W When to I/F
Are there odors in the building?  If yes, please describe: Detergents/Drycleaning A	gents/Starch
Do any of the building occupants use solvents at work?  (e.g., chemical manufacturing or laboratory, auto mechanic boiler mechanic, pesticide application, cosmetologist  If yes, what types of solvents are used? Stain Remove	
If yes, are their clothes washed at work?	
Do any of the building occupants regularly use or work	cat a dry-cleaning service? (Circle appropriate
response)  Yes, use dry-cleaning regularly (weekly)  Yes, use dry-cleaning infrequently (monthly or le	No
the greaten for the building/str	ucture? Y (N) Date of Installation:
Is there a radon mitigation system to the Active/Passive Is the system active or passive?  Active/Passive	₩
9. WATER AND SEWAGE Public Water Drilled Well	Driven Well Dug Well Other:
Water Supply:	Leach Field Dry Well Other:
Strake probamin	
10. RELOCATION INFORMATION (for oil spill re	sidential emergency)
a. Provide reasons why relocation is recommend	ed: IVA
b. Residents choose to: remain in home reloca	te to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained?

Y/N

d. Relocation package provided and explained to residents?

YIN

### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: None

See Figure 1 First Floor:

#### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, laudfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Figure 2

### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: \_MiniRae 2000 Photoionization Detector

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading	Photo *
Rear	Adco's SBLEV	1 Gal.	U/UO	See MSDS Attached	0.0	N
Rear	Sil Spot	1 Gal.	U/UO	See MSDS Attached	0.0	N
Rear	Picrin	12 oz.	U	Trichloroethylene ***	0.0	N
Rear	Pyratex	12 oz.	U	See MSDS Attached	0.0	N
Rear	Citrl-Solve	1 Gal.	Ų	See MSDS Attached	0.0	N
Rear	Ink Go	12 oz.	U	See MSDS Attached, Ethanol***	0.0	N
Rear	Hydrogen Peroxide	1 Gal.	U	See MSDS Attached	0.0	N
Rear	Laundry Detergent	1 Gal.	U/UO	See MSDS Attached	0.0	N
Rear	Clorox Bleach	1.5 Gal.	U/UO	See MSDS Attached	0.0	N
Rear	Streetex	1 Gal.	U/UO	See MSDS Attached	0.0	N
Rear	Air Compressor Oil	1 Qt.	U/UO	See MSDS Attached	0.0	N
Rear	Premium Starch	15 Gal.	U/UO	See MSDS Attached	0.0	N
						-

Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
 Photographs of the front and back of the product containers can replace hand written list of chemical ingredients. However, the photographs much be of good quality and ingredient labels must be legible.
 Chemical present in product and detected in indoor air sample at a concentration exceeding the RDL.

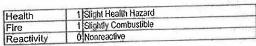
#### MATERIAL SAFETY DATA SHEET

PRODUCT

#### ADCO SB LEV

# Adama

#### NFPA HAZARD RATINGS\*





		SECTION 1:	PRODUCT INFORMA	TION	
Manufacturer: ADCO, Inc., EMERGENCY TELEPHON Intended Product Use:	900 W. Main, Sed E NUMBERS: CH Spotting/Leve	alia, MO 65301 (660) 826 EMTREC (800) 424-9300 ling for Green Earth Solve	6-3300 0 24 HRS 7 DAYS A WEEK; ent drycleaning systems onl	ADCO (800) 821-7556 (8-5 y.	M-F)
		SECTION 2:	HAZARDOUS INGREE	DIENTS	
Chemical Name		%	CAS#	OSHA PEL	LD 50
Decamethylcyclopentasiloxane		60-75	541-02-6	10 ppm TWA	oral: >40 g/kg (rat) dermal: >10 ml/kg (rat)
		SECTI	ON 3: PHYSICAL DAT	A	
		SLOTI	A STATE OF THE PARTY OF THE PAR	oint (°C): Not determined	*
Appeara	ance: Amber liquid		Solubility	in Water: Miscible	
Specific Gravity (20	Odor: Bland 0° C): 0.971		Vapor Pressure (	mm Hg): Not determined Density: Heavier than air	
pH (Water Solut	tion): 6-7		Vapor	Density. neaver than an	
		SECTION 4: FIRE	AND EXPLOSION HA	ZARD DATA	
Flash Point (Method)(°F): Extinguishing Media: Special Fire Fighting Proce	>200 (PM) edures:	Avoid accumulation of water	Upper Flamma Lower Flamma de, water fog, fine spray or foam er. Product may be carried across	ble Limit: Not determined ble Limit: Not determined s water surface. Do not use direct	waler stream.
Unusual Fire and Explosio	n Hazards:	None			
		05071	ON 5: REACTIVITY DA	ΤΔ	
		SECTION			
Stability:	Stable	- Indignation of the second	Conditions	to Avoid: Keep away from heat source of ignition. Ke	, sparks and liame. Avoid any sep from elevated temperatures.
Incompatibility (materials t Hazardous Decomposition Hazardous Polymerization	n Products:	Will not occur.	dioxide, silicon dioxide and forma		
***		SECTION	16: HEALTH HAZARD	DATA	
Toxicity (Estimated):	Low			8 - 5a	
Effects of Overexposure:	Acute:	tritation in eyes or on pro	Nonged contact with skin		
	Chronic:	None known			
Carcinogenicity:	This product of ACGIH, IARC	r any of its ingredients present or OSHA.	0.1% or more is NOT listed as a	carcinogen or suspected carcinoge	en by

<sup>\*</sup>Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

Adco SB Lev CARCINOGENICITY

EXPOSORE LIMITS		None reported	None as reported by	
10 ppm TWA Decamethylcyclopentasiloxane	Slight skin Moderate eye		ACGIH, IARC or OSHA SYNERGISTIC PRODUCTS	
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	STINERGISTIC PRODUCTO	
No effects reported	No effects reported	None reported	None reported	
ased on known toxicity of components.	No test data available on mixture,			
	SECTION 7: PREVEN	TATIVE MEASURES		
	Walter Street Control of the Control			
SPECIAL PROTECTION INFO		d with edequate ventilation	25	
Respiratory Protection	None required when used as directed. When cleaning up large spills in conf	ined area, self-contained breathing a	apparatus is recommended.	
	n: Normal industrial ventilation is adequ Local exhaust at work station recom	mended.		
Eye Protectio	s: Ordinarily not needed. Use chemican: Use googles or face mask if splashir	ig to incorp.		
Other protection equipm	ent ordinarily not needed. Availability o	of eye washes and adequate ventilati		
STORAGE AND HANDLING:	Keep containers tightly closed when Recommended storage in original co	not in use. Do not cut, drill, grind or ontainers below 85°F.	weld on or near empty containers.	
BPILL OR LEAK PROCEDURES:	Keep from sources of ignition. Soak up on absorbent material and shovel into containers for disposal.			
	Dispose of in a manner that complies with all local, state and federal regulations for combustible wastes.			
WASTE DISPOSAL METHOD:				
RECOMMENDED PRECAUTION	ARY LABELING:			
		FIRST AID:	flush eyes 15 minutes.	
CAUTION: Use with adequate vent	ilation. Avoid	with water. Wash	off of skin. If swallowed,	
protogged breathing of	vapors. Keep	do NOT induce vo	miting. Get medical	
away from heat and ope	en flames. Avoid	attention if sympto	ms persist.	
contact with skin and ey	yes.			
KEEP OUT OF REACH OF CHILDREI	N. DO NOT TAKE INTERNALLY.			
This product is intended for professiona		- FIDET AID		
	SECTION 8	: FIRST AID		
Inhalation: Move victim to fresh air	·			
Eves: Flush eves with water a	at least 15 minutes.			
Skin: Wash off with soap and	water.			
Ingestion: If swallowed, get medic	cal attention. Do NOT induce vomiting	unless directed to do so by medical	personnel,	
· · · · · · · · · · · · · · · · · · ·	IF SYMPTOMS PERSIST, S	SEEK MEDICAL ASSISTANCE		
	SECTION 9:	SARA TITLE III		
NOTE: This product does not contain compone	nts which are under the reporting requirements	of SARA Title III. Section 313.	S	
AV Semination and the semination of the seminati				
	SECTION 10: PR	EPARATION DATE		

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or

IRRITANCY OF PRODUCT

**EXPOSURE LIMITS** 

completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Date: November 30, 2005

SENSITIZATION TO PRODUCT

Prepared by: Julie D. Jones

Replaces MSDS of:

#### MATERIAL SAFETY DATA SHEET

PRODUCT	Sil Spot	
FRODUCT		



#### NFPA HAZARD RATINGS\*

Health	1 Slight health hazard
Fire	2 Moderately combustible
Reactivity	0 Nonreactive



#### SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO, Inc., 900 W. Main, Sedalia, MO 65301 (660)826-3300

EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821 7556 (8-5 M-F)

Intended Product Use: Spotting Agent for Green Earth Solvent

سرك و مثال و و و و و ما استسرور		SECTIO	N 2: HAZARDOUS INGREDI	ENTS	
Chemical Name		%	CAS#	OSHA PEL	LD 50
Decamethyloyclopentasiloxane 85-95			541-02-6	Not established	Not established
		S	ECTION 3: PHYSICAL DATA		
		iite liquid	Solubility in Vapor Pressure (m	int (°C): Not determined  Water: Not soluble  Im Hg): Not determined  Density: Heavier than air	
		SECTION 4:	FIRE AND EXPLOSION HAZ	ARD DATA	
Flash Point (Method)(°F): 160 (TCC)		Dry chemical, carb	Upper Flammable Limit: Lower Flammable Limit: on dioxide, water fog, fine spray or foam	Not determined Not determined	
Special Fire Fighting Procedures:  Avoid accumulation		Avoid accumulation	n of water. Product may be carried across v	valer surface. Do not use direct water stre	an,
Unusual Fire and Explosion	h Hazards:	None .			
COMMERCIAL CO.		Si	CTION 5: REACTIVITY DAT	Α	
Stability:	Stable		Conditions to Avoid:	Keep away from heat, sparks as source of ignition. Keep from el	nd flame. Avoid any levated temperatures.
Incompatibility (materials to Hazardous Decomposition Hazardous Polymerization:	Products:	None known Carbon monoxide Will not occur.	carbon dioxide, silicon dioxide and formald	ehyde.	
		SEC	TION 6: HEALTH HAZARD D	ATA	
Toxicity (Estimated):	Low				
Effects of Overexposure	Acute:	tri(ation in eyes o	on prolonged contact with skin.		
	Chronic:	None known.			
Carcinogenicity:	This product o	r any of its ingredients or OSHA.	present 0.1% or more is NOT fisted as a car	cinogen or suspected carcinogen by	

<sup>&</sup>quot;Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
10 ppm TWA Decamethylcyclopentasiloxane	Slight skin, moderate eye	None reported	None as reported by ACGIH, IARC o
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture, SECTION 7: PREVENTATIVE MEASURES SPECIAL PROTECTION INFORMATION Respiratory Protection: None required when used as directed with adequate ventilation. When cleaning up large spills in confined area, self-contained breathing apparatus is recommended. Ventilation: Normal industrial ventilation is adequate. Local exhaust at work station recommended. Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent. Eye Protection: Use goggles or face mask if splashing is likely. Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended. Keep containers tightly closed when not in use. Do not cut, drill, grind or weld on or near empty containers. STORAGE AND HANDLING: Recommended storage in original containers below 85°F Keep from sources of Ignition. Soak up on absorbent material and shovel into containers for disposal. SPILL OR LEAK PROCEDURES: Dispose of in a manner that complies with all local, state and federal regulations for combustible wastes. WASTE DISPOSAL METHOD: RECOMMENDED PRECAUTIONARY LABELING: FIRST AID: CAUTION: In case of contact, flush eyes for 15 minutes with water. Wash Use with adequate ventilation. Avoid prolonged breathing off of skin with soap and water. If swallowed, do NOT induce of vapors. Keep away from heat and open flames. Avoid vomiting. Get medical attention if symptoms persist, contact with skin and eyes. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY. This product is intended for professional use only by trained personnel, **SECTION 8: FIRST AID** Inhalation: Move victim to fresh air. Eyes: Flush eyes with water for at least 15 minutes. Skin: Wash off with soap and water. Ingestion: If swallowed, get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE SECTION 9: SARA TITLE III NOTE: This product does not contain components which are under the reporting requirements of SARA Title III, Section 313. SECTION 10: PREPARATION DATE This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied. ADCO RESEARCH DEPARTMENT

Replaces MSDS of:

November 30, 2005

Date:

March 4, 2005

# MATERIAL SAFETY DATA SHEET

Date-Issued: 08/04/2000 MSDS Ref. No: P-3 Date-Revised: 08/08/2000 Revision No: New MSDS

Picrin

# 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Picrin\*

GENERAL USE: For professional drycleaning use only. PRODUCT DESCRIPTION: Stain Removal Agent

PRODUCT CODE: PIC-US

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

R. R. Street & Co. Inc. 184 Shuman Boulevard Naperville, IL 60563

Product Stewardship: 800-323-7206 Transportation: 800-424-9300

Emergency Phone: 800-228-5635

# 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name

Trichloroethylene

Wt.%

CAS# EINECS#

 $\sim 100$ 

79-01-6

### 3. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

EYES: Substance may cause substantial eye irritation and possible damage.

SKIN: May cause skin irritation.

SKIN ABSORPTION: Absorption through skin is possible but not a likely route of

significant exposure.

INGESTION: Low to moderate toxicity. May cause vomiting. Can cause adverse health

effects as described under INHALATION.

INHALATION: High concentrations can cause central nervous system depression,

irregular heartbeat, cardiac arrest, unconsciousness or death.

# 3. HAZARDS IDENTIFICATION (continued)

# SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation and pain.

SKIN: Irritation.

SKIN ABSORPTION: No data available.

INGESTION: Nausea and vomiting.

INHALATION: Headache, nausea, vomiting, dizziness, vertigo, fatigue, lightheadedness

and coughing.

#### **ACUTE TOXICITY:**

If ingested, vomiting may occur; vomit may be aspirated into lungs causing chemical pneumonia.

#### **CHRONIC:**

Exposure can cause intolerance to ethyl alcohol, with small quantities causing inebriation and skin blotches. Prolonged or repeated contact may cause dermatitis.

#### CARCINOGENICITY:

See section 11.

#### MUTAGENICITY:

See section 11.

#### REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: See section 11.

TERATOGENIC EFFECTS: Not applicable.

MEDICAL CONDITIONS AGGRAVATED: Alcoholism, liver disease, rhythm

disorders of the heart, neuritis.

ROUTES OF ENTRY: Inhalation and skin.

TARGET ORGAN STATEMENT: See section 11.

CANCER STATEMENT: See section 11.

SENSITIZATION: Not applicable.

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

# 4. FIRST AID MEASURES (continued)

SKIN: Remove contaminated clothing. Wash with soap and water.

INGESTION: Get immediate medical attention. Do not induce vomiting unless

instructed to do so by poison center or physician.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. Get

medical attention.

ADDITIONAL INFORMATION: After emergency actions, call the emergency

medical information number on page 1 or a physician immediately.

# 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: None.

AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABLE CLASS: Not applicable.

EXTINGUISHING MEDIA: Not applicable.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide. OTHER CONSIDERATIONS: Concentrated vapor can be ignited by high-intensity

ignition source.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

FLASHPOINT: (footnote) TCC

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, phosgene and chlorine.

# 6. ACCIDENTAL RELEASE MEASURES

#### SMALL SPILL:

Absorb the liquid and scrub the area with detergent and water.

#### LARGE SPILL:

Contain spill. Avoid breathing vapor: Clean up spills immediately with absorbent material, observing precautions in the Protective Equipment section. Place absorbed material in closed containers for disposal. Do not flush to sewer. Avoid contamination of ground and surface waters.

### 7. HANDLING AND STORAGE

#### HANDLING:

Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

#### STORAGE:

Store in labeled, tightly sealed containers in a cool, dry, well ventilated area. SHELF LIFE: 1 year, minimum.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE GUIDELINES:**

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

#### **EXPOSURE LIMITS**

OSHA PEL ACGIH TLV Supplier OEL

ppm mg/m³ ppm mg/m³ ppm mg/m³

Trichloroethylene

TWA 100

50\*m

STEL 2000

100

#### OSHA TABLE COMMENTS:

1.\* = A5

2. Ceiling concentration. 300 ppm peak concentration allowed once in any 2 hour period.

ENGINEERING CONTROLS: Local exhaust may be required to control vapor concentration.

### PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN: Wear Viton(r), PVA, or Barrier(tm) gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

PROTECTIVE CLOTHING: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield. WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not smoke in presence of vapor. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Ethereal.

APPEARANCE: Clear. COLOR: Colorless.

pH: Not applicable.

PERCENT VOLATILE: 100

VAPOR PRESSURE: 58 mm Hg at 20°C

VAPOR DENSITY: 4.5 (Air=1)
BOILING POINT: 87°C (188°F)
FREEZING POINT: -85°C (-121°F)
SOLUBILITY IN WATER: Negligible.

EVAPORATION RATE: 4.5 Butyl acetate = 1

SPECIFIC GRAVITY: 1.45 COEFF. OIL/WATER: 2.42 ODOR THRESHOLD: 20 ppm

### 10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Contact with open flame, electric arcs, other hot surfaces

which can cause thermal decomposition.

STABILITY: Stable.

POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, phosgene

and chlorine.

INCOMPATIBLE MATERIALS: Strong alkalies, oxidizers, lithium, aluminum,

barium, magnesium, titanium.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

DERMAL LD<sub>50</sub>: >10000 mg/kg (rabbit)

ORAL LD<sub>50</sub>: >5000 mg/kg (rat)

INHALATION LC 50: >2000 ppm (rat)

TARGET ORGANS: Chronic overexposure to trichloroethylene has caused toxic effects in the liver, lymphatic (one species), kidney and cardiovascular system of experimental animals.

#### SUBCHRONIC:

Reports have been published associating increased incidences of scleroderma (systemic sclerosis) with exposures to trichloroethylene.

#### **CARCINOGENICITY:**

health effects.

IARC: Trichloroethylene is classified as 2A.

NTP: Trichloroethylene is on the NTP list.

OSHA: Not listed as a carcinogen.

MUTAGENICITY: Evidence for trichloroethylene is equivocal.

SYNERGISTIC MATERIALS: Consumption of alcohol may increase the potential for development of toxic effects resulting from exposure to trichloroethylene.

REPRODUCTIVE EFFECTS: Some transient fetal effects from inhalation of

trichloroethylene have been observed in rats.

GENERAL COMMENTS: Refer to Section 3 for additional information on potential

### 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Trichloroethylene has moderate persistence in the environment.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Recovered liquids may be sent to a licensed reclaimer or incineration facility. Contaminated material must be disposed of in a permitted waste management facility. Consult federal, state and local authorities for approved procedures. **EMPTY CONTAINER:** Do not cut or weld full or empty drums.

RCRA/EPA WASTE INFORMATION: Contains material(s) listed by RCRA as a hazardous waste.

### 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Trichloroethylene PRIMARY HAZARD CLASS/DIVISION: 6.1 UN/NA NUMBER: UN1710

PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 8 gal

OTHER SHIPPING INFORMATION: Drums of this product contain a Reportable

Quantity of trichloroethylene.

### CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Trichloroethylene PRIMARY HAZARD CLASS/DIVISION: 6.1

UN/NA NUMBER: UN1710 PACKING GROUP: III

#### AIR (ICAO/IATA)

PROPER SHIPPING NAME: Trichloroethylene PRIMARY HAZARD CLASS/DIVISION: 6.1

UN/NA NUMBER: UN1710 PACKING GROUP: III

PLACARDS: Consult applicable regulations governing air shipments.

IATA NOTE: Consult IATA for packaging requirements and quantity limitations.

# 15. REGULATORY INFORMATION

#### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:
FIRE: NO PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES CHRONIC: YES
313 REPORTABLE INGREDIENTS: Trichloroethylene is reportable.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

# 15. REGULATORY INFORMATION (continued)

CERCLA RQ: Trichloroethylene has an RQ of 100 lbs. REPORTABLE SPILL QUANTITY: 8 gals RCRA STATUS: See section 13.

**CANADA** 

WHMIS CLASS: Class D, Division 2

**MEXICO** 

Regulated for transportation.

STATE REGULATIONS

MASSACHUSETTS
Contains one or more substances named on the Massachusetts Substance List.

CALIFORNIA

PROPOSITION 65 STATEMENT: Trichloroethylene is on Proposition 65 list.

### 16. OTHER INFORMATION

REVISION SUMMARY

**New MSDS** 

NFPA CODES

HEALTH: 2 FIRE: 1 REACTIVITY: 0

**HMIS CODES** 

HEALTH: 3 FIRE: 1 REACTIVITY: 0 PROTECTION: H

# MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Pyratex®

GENERAL USE: For professional drycleaning use only. PRODUCT DESCRIPTION: Stain Removal Agent

MANUFACTURER

R. R. Street & Co. Inc. 184 Shuman Boulevard Naperville, IL 60563 Phone: 800-323-7206

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 800-228-5635

Transportation Emergency: 800-424-9300

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identity of the component(s) of this product is withheld as a trade secret.

\$p	eeme racticity of the compensation	Wt.%	CAS#	EINECS#
	Chemical Name	171.70	<u>Crico</u>	
	(trade secret #1)	·*		*
	(trade secret #2)	-	-	-
	(trade secret #3)	~	-	<u>.</u>
	(trade secret #4)	(#.)	•	3

#### COMMENTS:

#1 = aliphatic carboxylic ester

#2 = glycol ether, <30%

#3 = aliphatic ketone, <15%

#### 3. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

EYES: Substance may cause substantial eye irritation and possible damage.

SKIN: May cause skin irritation.

SKIN ABSORPTION: May penetrate skin readily resulting in absorption of potentially harmful amounts.

INGESTION: Moderately toxic. May be absorbed and cause central nervous system depression; in extreme cases

unconsciousness and death. May cause vomiting.

INHALATION: Extreme concentrations may cause unconsciousness or death.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe irritation.

SKIN: Irritation.

SKIN ABSORPTION: No data available.

INGESTION: Headache, dizziness, nausea, vomiting, fatigue and diarrhea; digestive tract irritation.

INHALATION: Headache, dizziness, nausea, narcosis and irritation of the respiratory tract.

ACUTE TOXICITY: If ingested, vomiting may occur; vomit may be aspirated into lungs causing chemical pneumonia.

CHRONIC: Prolonged or repeated contact may cause dermatitis.

CARCINOGENICITY: Not applicable.

MUTAGENICITY: Not applicable.

#### OTHER EFFECTS

REPRODUCTIVE EFFECTS: See section 11.

TERATOGENIC EFFECTS: Not applicable.

Date-Issued: 07/27/2000

Date-Revised: 05/13/2002

#### 3. HAZARDS IDENTIFICATION (continued)

MEDICAL CONDITIONS AGGRAVATED: Pre-existing eye, skin and respiratory disorders.

ROUTES OF ENTRY: Inhalation and skin.

TARGET ORGAN STATEMENT: See section 11.

CANCER STATEMENT: Does not contain any substance(s) listed as carcinogenic.

SENSITIZATION: Not applicable.

#### 4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with soap and water.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

#### 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 40°C (104°F)COC

FLAMMABLE LIMITS: 1-2 to 7.5-15

AUTOIGNITION TEMPERATURE: 244°C (471°F) to 449°C (840°F)

FLAMMABLE CLASS: NFPA Class IC

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog. HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb the liquid and scrub the area with detergent and water.

LARGE SPILL: Extinguish all ignition sources. Avoid breathing vapor. Contain spill. Clean up spills immediately with absorbent material, observing precautions in the Protective Equipment section. Place absorbed material in closed containers for disposal. Do not flush to sewer. Avoid contamination of ground and surface waters.

#### 7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks and flame.

HANDLING: Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers in a cool, well ventilated area.

SHELF LIFE: 1 year, minimum.

Date-Issued: 07/27/2000

ELECTROSTATIC ACCUMULATION HAZARD: Ground and bond containers when transferring material.

(SEE NEXT PAGE FOR SECTION 8.)

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES:** OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

HAZARDOUS COM ONEM (2)	ĺ		EXPO	SURE L	IMITS			
	25		OSHA	PEL	ACG	HTLV	Suppl	er OEL
			ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
(trade secret #1)		TWA	150		150			
(Hade scaret 11)		STEL	$NE^{[1]}$		200			
(trade secret #2)		TWA	50* <sup>[2]</sup>		20			
(trade societ "2)		STEL	NE		NE			
(trade secret #3)		TWA	100		50			
(trade societies)		STEL	NE		75			
(trade secret #4)		TWA	NE		NE			
(Hade societies)		STEL	NE		C 25			

OSHA TABLE COMMENTS: 1. NE=Not established. 2. \* = Skin

The specific identity of the component(s) of this product is withheld as a trade secret.

ENGINEERING CONTROLS: Local exhaust may be required to control vapor concentration.

#### PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN: Wear butyl or Barrier™ gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not smoke in presence of vapor. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Mild.

APPEARANCE: Clear.

COLOR: Light yellow to amber.

pH: 8

PERCENT VOLATILE: 72

VAPOR PRESSURE: ~8 mm Hg at 20°C

VAPOR DENSITY: ~4 (Air=1)

BOILING POINT: ~110°C (230°F) FREEZING POINT: <0°C (32°F)

SOLUBILITY IN WATER: Dispersible.

EVAPORATION RATE: ~0.6 Butyl acetate = 1

SPECIFIC GRAVITY: 0.91

COEFF. OIL/WATER: No data available.

ODOR THRESHOLD: 0.1 ppm

COMMENTS:

PERCENT VOLATILE: Approximate. BOILING POINT: Initial boiling point.

Date-Issued: 07/27/2000

Date-Revised: 05/13/2002

#### 10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: None.

STABILITY: Stable.

POLYMERIZATION: Will not occur.

INCOMPATIBLE MATERIALS: Oxidizing materials.

#### 11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LDso: ~1600 mg/kg (rat)

INHALATION LC50: ~450-6000 ppm (rat)

TARGET ORGANS: A component of this product has caused hemolysis of blood in rats; not considered relevant to humans. Rats exposed to 1000 ppm of a component of this product for 90 days showed evidence of kidney damage; not considered relevant to humans.

#### CARCINOGENICITY

IARC: Not listed as a carcinogen. NTP: Not listed as a carcinogen. OSHA: Not listed as a carcinogen.

SYNERGISTIC MATERIALS: Possibly haloalkanes.

REPRODUCTIVE EFFECTS: A component of this product showed some fetotoxicity in lab animals exposed to high concentrations.

GENERAL COMMENTS: Refer to Section 3 for additional information on potential health effects.

#### 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: The major components have low persistence in the environment and have low aquatic toxicity.

#### 13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recovered liquids may be sent to a licensed reclaimer or incineration facility. Contaminated material must be disposed of in a permitted waste management facility. Consult federal, state and local authorities for approved procedures.

EMPTY CONTAINER: Do not cut or weld full or empty drums.

RCRA/EPA WASTE INFORMATION: Contains material(s) listed by RCRA as a hazardous waste.

#### 14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquid, NOS

TECHNICAL NAME: Aliphatic carboxylic ester, Aliphatic ketone

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993 PACKING GROUP: III

LABEL: Cases of 6 one-gallon cans and individual one-gallon cartons are Limited Quantities. No Flammable Liquid (Class 3) label required when shipped by ground.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Flammable Liquid, NOS

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993 PACKING GROUP: IH

#### 14. TRANSPORT INFORMATION (continued)

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Flammable Liquid, NOS

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993 PACKING GROUP: III

PLACARDS: Consult applicable regulations governing air shipments. LABEL: Flammable Liquid (Class 3) label required when shipped by air.

IATA NOTE: Consult applicable regulations on packaging requirements and quantity limitations.

#### 15. REGULATORY INFORMATION

#### UNITED STATES

SARA TITLE HI (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT) 311/312 HAZARD CATEGORIES: FIRE: YES PRESSURE GENERATING: NO REACTIVITY: NO

ACUTE: YES CHRONIC: YES 313 REPORTABLE INGREDIENTS: Ingredients 2 and 3 are reportable.

### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: One or more ingredients has an RQ of 5000 lbs.

REPORTABLE SPILL QUANTITY: > 1000 gals

RCRA STATUS: See section 13.

#### STATE REGULATIONS

MASSACHUSETTS: Contains one or more substances named on the Massachusetts Substance List. Code # 99-013-012. CALIFORNIA: PROPOSITION 65 STATEMENT: Not applicable.

#### CANADA

WHMIS CLASS: Class B, Division 2 and Class D, Division 2

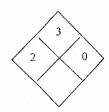
#### MEXICO

Regulated for transportation.

#### 16. OTHER INFORMATION

HMIS RATINGS:	
HEALTH:	2
FLAMMABILITY:	3
REACTIVITY:	0
PERSONAL PROTECTION:	Н

#### NFPA RATINGS:



### MATERIAL SAFETY DATA SHEET

Share Corporation P.O. Box 245013 Milwaukee, WI 53224

GENERAL INFORMATION NUMBER: (414) 355-4000 EMERGENCY TELEPHONE NUMBER: (800) 776-7192

CHEMTREC: (800) 424-9300



REVISION DATE: September 23, 2002 DATE OF ISSUE: October 2, 2002

#### I - Product Identification

#### Citra Solve

PRODUCT CODE: 8378

CHEMICAL FORMULATION: Pressurized citrus based cleaner.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 1

HAZARD RATING:

4 - Extreme;

3 - High:

FLAMMABILITY: 2

2 - Moderate;

1 - Slight;

REACTIVITY:0 0 - Insignificant

II - Hazardous Ingredients

	11 - Haz	aruous ingreu	Heiris	-	a street of		
	- Management	Values reported as	TWA unless no	ted.			
	APPROX	OSHA	ACGIH		A 40 C	FR:	
SUBSTANCE	%	PEL	TLV	<u>302</u>	<u>355</u>	<u>372</u>	CAS#
	1.00-10.0	10,000 ppm	5000ppm	N	N	N	124-38-9
Carbon Dioxide	1.00-5.00	N/E	N/E	N	N	N	9016-45-9
Poly (oxyethylene) nonylphenol	> 90.0	N/E	N/E	Y	N	N	5989-27-5
d-Limonene	> 90.0	IVIL					

Key:

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value N/D: Not Determined

C: Ceiling level

STEL: Short Term Exposure Limit

N/E: Not Established

Y: Yes

N/A: Not Applicable 302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).

355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).

372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

#### III - Physical Data

BOILING POINT (°F): N/D

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (AIR = 1): N/D

SOLUBILITY IN WATER: Emulsifies

SPECIFIC GRAVITY (WATER = 1): 0.85 VOC CONTENT (% by weight): 85.0-90.0

EVAPORATION RATE (WATER = 1): > 1.0

pH: N/A

APPEARANCE AND ODOR: Clear, colorless, liquid; citrus odor.

#### IV - Fire and Explosion Hazard Data

FLASH POINT (°F): 122

(TEST METHOD): Closed cup

NFPA 30B Rating: 3

UPPER: N/E

LOWER: N/E

FLAMMABLE LIMITS IN AIR (VOLUME %)

EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical. SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full

protective gear including self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARD: Contents under pressure. Exposure to temperatures above 120° F may cause bursting.

#### V - Reactivity Data

STABILITY: Stable

INCOMPATIBILITY: Strong acids and oxidizers. CONDITIONS TO AVOID: Extreme temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None

#### VI - Health Hazard Data

INGESTION: SKIN CONTACT: X EYE CONTACT: X INHALATION: X INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None EFFECTS OF OVEREXPOSURE

IF IN EYES: Moderate to severe irritation, redness and possible tearing.

IF ON SKIN: Irritation, chapping and dermatitis, with prolonged or repeated exposure. Contains a possible sensitizer.

IF SWALLOWED: Nausea, cramps, diarrhea. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

IF INHALED: Irritation of the respiratory tract, coughing and headache.

EMERGENCY AND FIRST AID PROCEDURES

IF IN EYES: Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical

IF ON SKIN: Remove contaminated clothing and launder separately before re-use. Wash with soap and water. If irritation persists,

IF SWALLOWED: Call a physician or poison control center immediately. Do not induce vomiting. Rinse mouth with water, then obtain medical attention. drink one glass of water. Never give anything by mouth to an unconscious person.

IF INHALED: Remove person to fresh air. If irritation persists, obtain medical attention.

#### VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and remove all sources of ignition. Soak up material with inert absorbent material and place in a labeled closed container for disposal.

WASTE DISPOSAL METHOD: Consult local environmental authorities. Dispose of cans in non-incinerated trash only.

### VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. If recommended Exposure Limits are exceeded, wear a NIOSH approved respirator, following manufacturer's recommendations. MECHANICAL: Not required LOCAL: Recommended

VENTILATION

PROTECTIVE GLOVES: Chemical resistant. EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Protective clothing, eye wash station.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in a cool, dry place away from heat or open flame.

OTHER PRECAUTIONS: Keep out of reach of children. Do not puncture or incinerate container.

# IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: Consumer Commodity

DOT ID NUMBER: None DOT CLASS: ORM-D

DOT PACKING GROUP: None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

REVISION DATE: September 23, 2002

Prepared by: PMR

DATE OF ISSUE: October 2, 2002

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Share Corporation assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.

#### MATERIAL SAFETY DATA SHEET

PAGE 1 OF 2

	N. Labora B.	
IDENTITY	New InkGo®	
IDENTITY	(Original InkGo is now called PermaGo®)	
	(Original nines) is the	

#### SECTIONI

MANUFACTURER: A.L. WILSON CHEMICAL CO.	EMERGENCY TELEPHONE NUMBER	800-424-9300 or 703-527-3887
1050 HARRISON AVENUE	TELEPHONE NUMBER FOR INFORMATION	N: 201-997-3300
P.O. BOX 207 KEARNY, NJ 07032	DATE PREPARED: January 1, 2007	

# SECTION II - IMPORTANT INGREDIENTS / IDENTITY INFORMATION

IMPORTANT COMPONENTS	CHEMICAL IDENTITY	CAS#	%	TLV
2-(2 BUTOXY ETHOXY) ETHANOL *	C8H18O3	112-34-5	< 5	ND
	C7H16O3	006881-94-3	< 20	ND
2-(2 PROPOXYETHOXY) ETHANOL * ALKYLBENZENES	C9-C11 ALKYLBENZENES	70693-06-0	< 5	ND
PARAFFINS	PARAFFINS	64771-72-8	< 10	300 PPM 8TWA Exxon
2 BUTOXY ETHANOL *	C14-C16 C6H14O2	111-76-2	< 5	20 PPM 8TWA OSHA
OTHER GLYCOL ETHERS *	GLYCOL ETHERS	NA	< 35	ND
* Subject to SARA, Title III, Sect	ion 313 and 40 CFR 372.			

# SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

SECTION III - PHYSICAL / OTL	ND	SPECIFIC GRAVITY (H2O=1)	approx95
BOILING POINT		MELTING POINT	NA
VAPOR PRESSURE (mm Hg)	<u>ND</u>		ND
VAPOR DENSITY (air =1)	ND	EVAPORATION RATE (butyl acetate =1)	
SOLUBILITY IN WATER	Low	FREEZING POINT	ND
APPEARANCE AND ODOR	Clear to ligh	t yellow with light sweet odor	

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT > 185° F Pensky Martens Closed Cup	FLAMMABLE LIMITS ND
EXTINGUISHING MEDIA water, carbon dioxide "CO2", d	ry chemical or foam
SPECIAL FIRE FIGHTING PROCEDURES ND	
UNUSUAL FIRE AND EXPLOSION HAZARDS ND	

### SECTION V - REACTIVITY DATA

SECTION V - REACTIVITY DATA	CONDITIONS TO AVOID
STABILITY stable	
INCOMPATIBILITY (MATERIALS TO AVOID)	alkalis, oxidizing agents, reducing agents
HAZARDOUS DECOMPOSITION PRODUCTS	carbon monoxide, carbon dioxide
HAZARDOUS DECOMI CONTONT INC.	
HAZARDOUS POLYMERIZATION will not occur	

SECTION VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE

EYES: May irritate.

May irritate. Prolonged or repeated contact may dry or defat skin. SKIN:

Coughing and vomiting may occur. INGESTION:

Overexposure may cause irritation or dryness of nose, throat. INHALATION:

FIRST AID

EYES: Immediately flush thoroughly with water for 15 minutes.. Get medical attention.

Immediately flush thoroughly with water. Remove contaminated clothes SKIN:

See a physician as soon as possible. INGESTION:

Remove victim to fresh air. INHALATION:

# SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

# STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Absorb liquid with paper or use vermiculite, floor absorbent or other absorbent materials. See below.

#### WASTE DISPOSAL METHOD

Dispose of in accordance with federal, state and local regulations.

# PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep in cool ventilated place.

SECTION VIII - CONTROL MEASURES

VENTILATION Use in adequately ventilated area.
EYE PROTECTION  Chemical splash goggles recommended.

NA = Not Applicable ND = Not Determined

See Page 1 for more information.







### **Material Safety Data Sheet** Hydrogen Peroxide 30% MSDS

Section 1: Chemical Product and Company Identification

Product Name: Hydrogen Peroxide 30%

Catalog Codes: SLH1552

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Water; Hydrogen Peroxide

CI#: Not applicable.

Synonym: Hydrogen Peroxide 30%

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

**Contact Information:** 

Sciencelab.com, Inc. 14025 Smith Rd. Houston, Texas 77396

US Sales: 1-800-901-7247 International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

#### Section 2: Composition and Information on Ingredients Composition: % by Weight CAS# Name 70 7732-18-5 Water 30 7722-84-1 Hydrogen Peroxide

Toxicological Data on Ingredients: Hydrogen Peroxide: ORAL (LD50): Acute: 2000 mg/kg [Mouse]. DERMAL (LD50): Acute: 4060 mg/kg [Rat]. 2000 mg/kg [ pig]. VAPOR (LC50): Acute: 2000 mg/m 4 hours [Rat].

#### Section 3: Hazards Identification

#### Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant). Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of ingestion, . Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

#### **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS; Not available.

MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance is toxic to lungs, mucous membranes.

Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or walstband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

#### Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: combustible materials

Explosion Hazards in Presence of Various Substances: Slightly explosive in presence of open flames and sparks, of heat, of organic materials, of metals, of acids.

Fire Fighting Media and Instructions:

Fire: Small fires: Use water. Do not use dry chemicals or foams. CO2, or Halon may provide limited control. Large fires: Flood fire area with water from a distance. Move containers from fire area if you can do it without risk. Do not move cargo or vehicle if cargo has been exposed to heat. Fight fire from

maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. /Hydrogen peroxide, aqueous solution, with not less than 8% but less than 20% Hydrogen peroxide; Hydrogen peroxide, aqueous solution, with not less than 20% but not more than 60% Hydrogen peroxide (stabilized as necessary)/ [QC Reviewed] [U.S. Department of Transportation. 2000 Emergency Response Guidebook. RSPA P 5800.8 Edition. Washington, D.C: U.S. Government Printing Office, 2000,p. G-140]

Special Remarks on Fire Hazards:

Most cellulose (wood, cotton) materials contain enough catalyst to cause spontaneous ignition with 90% Hydrogen Peroxide. Hydrogen Peroxide is a strong oxider. It is not flammable itself, but it can cause spontaneous combustion of flammable materials and continued support of the combustion because it liberates oxygen as it decomposes.

Hydrogen peroxide mixed with magnesium and a trace of magnesium dioxide will ignite immediately.

Special Remarks on Explosion Hazards:

Soluble fuels (acetone, ethanol, glycerol) will detonate on a mixture with peroxide over 30% concentration, the

violence increasing with concentration.

Explosive with acetic acid, acetic anhydride, acetone, alcohols, carboxylic acids, nitrogen containing bases, As2S3, Cl2 + KOH, FeS, FeSO4 + 2 methylpryidine + H2SO4, nitric acid, potassium permanganate, P2O5, H2Se, Alcohols + H2SO4, Alcohols + tin chloride, Antimoy trisulfide, chlorosulfonic acid, Aromatic hydrocarbons + trifluoroacetic acid, Azeliac acid + sulfuric acid (above 45 C), Benzenesulfonic anhydride, tert-butanol + sulfuric acid, Hydrazine, Sulfuric acid, Sodium iodate, Tetrahydrothiophene, Thiodiglycol, Mercurous oxide, mercuric oxide, Lead dioxide, Lead oxide, Manganese dioxide, Lead sulfide, Gallium + HCl, Ketenes + nitric acid, Iron (II) sulfate + 2-methylpyridine + sulfuric acid, Iron (II) sulfate + nitric acid, + sodium carboxymethylcellulose (when evaporated), Vinyl acetate, trioxane, water + oxygenated compounds (eg: acetaldehyde, acetic acid, acetone, ethanol, formaldehyde, formic acid, methanol, 2-propanol, propionaldehyde), organic compounds. Beware: Many mixitures of hydrogen peroxide and organic materials may not explode upon contact. However, the resulting combination is detonatable either upon catching fire or by impact.

EXPLOSION HAZARD: SEVERE, WHEN HIGHLY CONCENTRATED OR PURE H2O2 IS EXPOSED TO HEAT, MECHANICAL IMPACT, OR CAUSED TO DECOMPOSE CATALYTICALLY BY METALS & THEIR

SALTS, DUSTS & ALKALIES.

ANOTHER SOURCE OF HYDROGEN PEROXIDE EXPLOSIONS IS FROM SEALING THE MATERIAL IN STRONG CONTAINERS. UNDER SUCH CONDITIONS EVEN GRADUAL DECOMPOSITION OF HYDROGEN PEROXIDE TO WATER + 1/2 OXYGEN CAN CAUSE LARGE PRESSURES TO BUILD UP IN THE CONTAINERS WHICH MAY BURST EXPLOSIVELY.

Fire or explosion:

May explode from friction, heat or contamination. These substances will accelerate burning when involved in a fire. May ignite combustibles (wood, paper, oil, clothing, etc.). Some will react explosively with hydrocarbons (fuels). Containers may explode when heated. Runoff may create fire or explosion hazard. /Hydrogen peroxide, aqueous solution, stabilized, with more than 60% Hydrogen peroxide; Hydrogen peroxide, stabilized/ [QC Reviewed] [U.S. Department of Transportation. 2000 Emergency Response Guidebook. RSPA P 5800.8 Edition. Washington, D.C: U.S. Government Printing Office, 2000,p. G-143] .

Fire or explosion: These substances will accelerate burning when involved in a fire. Some may decompose explosively when heated or involved in a fire. May explode from heat or contamination. Some will react explosively with hydrocarbons (fuels). May ignite combustibles (wood, paper, oil, clothing, etc.). Containers may explode when heated. Runoff may create fire or explosion hazard. /Hydrogen peroxide, aqueous solution, with not less than 8% but less than 20% Hydrogen peroxide; Hydrogen peroxide, aqueous solution, with not less than 20% but not more than 60% Hydrogen peroxide (stabilized as necessary)/ [QC Reviewed] [U.S. Department of Transportation. 2000 Emergency Response Guidebook. RSPA P 5800.8 Edition. Washington, D.C: U.S.

Government Printing Office, 2000,p. G-140]

(Hydrogen Peroxide)

#### Section 6: Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:

Corrosive liquid. Oxidizing material.

Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry Into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7: Handling and Storage

Keep locked up.. Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible material.. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If Ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, combustible materials, organic materials, metals, acids, alkalis.

Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalies, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers. Do not store above 8°C (46.4°F). Refrigerate Sensitive to light. Store in light-resistant containers.

### Section 8: Exposure Controls/Personal Protection

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** 

Hydrogen Peroxide

TWA: 1 (ppm) from ACGIH (TLV) [United States] TWA: 1 (ppm) from OSHA (PEL) [United States]

TWA: 1 STEL: 2 [Canada]

TWA: 1.4 (mg/m3) from NIOSH TWA: 1.4 (mg/m3) from OSHA (PEL) [United States]

TWA: 1 (ppm) [United Kingdom (UK)]

TWA: 1.4 (mg/m3) [United Kingdom (UK)]Consult local authorities for acceptable exposure limits.

### Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Odorless.

Taste: Slightly acid. Bitter

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH (1% soln/water): Not available

Boiling Point: 108°C (226.4°F)

Melting Point: -33°C (-27.4°F)

Critical Temperature: Not available.

Specific Gravity: 1.1 (Water = 1)

Vapor Pressure: 3.1 kPa (@ 20°C)

Vapor Density: 1.1 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:

Easily soluble in cold water. Soluble in diethyl ether.

### Section 10: Stability and Reactivity Data

Stability: The product is stable. It contains a stabilizer.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Reactive with reducing agents, combustible materials, organic materials, metals, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

#### Special Remarks on Reactivity:

Incompatible with reducing materials, ethers (dioxane, furfuran, tetrahydrofuran), oxidizing materials, Metals(eg. potassium, sodium lithium, iron, copper, brass, bronze, chromium, zinc, lead, silver, nickel), metal oxides (eg. cobalt oxide, Iron oxide, lead oxide, lead hydroxide, manganese oxide), metal salts (eg. calcium permanganate, salts of Iron), manganese, asbestos, vanadium, platinium, tungsten, molybdeum, triethylamine, palladium, sodium pyrophosphate, carboxylic acids, cyclopentadiene, formic acid, rust, ketones, sodium carbonate, alcohols, sodium borate, aniline, mercurous chloride, rust, nitric acid, sodium pyrophosphate, hexavalent chromium compounds, tetrahydrofuran, sodium fluoride organic matter, potassium permanganate, urea, chlorosulfonic acid, manganese dioxide, hydrogen selenide, charcoal, coal, sodium borate, alkalies, cyclopentadiene, glycerine, cyanides (potassium, cyanide, sodium cyanide), nitrogen compounds...

Caused to decompose catalytically by metals (in order of decreasing effectiveness): Osmlum, Palladium, Platinum, Iridium, Gold, Silver, Manganese, Cobalt, Copper, Lead. Concentrated hydrogen peroxide may decompose violently or explosively in contact with iron, copper, chromium, and most other metals and their salts, and dust.

(Hydrogen Peroxide)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

### Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

**Toxicity to Animals:** 

Acute oral toxicity (LD50): 6667 mg/kg (Mouse) (Calculated value for the mixture). Acute dermal toxicity (LD50): 6667 mg/kg ( pig) (Calculated value for the mixture).

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH [Hydrogen Peroxide]. Classified 3 (Not classifiable for human.) by IARC [Hydrogen Peroxide].

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Hydrogen Peroxide]. Mutagenic for bacteria

and/or yeast. [Hydrogen Peroxide]. Contains material which may cause damage to the following organs: blood, upper respiratory tract, skin, eyes, central nervous system (CNS).

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant).

Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of ingestion, of inhalation (lung corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

May cause cancer and may affect genetic material based on animal data. May be tumorigenic. (Hydrogen Peroxide)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: Causes severe skin irritation and possible burns. Absorption into skin may affect behavior/central nervous system (tremor, ataxia, convulsions), respiration (dyspnea, pulmonary emboli), brain.

Eyes: Causes severe eye irritation, superficial clouding, corneal edema, and may cause burns. Inhalation: Causes respiratory tract irritation with coughing, lacrimation. May cause chemical burns to the

respiratory tract. May affect behavior/Central nervous system (insomnia, headache, ataxia, nervous tremors with numb extremities) and may cause ulceration of nasal tissue, and , chemical pneumonia, unconciousness, and possible death. At high concentrations, respiratory effects may include acute lung damage, and delayed pulmonary edema. May affect blood.

Ingestion: Causes gastrointestional tract irritation with nausea, vomiting, hypermotility, and diarrhea. Causes gastrointestional tract burns. May affect cardiovascular system and cause vascular collapse and damage. May affect blood (change in leukocyte count, pigmented or nucleated red blood cells). May cause difficulty in swallowing, stomach distension and possible cerebal swelling. May affect behavior/central nervous system (tetany, excitement).

Chronic Potential Health Effects:

Prolonged or repeated skin contact may cause dermatitis.

Repeated contact may also cause corneal damage.

Prolonged or repeated ingestion may affect metabolism (weight loss).

Prolonged or repeated inhalation may affect respiration, blood.

(Hydrogen Peroxide)

### Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short/long term degradation products are to be expected.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

# Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# Section 14: Transport Information

DOT Classification: CLASS 5.1: Oxidizing material.

Identification: : Hydrogen peroxide, aqueous solution UNNA: 2014 PG: II

Special Provisions for Transport: Not available.

# Section 15: Other Regulatory Information

Federal and State Regulations:

New York acutely hazardous substances: Hydrogen Peroxide Rhode Island RTK hazardous substances: Hydrogen Peroxide

Pennsylvania RTK: Hydrogen Peroxide

Florida: Hydrogen Peroxide Minnesota: Hydrogen Peroxide

Massachusetts RTK: Hydrogen Peroxide

New Jersey: Hydrogen Peroxide

TSCA 8(b) Inventory: Hydrogen Peroxide

SARA 302/304/311/312 extremely hazardous substances: Hydrogen Peroxide CERCLA: Hazardous substances.: Hydrogen Peroxide: 1 lbs. (0.4536 kg);

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):

CLASS C: Oxidizing material. CLASS E: Corrosive liquid.

CLASS F: Dangerously reactive material.

DSCL (EEC):

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 1

**Personal Protection:** 

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 1

Specific hazard:

Protective Equipment:

Gloves.
Full suit,
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Face shield.

### Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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### Back to: Laundry Detergent | Residential Home

### MATERIAL SAFETY DATA SHEET

**Restore Products Company** 

Date of Issue:

August 3, 1997

5170 North St. Albans

Shoreview, Minnesota 55126

Product Name: LAUNDRY DETERGENT

Phone: 651.765.0137 Facsimile: 651.765.0029

NFPA HAZARD IDENTIFICATION SYSTEM

HAZARD RATINGS:

0=Least 1=Slight

HEALTH =

0 0 0

2=Moderate 3=High

4=Severe

FIRE = REACTIVITY =

EQUIPMENT = 0

SECTION I - PRODUCT DESCRIPTION

PRODUCT NAME:

LAUNDRY DETERGENT CONCENTRATE

GENERAL DESCRIPTION:

Heavy Duty Detergent

CHEMICAL NATURE:

Natural Surfactant/Solvent/Builder Blend

PRODUCT CODE:

608

NE

SECTION II - PRODUCT COMPOSITION (OSHA Listed Potentially Hazardous Ingredients)

Contains no hazardous ingredients.

SECTION III - PHYSICAL PROPERTIES

**BOILING RANGE:** 

SPECIFIC GRAVITY: (Water = 1)

1.12 ± 2%

VAPOR PRESSURE AT 20C: (MM of HG)

Equivalent to water Equivalent to water

VAPOR DENSITY: (Air = 1)

Infinite

SOLUBILITY IN WATER: SOLUBILITY IN SOLVENT:

Miscible

**EVAPORATION RATE:** 

NE

APPEARANCE:

Clear slightly viscous liquid

ODOR:

Citrus

PH RANGE:

 $8.9 \pm .2$ 

SECTION IV - FIRE AND EXPLOSION DATA

LOWER FLAMMABILITY LIMITS: (% In Air)

Not pertinent

FLASH POINT: (And Method)

Not pertinent

FLAMMABILITY CLASSIFICATION:

Not flammable Known known

UNUSUAL FIRE/EXPLOSION HAZARDS: RECOMMENDED EXTINGUISHING MEDIA:

Water spray, carbon dioxide, dry chemical powder

SPECIAL FIRE FIGHTING PROCEDURES:

None known

SECTION V - HEALTH INFORMATION

ACUTE TOXICITY: Non-toxic

THRESHOLD LIMIT VALUE: No limit known

EFFECTS OF OVEREXPOSURE: Ingestion: Irritation of the stomach can develop following ingestion. Eye contact: This material will cause eye irritation. Skin contact: Dermatitis and skin sensitization can develop in extremely sensitive people. Skin absorption: Systemically toxic concentrations will probably not be absorbed through the skin in humans. Inhalation: None known

OTHER EFFECTS OF OVER EXPOSURE: None known

**EMERGENCY FIRST AID PROCEDURES:** 

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. If irritation persists have eyes examined and treated by medical personnel.

SKIN CONTACT: If irritation occurs remove contaminated clothing and footwear. Wash material off the skin with plenty of soap and water. Wash clothing and footwear before reuse.

INHALATION: No treatment needed.

INGESTION: Drink water to dilute. Induce vomiting only if advised by physician or poison control center. Call poison control center.

### SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal conditions CONDITIONS TO AVOID: None known

INCOMPATIBILITY WITH OTHER MATERIALS: None known HAZARDOUS DECOMPOSITION MATERIALS: None known

HAZARDOUS POLYMERIZATION: Will not occur

### SECTION VII - FIRE AND SPILL/LEAK PROCEDURES

IN CASE OF FIRE: No special precautions

PROCEDURES IF MATERIAL IS SPILLED OR RELEASED: Where possible flush down drain to waste treatment sewer; otherwise on small spills, use chemical absorbent and sweep up. For large spills, contain and collect. WASTE DISPOSAL PROCEDURES: Dispose of this product or its residues in accordance with all local, state and federal requirements.

### SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: None required for recommended use

LOCAL EXHAUST: Normal room ventilation

PROTECTIVE GLOVES AND CLOTHING: None required under normal conditions.

EYE PROTECTION: None required for recommended use. If need is determined use safety glasses or face

OTHER PROTECTIVE EQUIPMENT: As determined by or recommended by federal state or local regulations.

### SECTION IX - ADDITIONAL PRECAUTIONS

No additional precautions.

The information herein is presented in good faith and believed to be correct as of the date hereof. However, Restore Products Company makes no representation as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purposes prior to use.

No representation or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature with respect to the product or to the information herein is made hereunder.

Restore Products Company shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or the use of or reliance upon information contained herein.



# The Clorox Company 1221 Broadway Oakland, CA 94612 Tel. (510) 271-7000

# Material Safety Data Sheet

Product:	CLOTTOXTILL	GULAR-BLEACH	VITH A CHARACTERIS	TIC CHLORINE ODOR	
Description:	CLEAR, LIGH			Emergency Tel	ephone Nos.
Other Designations  Clorox Bleach  EPA Reg. No. 5813-50		Clorex Sale	butor es Company roadway CA 94612	For Medical Eme (800) 446 For Transportation Eme (800) 424	rgencies call: -1014 ergencies Chemtrec
M. Harrard Data		Januaria	III Hazardous	Ingredients	
II Health Hazard Data				The state of the s	Exposure Limit
DANGER: CORROSIVE, May cause sever skin. Vapor or mist may irritate. Harmful if s children.	Wallowed. Noop		Ingredient Sodium hypochlorite CAS# 7681-52-9	Concentration 6.15%	Not established
Some clinical reports suggest a low potential exposure to sodium hypochlorite if skin dam exposure. Under normal consumer use con	ditions the likelih	nood of any adverse	Sodium hydroxide CAS# 1310-73-2	<1%	2 mg/m <sup>3; 1</sup> 2 mg/m
Medical conditions that may be aggravated of vapor or mist: heart conditions or chronic asthma, emphysema, chronic bronchitis or or the conditions of the co					
FIRST AID:  Eye Contact: Hold eye open and rinse with contact lenses, after first 5 minutes. Contin Skin Contact: Wash skin with water for 15-			<sup>1</sup> ACGIH Threshold Lin		TIMA
a abucician			<sup>2</sup> OHSA Permissible Ex	posure Limit (PEL) – Time We	ighted Average (1 vvA)
Ingestion: Do not induce vomiting. Drink a develops, call a physician. Do not give any person.	amy of mann		None of the ingredient carcinogen lists.	s in this product are on the IAR	C, NTP or OSHA
Inhalation: Remove to fresh air. If breathin	g is affected, ca	ii a physician.	When the second state of t	tion and Regulator	v Data
<b>IV Special Protection and</b>	Precautio	ns	Viransporta	Holl and Regulator	2
No special protection or precautions have a under directed consumer use conditions. It given for production facilities and for other is increased potential for accidental, large statement of the production facilities and for other is increased potential for accidental, large statement of the production of the product	peen identified for The following red conditions and s scale or prolonge as, skin and clott ontaminated do	or using this product commendations are ituations where there ed exposure. hing. Wash hands thing for prolonged	Sections 311/312 and This product does cor hypochlorite <7.35%)	CERCLA: Bottled product is recontains no chemicals reportantain chemicals (sodium hydroxithat are regulated under Section All components of this productions).	ide <0.2% and sodium on 304/CERCLA.
mist. <u>Personal Protective Equipment:</u> Wear safe gloves if in contact liquid, especially for pro-	etv dlasses. Use	e rubber or nitrile			
KEEP OUT OF REACH OF CHILDREN			VII Denstiviti	/ Data	
VI Spill Procedures/Waste	Disposa		VII Reactivity	use and storage conditions. Si	rong oxidizing agent.
Spill Procedures: Control splil. Containeriz residual liquid; dispose appropriately. Warmultiple products, responders should evaluncompatibility with sodium hypochlorite. It enclosed, and/or poorly ventilated areas u Waste Disposal: Dispose of in accordance	ze liquid and use sh area and let c uate the MSDS's Breathing protec ntil hazard asse	a absorbents on dry. For spills of s of the products for ation should be worn in ssment is complete.	Reacts with other hor removers, vinegar, as gases, such as chlori metal may cause pitt	isehold chemicals such as tolic cids or ammonia containing pro ine and other chlorinaled speci	ducts to produce hazard
Waste Disposal: Dispose of in accordance local regulations.	e with our obbine			)ata	
VIII Fire and Explosion Da	ata		IX Physical I	Jala	angrox 212°F/100°
Flash Point: None Special Firefighting Procedures: None Unusual Fire/Explosion Hazards: None. It does not ignite when exposed to open flat	Vot flammable o	r explosive. Product	Spediic Gravity (H <sub>2</sub> U	=1)	comple

# MATERIAL SAFETY DATA SHEET

Date-Issued: 10/26/2000 MSDS Ref. No: S-7 Revision No: New MSDS

Streetex

# 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Streetex\*

GENERAL USE: For professional drycleaning use only. PRODUCT DESCRIPTION: Stain Removal Agent

PRODUCT CODE: STX-US

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

R. R. Street & Co. Inc. 184 Shuman Boulevard Naperville, IL 60563

Product Stewardship: 800-323-7206 Transportation: 800-424-9300

Emergency Phone: 800-228-5635

# 2. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identity of the component(s) of this product is withheld as a trade secret.

Chemical Name	$\underline{\mathbf{v}}$	Vt.%	CAS# EI	NECS#
(trade secret #1)		-	-	**
(trade secret #2)		~	•••	-
(trade secret #3)		•	-	~
(trade secret #4)			<del>-</del>	

# 3. HAZARDS IDENTIFICATION

# POTENTIAL HEALTH EFFECTS

EYES: Substance may cause substantial eye irritation and possible damage.

SKIN: May cause skin irritation.

SKIN ABSORPTION: Prolonged or widespread exposure may result in the absorption of potentially harmful amounts of material.

# 3. HAZARDS IDENTIFICATION (continued)

INGESTION: Moderately toxic. May be absorbed and produce central nervous system

depression; in extreme cases unconsciouness and death.

INHALATION: May cause headache.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe irritation.

SKIN: Irritation.

SKIN ABSORPTION: No data available.

INGESTION: Headache, dizziness, nausea, vomiting, fatigue and diarrhea; digestive

tract irritation.

INHALATION: Dizziness, drowsiness, and nasal and respiratory irritation.

### **ACUTE TOXICITY:**

If ingested, vomiting may occur; vomit may be aspirated into lungs causing chemical pneumonia.

### **CHRONIC:**

No data available.

### **CARCINOGENICITY:**

Not applicable.

#### **MUTAGENICITY:**

Not applicable.

### REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Not applicable.

TERATOGENIC EFFECTS: Not applicable.

MEDICAL CONDITIONS AGGRAVATED: No data available.

ROUTES OF ENTRY: Inhalation and skin.

TARGET ORGAN STATEMENT: No data available.

CANCER STATEMENT: Does not contain any substance(s) listed as carcinogenic.

SENSITIZATION: Not applicable.

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with water.

INGESTION: Get immediate medical attention. Do not induce vomiting unless

instructed to do so by poison center or physician.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

# 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: None.

AUTOIGNITION TEMPERATURE: Not available.

FLAMMABLE CLASS: Not applicable.

EXTINGUISHING MEDIA: Not applicable.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, oxides of sulfur.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

FLASHPOINT: (footnote) COC

# 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILL:

Flush with water or clean up with absorbent material and place in closed containers for disposal.

#### LARGE SPILL:

Contain spill. Clean up spills immediately with absorbent material. Place absorbed material in closed containers for disposal. Flush residual with water.

### 7. HANDLING AND STORAGE

### HANDLING:

Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

#### STORAGE:

Store in labeled, tightly sealed containers.

SHELF LIFE: 1 year, minimum.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE GUIDELINES:**

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		OSHA P	EL ACG	H TLV	Supp	lier OEL
		ppm mg	/m³ ppm	mg/m³	ppm	mg/m³
(trade secret #1)	TWA	NEm	NE			
2°	STEL	NE	C 25			
(trade secret #2)	TWA	NE	NE			
	STEL	NE	NE			
(trade secret #3)	TWA	NE	NE			
	STEL	NE	NE			
(trade secret #4)	TWA	NE	NE			
	STEL	NE	NE			

**EXPOSURE LIMITS** 

### **OSHA TABLE COMMENTS:**

1. NE=Not established.

The specific identity of the component(s) of this product is withheld as a trade secret.

### PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN: Wear PVC or Barrier(tm) gloves.

RESPIRATORY: None required under ordinary conditions.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

PROTECTIVE CLOTHING: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection. Avoid breathing spray.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Mild.

APPEARANCE: Clear.

COLOR: Colorless to light yellow.

pH: 7

PERCENT VOLATILE: 81

VAPOR PRESSURE: ~17 mm Hg at 20°C

VAPOR DENSITY: ~2.3 (Air=1) BOILING POINT: 99°C (210°F) FREEZING POINT: <0°C (32°F)

SOLUBILITY IN WATER: Miscible.

**EVAPORATION RATE:** ~0.3 Butyl acetate = 1

**SPECIFIC GRAVITY: 1.02** 

COEFF. OIL/WATER: No data available. ODOR THRESHOLD: No data available.

### **COMMENTS:**

PERCENT VOLATILE: Approximate.

### 10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO CONDITIONS TO AVOID: None.

STABILITY: Stable.

POLYMERIZATION: Will not occur.

INCOMPATIBLE MATERIALS: Strong oxidizers, strong acids, alkalies.

### 11. TOXICOLOGICAL INFORMATION

### ACUTE

ORAL LD<sub>50</sub>: >5000 mg/kg (rat) INHALATION LC<sub>50</sub>: Not available.

### **CARCINOGENICITY:**

IARC: Not listed as a carcinogen. NTP: Not listed as a carcinogen. OSHA: Not listed as a carcinogen.

SYNERGISTIC MATERIALS: No data available.

GENERAL COMMENTS: Refer to Section 3 for additional information on potential

health effects.

# 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: All components are biodegradable.

# 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Incinerate or dispose of in accordance with federal, state and local regulations.

RCRA/EPA WASTE INFORMATION: Contains no material listed by RCRA as a hazardous waste.

### 14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Not regulated.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Not regulated.

### 15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: NO PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES

**CHRONIC: NO** 

313 REPORTABLE INGREDIENTS: None.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Not applicable. RCRA STATUS: See section 13.

CANADA

WHMIS CLASS: Class D, Division 2

**MEXICO** 

Not applicable.

STATE REGULATIONS

MASSACHUSETTS

Contains one or more substances named on the Massachusetts Substance List. Code # 99-013-018. CALIFORNIA

PROPOSITION 65 STATEMENT: Not applicable.

### 16. OTHER INFORMATION

NFPA CODES

**HEALTH: 2 FIRE: 1 REACTIVITY: 0** 

**HMIS CODES** 

HEALTH: 2 FIRE: 1 REACTIVITY: 0 PROTECTION: H



# ROYAL MANUFACTURING COMPANY, LP

# MATERIAL SAFETY DATA SHEET

PRODUCT: NFPA Rating: AIR COMPRESSOR OILS

Flammability: 1, Reactivity: 0, Health:0

SECTION 1: MANUFACTURER AND LOCATION

Manufacturers Name:

Address:

Telephone Number:

Emergency:

Royal Mfg Co LP

P.O. Box 693, Tulsa, OK 74101-0693

(918) 587-5711 1-800-299-2671

SECTION 2: MATERIAL IDENTIFICATION AND INFORMATION

COMPONENT

CAS NUMBER

TLVIPEL (mgiM3)

WEIGHT %

PETROLEUM OIL

64741-88-4

5 (AS OIL MIST)

> 95 NE < 5

PROPRIETARY ADDITIVES

MIXTURE

The specific chemical names and composition of the components not disclosed is confidential business information and is withheld as permitted by 29CFR 1910.1200 and various state Right-to-Know laws.

This material is not known to contain any chemical listed as a carcinogen or suspected carcinogen by OSHA Hazard Communication Standard 29CFR 1910.1200, IARC, or the National Toxicology Program (NTP) at a concentration greater than 0.1%.

### SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name:

Form:

Odor:

Specific Gravity (water = 1):

Melting Point:

**Bolling Point:** Volatility, weight % at 25C: **Evaporation Rate:** 

Vapor Pressure, mmHg at 25C: Solubility in Water:

Stability:

Air Compressor Off

Liquid

Slight petroleum odor 0.87

NE NE

Negligible Negligible

Insoluble

Stable under normal conditions

### **SECTION 4: FIRE AND EXPLOSION DATA**

Flashpoint (Cleveland Open Cup): Autoignition Temperature: Flammable Limits:

Fire Extinguishing Agents:

NE NE

Water Spray (fog), dry chemical, foam, halon, or carbon dioxide. Water stream may splash burning liquid and spread fire.

Special Fire Fighting Procedures:

As for petroleum products. Do not use direct or heavy

Special Fire Fighting Procedures:

As for petroleum products. Do r water stream to fight fire. Use self-contained breathing apparatus to fight fires.

#### SECTION 5: FIRST AID

Contact with EYES:

least 15 minutes. Get medical attention.

Contact with SKIN:

respiration. Get medical attention.

Ingestion:

immediately flush with large quantities of cool water for at

Wash off with soap and water.

Remove to fresh air. If not breathing, give artificial

Do NOT induce vomiting. Get medical attention.

### SECTION 6: REACTIVITY

Reactivity: Stable under normal temperatures and pressures. Incompatibilities: Strong oxidizing agents, heat, open flame.

Hazardous Polymerization: Does not occur.

CO2, CO Hazardous Decomposition Products:

### SECTION 7: SPECIAL PROTECTION INFORMATION

Use in a well ventilated area with local exhaust ventilation. Ventilation (Local, Mechanical, Special): Respiratory Protection: None required in normal use. Use only NIOSH/MSHA Organic vapor approved equipment if necessary.

Not required in normal use.

Eye Protection:

Goggles or safety glasses are recommended.

ent: Practice good personal hygiene. Wash hands after use and handling. Other Protective Equipment:

### SECTION 8: ENVIRONMENTAL PROCEDURES

Contain any spills with absorbents to prevent migrations and entry into sewers or streams. Take up small spills with dry chemical absorbent. Large spills may be taken up with pump or or streams. Take up small spins with dry chemical absorbent. May require excavation of contaminated soil.

Waste Disposal: To the best of Royal Manufacturing Company, LP knowledge, this product is not Waste Disposal: regulated by CERCLA/RCRA as a hazardous waste or material. However, this product has not been tested for the toxicity characteristic via the Toxicity Characteristic Leaching Procedure. Therefore, it may be disposed of as an industrial waste in a manner acceptable to good waste management practice and in compliance with applicable local, state, and federal regulations.

o-Know: SARA Section 311 category - Health Hazard Immediate SARA Section 313 - contains < 0.04% Zinc

TSCA: This material is in compliance with the Toxic Substances Control Act (15USC2601-2629)

### SECTION 9: STORAGE AND HANDLING

Keep containers sealed until ready for use. Avoid excessive long-term storage temperatures to prolong shelf life. Maximum storage temperature: 120F. Store in well ventilated areas.

#### **SECTION 10: TRANSPORT**

D.O.T. Shipping Name: Not Regulated D.O.T. I.D. Number: NA

Reportable Quantity: Freight Classification:

UN Hazard Class: NA Special Transportation Notes:

None

Notes:

NA = Not Applicable NE = Not Established

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Revision Date:

October 22, 2003

Prepared by: Riverside Laboratories

Supercedes: Any previous versions

MSDS Number: S6506 \* \* \* \* \* \* Effective Date: 09/03/09 \* \* \* \* \* Supercedes: 04/23/07

MSDS

Material Safety Data Sheet

24 Hour Emergency Telephone: 908-859-2151 CHEMTREG: 1-806-424-9300

National Response in Canada CANUTEC: 613-996-6666

Outside U.S. and Canada Chemirec: 703-527-3887

HOTE: CHEMTREO, CANUTEO and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, Iro, exposure or addient

involving chemicals.

From: Mallinokrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865

Mallinckrodt CHEMICALS

All non-emergency questions should be directed to Customer Service (1-800-592-2537) for assistance.

# STARCH SOLUBLE

### 1. Product Identification

Synonyms: Amglogen; Amylodextrin; Potato starch

CAS No.: 9005-84-9

Molecular Weight: Not applicable to mixtures.

Chemical Formula: (C6H10O5) x

Product Codes: J.T. Baker: 4006, 4010 Mallinckrodt: 8188

# 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
	9005-84-9	90 - 100%	Yes
Starch Soluble	9005-84-9	90 - 100%	162

# 3. Hazards Identification

**Emergency Overview** 

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

Health Rating: 0 - None

Flammability Rating: 1 - Slight Reactivity Rating: 0 - None Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)

### Potential Health Effects

### Inhalation:

Symptoms similar to those caused by nuisance dust; coughing, sneezing.

Not expected to be a health hazard.

Skin Contact:

No adverse effects expected.

Eve Contact:

No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:

No adverse effects expected.

Aggravation of Pre-existing Conditions:

Persons with respiratory impairment may be sensitive to starch dust.

## 4. First Aid Measures

### Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

Wash exposed area with soap and water. Get medical advice if irritation develops.

**Eye Contact:** 

Wash thoroughly with running water. Get medical advice if irritation develops.

# 5. Fire Fighting Measures

Autoignition temperature: > 380C (> 716F)

Combustible solid.

Minimum ignition energy > 30 m (Depends on particle size, moisture content, etc.) Contact with strong

oxidizers may cause fire.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Minimum ignition temperature, cloud: 430C (806F).

Fire Extinguishing Media:

If involved in a fire, use water spray.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### 6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

# 7. Handling and Storage

Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities.

# 8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL):

15 mg/m3 total dust, 5 mg/m3 respirable fraction

-ACGIH Threshold Limit Value (TLV):

10 mg/m3 (TWA) inhalable fraction

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation*, *A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier,

whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

# 9. Physical and Chemical Properties

Appearance:

White, amorphous powder or granules.

Odor:

Slight characteristic odor.

Solubility:

Dispersible in hot water.

Specific Gravity:

ca. 1.5

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

**Boiling Point:** 

Not applicable.

Melting Point:

No information found.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

# 10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Heavy, black acrid smoke.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizers.

Con	ditio	ns to	Avo	id

Heat, flames, ignition sources and incompatibles.

# 11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

\Cancer Lists\		ہ جہ بند سد بند ہے جہ شداشہ ہیڈ ہے جہ شہ ہیں شہ ہے	
(Cancer biscs)	NTP	Carcinogen	
Ingredient	Known	Anticipated	IARC Category
Ingreatenc			
Starch Soluble (9005-84-9)	No	No	None

# 12. Ecological Information

Environmental Fate:
No information found.
Environmental Toxicity:
No information found.

# 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

# 14. Transport Information

Not regulated.

# 15. Regulatory Information

\Chemical Inventory Status - Part 1\				
	TSCA	EC	Japan	Australia
Ingredient	10011	2.3 47		
Starch Soluble (9005-84-9)	Yes	Yes	No	Yes
Startin Sorator (same and				

Ingredient	Yes		NDSL  No	
Starch Soluble (9005-84-9)Federal, State & International Regulation	Yes		No	Yes
	ons -			
-SARA				
Ingredient RQ	TPQ	List	Chemi	ical Cat
Starch Soluble (9005-84-9) No	No			No
\Federal, State & International Regulation	ons -	Part 2\		
Ingredient CERCLA		261.33	8 ( c	(£
Starch Soluble (9005-84-9) No		No		

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

### 16. Other Information

NFPA Ratings: Health: 0 Flammability: 2 Reactivity: 0

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

**Label Precautions:** 

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Disclaimer:

Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in

Prepared by: Environmental Health & Safety Phone Number: (314) 654-1600 (U.S.A.)

### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's NameDustin Kapson		Date/Time	Prepared 2-11-10/2:30 p
Preparer's Affiliation Consultar			
Purpose of Investigation Soil Vi			
1. OCCUPANT:			
Interviewed: (Y)/ N			
Last Name: Sniffen, D.D.S.	First Name:	Allen	According to the second of the control of the contr
Address: 134 Wildey Street, Ta			
County: Westchester			
Home Phone:	Office Phone: 9	14-631-0200	gar-atam, philosophical activity
Number of Occupants/persons a	nt this location 5-10 A	ige of Occupat	nts 5 - 75
2. OWNER OR LANDLORDS Interviewed: (Y) N			
Last Name: Eikhof	First Name:	Tom	
Address: 3121 East Main Stree			
County: Westchester			E:
Home Phone:	Office Phone: 91	14-526-4995	Andrews and the second of the second
3. BUILDING CHARACTER	RISTICS		
Type of Building: (Circle appr	ropriate response)	•••	
Residential Industrial	School Commerce Church Other:	cial/Multi-use	Accountable of the

		2	
If the property is residential,	type? (Circle approp	priate	response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home		3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how many?	5		
If the property is commercial	, type?		
Business Type(s) Denti	st's Office		
Does it include residences	(i.o., multi-use)? Y	M	If yes, how many?
Other characteristics:			
Number of floors 1	В	uildin	ng age 34
Is the building insulated	)/N H	low al	r tight? Tight (Average / Not Tight
Airflow between floors			flow patterns and qualitatively describe:
NA		an e-men (Steller	
Airflow near source			ne unit varies based on the locations of air ducts and
openings. Air can flow between			
Outdoor air infiltration Outdoor air infiltration is minima is when patients open the main	al. Doors and windov entrance door on the	ws are	properly sealed. The only source of outdoor air h side of the unit.
	on an expension of the second		
Infiltration into air ducts The air conditioning unit was no out of supply vents.	ot operating. The force	ced ho	ot air furnace locally circulated air into a return vent and

	3
5.	BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone '	(brick)
b. Basement type:	full	crawlspace	slab	other None
c. Basement floor:	concrete	dirt	stone	other None
d. Basement floor:	uncovered	covered	covered with 1	None
e. Concrete floor:	unsealed	sealed	sealed with	
f. Foundation walls:	poured	<b>Block</b>	stone	other
g. Foundation walls:	Cunscaled	sealed	sealed with	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finish	ed
j. Sump present?	Y (N)			
k. Water in sump?	/ N / not applicable			
Basement/Lowest level depth bel	ow grade: 0	(feet)		
Electrical outlets are located in the Slab joints are present.	floor of each of the p	atient rooms and	d utility penetration	s are throughout.
	AIR CONDITION  In this building: (cin  Heat pump  Stream radia  Wood stove	ING (Circle all rele all that app Hot tion Rad	that apply)	
Slab joints are present.  6. HEATING, VENTING and Type of heating system(s) used in Space Heaters Electric baseboard  The primary type of fuel used is Electric Wood	AIR CONDITION  In this building: (cin  Heat pump  Stream radia:  Wood stove  Fuel Oil  Propane  Coal	ING (Circle all rele all that app Hot tion Rad Out	that apply)  oly — note primar  water baseboard  iant floor door wood boiler	·y)
Slab joints are present.  6. HEATING, VENTING and Type of heating system(s) used in Flot air circulation Space Heaters Electric baseboard  The primary type of fuel used is Electric	AIR CONDITION  In this building: (cin  Heat pump  Stream radia:  Wood stove  Fuel Oil  Propane  Coal	ING (Circle all rele all that app Hot tion Rad Out	that apply)  oly — note primar  water baseboard  iant floor door wood boiler	·y)

Air condition	ing: Central Air Window units Open W	indows None
	distribution ducts present? (Y)/N	
Describe the sthere is a cold diagram.	supply and cold air return ductwork, and its condition value are turn and the tightness of duct joints. Indicate the	where visible, including whether is locations on the floor plan
Air ducts are i	n good condition and joints appear tight. A cold air return is l	ocated in the central portion of the
building and	supply vents are distributed throughout the retail space. See	Figure 1.
7. OCCUPA Is basement/	ANCY lowest level occupied? Full-time Occasionally  General Use of Each Floor (e.g., familyroom, bedroe	Seldom Almost Never om, Jaundry, workshop, storage)
Basement  1 <sup>st</sup> Floor	Dentist's Office	nderstanding og state og det selle og det sel Selle og det selle
2 <sup>nd</sup> Floor		and the second of the second o
3 <sup>rd</sup> Floor		and the state of t
4 <sup>th</sup> Floor		The state of the s
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR QUALITY	(
	an attached garage?	Y (N)
b. Does th	e garage have a separate heating unit?	Y/N/NA
c. Are pet stored i	roleum-powered machines or vehicles n the garage (e.g., lawnmower, atv, car)	Y / N / NA) Please specify

d. Has the building ever had a fire?

g. Is there smoking in the building?

f. Is there a workshop or hobby/craft area?

h. Have cleaning products been used recently?

e. Is a kerosene or unvented gas space heater present?

YN When?

Y(N) Where?

Y (N) Where & Type?

Y /N) How frequently?\_\_\_\_\_

Y)N When & Type? Continuously - Sanitizers

i. Have cosmetic products been used recently?	Y(N)	When & Type?
5	•	
j. Has painting/staining been done in the last 6 months		Where & When?
k. Is there new carpet, drapes or other textiles?	9	Where & When?
I. Have air fresheners been used recently?	AND	When & Type?
m. Is there a kitchen exhaust fan?	Y/W	If yes, where vented?
n. Is there a bathroom exhaust fan?	Q 1H	If yes, where vented? Roof
o. Is there a clothes dryer?	YM	If yes, is it vented outside? Y/N
p. Has there been a pesticide application?	Y/10	When & Type?
Are there odors in the building?  If yes, please describe:	Y (j)	
boiler mechanic, pesticide application, cosmetologist  If yes, what types of solvents are used? X-ray solvents  If yes, are their clothes washed at work?	Y \ W	
Do any of the building occupants regularly use or work response)	at a dry-clea	aning service? (Circle appropriate
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or lese. Yes, work at a dry-cleaning service	SS)	No Unknown
Is there a radon mitigation system for the building/stru Is the system active or passive? Active/Passive	icture? Y	Date of Installation:
9. WATER AND SEWAGE		
Water Supply: Public Water Drilled Well I	Oriven Well	Dug Well Other:
Sewage Disposal: Public Sewer Septic Tank	Leach Field	Dry Well Other:
10. RELOCATION INFORMATION (for oil spill resi	dential emer	gency)
a. Provide reasons why relocation is recommended	I: <u>NA</u>	
h Residents choose to: remain in home relocate	to friends/far	mily relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained?

Y/N

d. Relocation package provided and explained to residents?

Y/N

### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

None Basement:

First Floor: See Figure 1

#### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Figure 2

### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used:	MiniRae 2000 Photolonization Detector
Make & Model of field instrument used:	MiniRae 2000 Photolonization Detec

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading	Photo **  Y/N
Storage	Redi-Chem A	1 Gal.	U	See MSDS Attached	0.0	N
Storage	Redi-Chem B	1 Gal.	U	See MSDS Attached	0.0	N
Storage	Super Kleen	16 oz.	υ	See MSDS Attached	0.0	N
Storage	Compressor Oil	12 oz.	υ	See MSDS Attached	0.0	N
Storage	Metricide	1 Gal.	U	See MSDS Attached	0.0	N
Storage	Vionex	1 Gal.	U	See MSDS Attached	0.0	N
Storage	Latex Paint	1 Gal.	U	See MSDS Attached, Ethanol***	0.0	N
Storage	WD-40	16 oz.	U	See MSDS Attached	0.0	N
Storage	Rubbing Alcohol	32 oz.	U	See MSDS Attached, Isopropanol***	0.0	N
						W. Jacobson Mary

Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
 Photographs of the front and back of the product containers can replace hand written list of chemical ingredients. However, the photographs much be of good quality and ingredient labels must be legible.
 \*\*\* Chemical present in product and detected in indoor air sample at a concentration exceeding the RDL.



### **Material Safety Data Sheet** #D-27274

SECTION 1 - General Information

Product Name: REDI-CHEM® Dental B Fixer

Catalog No. 27274

Chemical Family:

Photographic Fixer

Proper D.O.T. Shipping Name: Not Regulated

Manufacturer:

ALLIED Diagnostic Imaging, Inc. 5440 Oakbrook Parkway

Norcross, GA 30093

SECTION II - Product and Hazardous Ingredients Information

Item #4005 CAS# Ammonium Thiosulfate 7783-18-8 Sodium Sulfite 7757-83-7 Acetic Acid 64-19-7 Water

7732-18-5

N/A Specific Gravity: 1.085

N/A

N/A

10 ppm

Formula:

Aqueous Mixture

Not Applicable

Manufacturer's Phone Number: (770) 448-0250

(800) 424-9300

SARA

N/A

N/A

N/A

5000#

RQ/TPQ

N/A

N/A

N/A

N/A

**CHEMTREC Phone Number:** 

PEL (TWA)

(STEL 15 ppm)

D.O.T. Hazard Classification:

Vapor Pressure (mmHg): 17.0 Vapor Density (mmHg): 0.6 Percent Volatile by Weight: 90%

PERCENT

10-15

1-2

1-3

80-85

Solubility in Water: Complete Evaporation Rate: N/A

Appearance and Odor: Clear, slight vinegar odor pH: 4.40

SECTION IV - Fire and Explosion Hazard Data

Flash Point: None

Boiling Point: >212°F

SECTION III - Physical Data

Extinguishing Media: Use method appropriate for surrounding fire.

Special Fire Fighting Procedures: Use protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosions Hazards: When heated to decomposition, it can emit irritating toxic fumes, i.e.

ammonia, oxides of sulfur and nitrogen. IDLH Ammonia - 500 ppm

SECTION V - Health Hazard Data TLV (ACGIH): Acetic Acid (25 mg/m3)

Short-Term Exposure Limit (STEL): Acetic Acid (15 ppm)

Pure Component Toxicology Information:

Ammonium Thiosulfate: Ammonium thiosulfate is considered to have a low toxicity to humans by ingestion. Inhalation of mist may cause irritation of the nose, throat and respiratory tract. Contact with eyes may cause irritation or a burning sensation. Prolonged or repeated contact with skin may cause irritation.

Acetic Acid: Acetic acid is a skin and eye corrosive. Vapor irritates the eyes and respiratory system. Ingestion causes internal irritation and damage. The compound has been infrequently associated with skin sensitization in humans. Sodium Sulfite: Slightly toxic by oral ingestion. It is a slight to moderate skin, eye, and respiratory tract irritant. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, hives, weakness and diarrhea following ingestion.

Effects of Overexposure:

Inhalation: Low hazard for ordinary industrial handling. Contact with strong acids or if heated, sulfites may liberate sulfur dioxide gas. Sulfur dioxide gas can irritate the respiratory tract. Some asthmatics or hypersensitive individuals may experience difficult breathing.

Page 1 of 2

5440 Oakbrook Parkway · Norcross, GA 30093-2251 PHONE: (770) 448-0250 • FAX: (770) 448-0257



# Material Safety Data Sheet #D-27274

Eyes: Vapor may cause irritation. Contact may cause burns. Skin: Repeated and prolonged contact may cause irritation.

Ingestion: Do Not take internally. May be harmful if swallowed. Sulfite sensitive individuals may experience

wheezing, chest tightness, upset stomach and weakness.

#### Evidence of:

Carcinogen: N/A
Teratogenicity: N/A

Reproductive Toxicity: N/A Mutagenicity: Sodium Sulfite Synergistic Products: N/A

#### **Emergency First Aid Procedures:**

Eyes: Flush with large amounts of water for 15 minutes. Seek medical attention. Skin: Wash skin with soap and water. If irritation occurs, seek medical attention.

Ingestion: Induce vomiting only as directed by medical personnel. Seek medical attention immediately giving full

details of amount ingested and toxicity.

Inhalation: Move to fresh air. Treat symptomatically.

#### SECTION VI - Reactivity Data

Stability: Stable.

Incompatibility: Strong acids, strong bases.

Hazardous Decomposition Products: When heated to decomposition, it can emit toxic fumes of SO2 and ammonia.

Contact with strong bases may release ammonia. Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

#### SECTION VII - Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: Wear protective clothing as specified in Section VIII. Neutralize with sodium bicarbonate. If federal, state and local laws permit, flush to sower with large amounts of water. Waste Disposal: Neutralize with sodium bicarbonate. If federal, state, and/or local laws permit, flush to sewer with large amounts of water. Otherwise, dispose of contaminated product and materials used in cleaning up the spill in a manner approved for this material. Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

### SECTION VIII - Special Protection Information:

Respiratory Protection (Specify Type): Should not be necessary under normal conditions. If exposed to vapors that exceed TLV or PEL, wear approved vapor respirator.

Ventilation: Good local mechanical ventilation should be sufficient.

Protective Equipment:
Gloves: Impervious gloves.
Eyes: Wear protective goggles.

Other: As necessary to prevent skin contact. Eyewash facilities in vicinity of use.

#### SECTION IX -Regulatory Information

U.S. California Prop 65: none

#### Carcinogenicity Classification (components present at 0.1% or more):

The International Agency for Research on Cancer (IARC):

Sodium Sulfite: 3 (Classification not possible from current data)

U.S. National Toxicology Program (NTP): none

U.S. Occupational Safety and Health Administration (OSHA): none

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# Material Safety Data Sheet #D-27274

#### SECTION X-Special Precautions

Precautions to be Taken in Handling and Storage: Do not store or consume food, drink or tobacco in surrounding area. Wash thoroughly after handling.

The information contained in this material safety data sheet is furnished without warranty of any kind. The user should consider this data a supplement to other information gathered and must make independent determination of suitability and completeness of information from this and other sources to assure proper use and disposal of the materials and the health and safety of employees and customers. This statement is incorporated as part of this Material Safety Data Sheet.

Revised: 3/26/08

#### MATERIAL SAFETY DATA SHEET

### I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SUPER KLEEN

DATE: December 27, 2008

SUPPLIER:

Melrose Chemicals Ltd.

2323-46th ave. Lachine, QC CANADA H8T 3C9 Tel: +1 (514) 631-2998 Fax: +1 (514) 631-2997

E-mail: prodsafe@melrosechem.com

PRODUCT USE: Cleaner

#### II. HAZARDS IDENTIFICATION

Hazard classification of product according to Directive 1999/45/EC: Xi, irritant

Hazards for humans: Irritating to eyes and skin.

Hazards for environment: Not applicable.

Chemical Identity:	Index #	EINECS#	CAS#	% Conc.	Toxicity
Disodiummetasilicate	014-010-00-8	229-912-9	6834-92-0	3 - 7	C; R34, 37
Tetrasodium ethylene					
diamine tetraacetate	607-428-00-2	200-573-9	64-02-8	3 - 7	Xn; R22, 4
Sodium hydroxide	011-002-00-6	215-185-5	1310-73-2	1 - 5	C; R35
Ingredients according to	Directive 2004/648	/EC			
Amphoteric surfactants	5 - 15%				
Nonionic surfactants	<5%				
EDTA	<5%				

### IV. FIRST AID MEASURES

Contact with skin: Wash exposed area with soap and water and rinse well.

Contact with eyes: Flush with plenty of water. Get medical attention if irritation persists.

Inhalation: Not applicable.

Ingestion: If victim is conscious, give two glasses of water to drink. Call a physician. Do not give anything

by mouth to an unconscious person.

### V. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Means of extinction: Not applicable.

Hazardous combustion products: Not applicable.

Unusual fire and explosion hazards: None

### VI. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of spills or leaks: Small amounts - Flush with water.

Large amounts - Contain spill and collect into waste container. Absorb remaining product with earth or sand and dispose of with solid waste. Flush spill area with water.

Personal protective equipment to be used: Protective gloves and safety glasses.

#### VII. HANDLING AND STORAGE

Special handling procedures and equipment: Not applicable.

Specific storage requirements: Not applicable.

### VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

Respiratory Protection: Not applicable. Protective Gloves: Nitril or neoprene. Eye Protection: Safety glasses.

Additional Protective Equipment: Not applicable.

Ventilation: Use with adequate ventilation for misting operations.

#### IX. PHYSICAL AND CHEMICAL PROPERTIES

Flashpoint and method of determination: >93.3°C (C.O.C.)

Flammable limits (% in air): LOWER: Not applicable. UPPER: Not applicable.

#### MATERIAL SAFETY DATA SHEET

Auto-Ignition temp.: Not applicable. Vapour density: Not determined. Physical State: Liquid Coefficient of n-octanol/water distribution: Not determined. Boiling Point: 100°C Odour: Surfactant Freezing Point: -5°C Specific Gravity: 1.04 pH: 13.2 Vapour Pressure: Not determined. Colour: Slightly yellow Evaporation Rate: Not determined. Odour threshold: Not determined. Solubility in water: Complete X. STABILITY AND REACTIVITY Chemical stability: Stable under normal conditions. Hazardous polymerization will not occur TOXICOLO ICAL INFORMATION Probable route of exposure: Splashes on skin or in eyes Name of toxicologically syne gistic product(s): Data not available Environmental toxicity information: The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request 1 DESCRIPTION OF THE PROPERTY OF AUTOMOSPACE 5 01 02 (plastic packaging). Can be re PORT CARRIAGE BY ROAD (GROSSING BORDERS) ADR/RID: ADR/RID Class: Hazard Identification Number: **UN Number:** Packing group: Label: UN proper shipping name: TRANSPORT BY SEA IMDG: Not applicable. IMDG Class: Not applicable. **UN Number:** Not applicable. Packing group: Not applicable. EMS Number: Not applicable. Label: No Marine pollutant: Not applicable.

UN proper shipping name:

Page No. 3 of 3

#### MATERIAL SAFETY DATA SHEET

### TRANSPORT BY AIR ICAO-TI and IATA-DGR:

ICAO/IATA Class:

Not applicable.

UN Number:

Not applicable.

Packing group:

Not applicable.

Label:

Not applicable.

UN proper shipping name:

Not applicable.

### XV. REGULATORY INFORMATION

Inventory Status: TSCA (USA), CEPA (Canada, DSL), EINECS (EU), China, TCCL (Korea, KECI), RA 6969 (Philippines, PICCS), NICNAS (Australia, AICS).

WHMIS CLASSIFICATION: Class D, 2b

Danger symbol: Xi, irritant



Risk phrases: 36/38 Irritating to eyes and skin.

Safety phrases: 26 In case of contact with eyes rinse immediately with plenty of water and seek medical

advise.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### XVI. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian *Controlled Products Regulations* and the MSDS contains all the information required by the Canadian *Controlled Products Regulations* and national legislation.

This Material Safety Data Sheet is in conformation with Directive 1907/2006 (REACH) and local legislation.

R-Sentences of ingredients in paragraph II:

22 Harmful if swallowed.

34 Causes burns.

35 Causes severe burns.

37 Irritating to respiratory system.

41 Risk of serious damage to eyes.

Replaces: M.S.D. dated: December 27, 2005

Version: 8

Changes to the MSDS in this revision: sections 1, 2, 3, 8, 15, 16

Français

Español

Bahasa Indonesia

Nederlands

Deutsch

Bahasa Malayu





PRODUCT: NFPA Rating: AIR COMPRESSOR OILS

Flammability: 1, Reactivity: 0, Health:0

SECTION 1: MANUFACTURER AND LOCATION

Manufacturers Name:

Address:

Telephone Number:

Emergency:

Royal Mfg Co LP

P.O. Box 693, Tulsa, OK 74101-0693

(918) 587-5711 1-800-299-2671

SECTION 2: MATERIAL IDENTIFICATION AND INFORMATION

COMPONENT PETROLEUM OIL CAS NUMBER

64741-88-4

TLVIPEL (mgIM3) 5 (AS OIL MIST)

**WEIGHT %** > 95

PROPRIETARY ADDITIVES

MIXTURE

NE < 5

The specific chemical names and composition of the components not disclosed is confidential business information and is withheld as permitted by 29CFR 1910.1200 and various state Right-to-Know laws.

This material is not known to contain any chemical listed as a carcinogen or suspected carcinogen by OSHA Hazard Communication Standard 29CFR 1910.1200, IARC, or the National Toxicology Program (NTP) at a concentration greater than 0.1%.

Liquid

Air Compressor Oil

Slight petroleum odor

**SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES** 

Chemical Name:

Form:

Odor: Specific Gravity (water = 1):

Melting Point:

**Boiling Point:** 

Volatility, weight % at 25C: **Evaporation Rate:** 

Vapor Pressure, mmHg at 25C:

Solubility in Water:

Stability:

0.87 NE NE Negligible

Negligible < 1 mm

Insoluble

Stable under normal conditions

**SECTION 4: FIRE AND EXPLOSION DATA** 430F

Flashpoint (Cleveland Open Cup):

**Autoignition Temperature:** 

Flammable Limits:

NE

Water Spray (fog), dry chemical, foam, halon, or carbon Fire Extinguishing Agents:

dioxide. Water stream may splash burning liquid and spread fire.

As for petroleum products. Do not use direct or heavy Special Fire Fighting Procedures: water stream to fight fire. Use self-contained breathing apparatus to fight fires.

**SECTION 5: FIRST AID** 

Contact with EYES:

least 15 minutes. Get medical attention.

Contact with SKIN:

Inhalation:

respiration. Get medical attention.

Ingestion:

Immediately flush with large quantities of cool water for at

Wash off with soap and water.

Remove to fresh air. If not breathing, give artificial

Do NOT induce vomiting. Get medical attention.

**SECTION 6: REACTIVITY** 

Stable under normal temperatures and pressures. Reactivity: Strong oxidizing agents, heat, open flame. Incompatibilities:

Hazardous Polymerization: Does not occur.

Hazardous Decomposition Products:

### SECTION 7: SPECIAL PROTECTION INFORMATION

Use in a well ventilated area with local exhaust ventilation. Ventilation (Local, Mechanical, Special): Respiratory Protection: None required in normal use. Use only NIOSH/MSHA Organic vapor approved equipment if necessary.

Not required in normal use. Gloves:

Goggles or safety glasses are recommended.

Practice good personal hygiene. Wash hands after use and handling. Other Protective Equipment:

### SECTION 8: ENVIRONMENTAL PROCEDURES

Contain any splils with absorbents to prevent migrations and entry into sewers Spills or Leaks: or streams. Take up small spills with dry chemical absorbent. Large spills may be taken up with pump or vacuum and finished off with dry chemical absorbent. May require excavation of contaminated soil. To the best of Royal Manufacturing Company, LP knowledge, this product is not Waste Disposal: regulated by CERCLA/RCRA as a hazardous waste or material. However, this product has not been tested for the toxicity characteristic via the Toxicity Characteristic Leaching Procedure. Therefore, it may be disposed of as an industrial waste in a manner acceptable to good waste management practice and in compliance with applicable local, state, and federal regulations.

SARA Section 311 category - Health Hazard Immediate Right-to-Know:

SARA Section 313 - contains < 0.04% Zinc

TSCA: This material is in compliance with the Toxic Substances Control Act (15USC2601-2629)

#### SECTION 9: STORAGE AND HANDLING

Keep containers sealed until ready for use. Avoid excessive long-term storage temperatures to prolong shelf life. Maximum storage temperature: 120F. Store in well ventilated areas.

# **SECTION 10: TRANSPORT**

D.O.T. Shipping Name: Not Regulated

D.O.T. I.D. Number: NA Reportable Quantity: NA

Freight Classification: NA **UN Hazard Class:** NA

Special Transportation Notes: None

NA = Not Applicable NE = Not Established

Royal Manufacturing Company, LP believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. No warranty of fitness, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or process. Further, since the conditions and methods of use of this product and of the information referred to herein are beyond the control of Royal Manufacturing Company, LP, Royal Manufacturing Company, LP expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

October 22, 2003 Revision Date: Supercedes: Any previous versions
Prepared by: Riverside Laboratories

Kinetronics Corporation 4363 Independence Court Sarasota, Florida 34234 Phone 941-951-2432 Fax 941-955-5992 Web Site: www.kinetronics.com

# Material Safety Data Sheet Isopropyl Alcohol

	PRODUCT & COMPANY IDENTIFICATION
	In case of Emergency call CHEMTREC 1-800-424-9300
Supplier	Simchem Corporation, 311 Sarasota Center Blvd., P.O. Box 697, Osprey, Florida, 34229-0697 (941) 377-9935 Fax (941) 377-9539
CAS Number	67-63-0
Synonyms	isopropanol; sec-propyl alcohol; sec-propanol; dimethylcarbinol
Formula	(CH <sub>3</sub> )2CHOH

# TRANSPORTATION DATA

US Department of Transportation – 49 CFR	
Proper Shipping Name	sopropanol
UN Number	UN1219
Hazard Class	3
Packing Group	
Labels	Flammable Liquid

# PHYSICAL/CHEMICAL DATA

Appearance	Clear, colorless liquid	
Odor	Rubbing alcohol	
Boiling Point	82° C	
Melting Point	-89° C	
Vapor Pressure	44 @ 25° C (mm Hg)	
Vapor Density (Air = 1)	2.1	
Specific Gravity	0.79 @ 20° C/4° C	
Solubility in Water	Miscible in water	
Volatile by Volume	100% @ 21° C	¥.
Evaporation Rate	2.83 (BuAc =1)	

# **REACTIVITY DATA**

Stability	Stable
Incompatibility	Heat, flame, strong oxidizers, acetaldehyde, acids, chlorine, ethylene oxide, Isocyanates.
Hazardous	Carbon dioxide and carbon monoxide may form when heated to
Decomposition Products	decomposition.
Conditions to Avoid	Heat, flame, ignition sources and incompatibles.
Hazardous Polymerization	Will not occur.

Isopropyl Alcohol: Material Safety Data Sheet

Kinetronics Corporation 4363 Independance Ct. Sarasota, FL 34234 Phone: (941) 951-2432 Fax: (941) 955-5992

Web Site: www.Kinetronics.com

# FIRE AND EXPLOSION HAZARD DATA

Flash Point	12° C
Auto Ignition Temperature	399° C
Flammable Limits	LEL: 2.0 UEL: 12.7
Fire Extinguishing Spray	Water spray, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills and nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.
Explosion	Above flash point, vapor air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire or explosion. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.
Special Information	In the event of a fire, wear full protective clothing and NIOSH-approved self- contained breathing apparatus with full face piece operated in the pressure demand for other positive pressure mode.

# PRECAUTIONS FOR SAFE HANDLING & USE

to be Taken in Case Material is Steps Spilled or Released	Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified on section 5. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.
Disposal Method	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Handling and Storage	Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tolls and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues.

Phone: (941) 951-2432 Fax: (941) 955-5992

Web Site: www.Kinetronics.com

# **HEALTH HAZARD DATA**

Potential Health Effects:

Of China House	
Inhalation	Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowslness, headache, staggering, unconsciousness and possibly death.
Ingestion	Ingestion can cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result. The single lethal dose for a human adult = about 250 mls (8 ounces).
Skin Contact	May cause skin irritation with redness and pain. May be absorbed through the skin with possible systemic effects.
Eye Contact	Vapors cause eye irritation. Splashes caused severe irritation, possible corneal burns and eye damage.

First Aid Measures:

04.00
In case of Inhalation, remove to fresh air. In not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
bledining is difficult, give oxygen. Call a physician.
Give large amounts of water to drink. Never give anything by mouth to an unconscious
person. Get medical attention.
Immediately flush skin with plenty of water for at least 15 minutes. Call a physician if
irritation develops.
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Personal Protective Equipment:

	Were impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene and nitrile rubber are recommended materials.
Eye Protection	Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area,

### ADDITIONAL INFORMATION

Always comply with all applicable international, federal, state and local regulations regarding the transportation, storage, use and disposal of this chemical.

Due to the changing nature of regulatory requirements, the regulatory information listed in Section X this document should not be considered all-inclusive or authoritative. International, Federal, State Local regulations should be consulted to determine with all required reporting requirements.

The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, MSDS information may not be applicable.

Isopropyl Alcohol: Material Safety Data Sheet

# MATERIAL SAFETY DATA SHEET

#### METRICIDE

# 14-Day, 2.6% Glutaraldehyde

#### 1 - IDENTIFICATION

Manufacturer:

Metrex Research Corporation

Address: City, State, Zip: 28210 Wick Road Romulus, MI 48174 1-800-841-1428

Telephone: Emergency:

Chemtree 1-800-424-9300

Date Prepared:

August 16, 2001

# 2 - COMPOSITION INFORMATION

Hazardous Ingredients

This product contains no hazardous components as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Other Ingredients

TLY % PEL 2.6 0.05 ppm 111-30-8 N/A Glutaraldehyde 97.4 Water and other inert ingredients 7732-18-5 N/A

# 3 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 212 °F

Specific Gravity ( $H_20 = 1$ ): 1.004

Vapor Pressure (mm Hg): Same as water Vapor Density (AIR = 1): Same as water

Melting Point: N/A Solubility in Water: 100%

Appearance and Odor: Activated solution is green with a mild

glutaraldehyde odor.

pH: 3.2-4.3 unactivated; 7.5-8.5 activated

#### 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Flammable Limits: LEL: N/A UEL: N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A Unusual Fire and Explosion Hazards: N/A

### 5 - REACTIVITY DATA

Stability: Stable solution

Conditions to Avoid: Avoid high temperatures above 200 °F. Avoid

removal of water by artificially raising temperature.

Incompatibility (Material to Avoid): Acids and alkalines will

neutralize active ingredient.

Hazardous Decomposition Byproducts: N/A Hazardous Polymerization: Will not occur

#### 6 - HEALTH HAZARD DATA

Routes of Entry:

Skin: Moderate irritation

Eyes: Contact with eyes causes damage. Inhalation: Low or mild irritation

Ingestion: Toxic

Carcinogenicity

NTP: No

IARC Monographs: No OSHA Regulated Carcinogen: No

# 7 - EMERGENCY FIRST AID PROCEDURES

Skin: Wash skin with soap and water.

Eyes: Flush with water for 15 minutes. If irritation persists, seek

medical attention. Inhalation: Remove to fresh air. If irritation persists, seek medical

Ingestion: Do not induce vomiting. Give large amounts of water.

Seek medical attention.

# 8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Ventilate area; wear protective gloves and eye gear. For SMALL spills, wipe with sponge, mop or towel. Flush with large quantities of water. For LARGE spills, use ammonium carbonate, sodium bisulfite or dibasic ammonium phosphate to deactivate glutaraldehyde. Collect liquid and discard it.

Waste Disposal Method: Flush thoroughly with water into sewage disposal system in accordance with federal, state, and local regulations. Do not reuse empty container. Wrap container and put in trash. Precautions to be taken in Handling and Storing: Keep in cool

place. Use in well-ventilated area.

Other Precautions: Keep out of reach of children. Do not ingest. Avoid skin and eye contact. Wash contaminated clothing before reuse; discard if disposable. Avoid contamination of food.

#### 9 - CONTROL MEASURES

Respiratory Protection: Use in a well-ventilated area. VENTILATION:

Local Exhaust: Adequate ventilation to maintain recommended exposure limit

Mechanical (General): Should be sufficient

Protective Gloves: Butyl rubber, nitrile rubber, polyethylene or double-gloved latex

Eve Protection: Safety glasses

Work/Hygiene Practices: Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

# 10 - TRANSPORTATION INFORMATION

Not DOT regulated.

# 11 - SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:

(HMIS Hazard Index: 4 - Severe Hazard; 3 - Serious Hazard; 2 - Moderate Hazard; 1 - Slight Hazard; 0 - Minimum Hazard]

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate.

# MATERIAL SAFETY DATA SHEET

### VIONEX

# No Rinse Gel Antiseptic Handwash

#### 1 - IDENTIFICATION

Manufacturer:

Metrex Research Corporation

Address:

28210 Wick Road Romulus, MI 48174

City, State, Zip:

1-800-841-1428

Telephone: Emergency:

Chemtrec 1-800-424-9300

Date Prepared:

October 2, 2003

# 2 - COMPOSITION INFORMATION

Hazardous Ingredients

CAS# PEL

% TLY

SD 40 Alcohol (Ethyl Alcohol)

1000 ppm 64-17-5

10 1000 ppm

Other Ingredients Water and surfactants

3 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A

Specific Gravity (H<sub>2</sub>0 = 1.0): 0.97 Vapor Pressure (mm Hg): N/D Vapor Density (AIR = 1): N/D Evaporation Rate: N/D Solubility in Water: 100%

Appearance and Odor: White opaque viscous gel, medicinal fragrance

4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 128 °F Tag Closed Cup Flammable Limits: LEL: N/A UEL: N/A

Extinguishing Media: Water, carbon dioxide, dry chemical

Special Fire Fighting Procedures: N/A Unusual Fire or Explosion Hazards: None

5 - REACTIVITY DATA

Stability: Stable solution Conditions to Avoid: N/A

Incompatibility (Material to Avoid): N/A Hazardous Polymerization: Will not occur.

6 - HEALTH HAZARD DATA

Routes of Entry:

Eyes: Can be irritating to eyes.

Inhalation: N/A Carcinogenicity -

NTP: No

IARC Monographs: No

OSHA Regulated Carcinogen: No

# 7 - EMERGENCY FIRST AID PROCEDURES

Skin: Flush with water. If irritation occurs and persists, get medical

attention.

Eyes: Flush eyes with water for at least 15 minutes. Get medical

attention if irritation persists. Inhalation: Not expected to occur.

Ingestion: Get medical attention. Do not induce vomiting.

# 8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Flush area with water and dispose to sanitary sewer.

Waste Disposal Method: An acceptable method of disposal is to dilute with large amounts of water followed by discharge into a suitable treatment system in accordance with all regulatory agencies. Because acceptable methods of disposal may vary by location and because regulatory requirements may change, the appropriate regulatory agencies should be contacted prior to disposal.

Precautions to be taken in handling and storing: Store containers tightly closed and in an upright position at room temperature.

#### 9 - CONTROL MEASURES

Respiratory Protection (Specify Type): N/A

VENTILATION: Local Exhaust: N/A

Mechanical (General): Should be sufficient

Protective Gloves: N/A

Eye Protection: Use goggles if eye exposure is possible.

#### 10 - TRANSPORTATION INFORMATION

This product is not regulated by DOT for ground transportation under the aqueous alcohol exemption per 49 CFR 173.150 (e).

#### 11 -SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:

[HMIS Hazard Index: 4 - Severe Hazard; 3 - Serious Hazard; 2 - Moderate Hazard; 1 - Slight Hazard; 0 - Minimum Hazard]

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate.

- Section 1 -Product Identification



- Section 2 -

(percent by weight)

2-(2-Methoxyethoxy)-ethanol

CAS No. Hazardous Ingredients

112-34-5 § 2-(2-Butoxyethoxy)-ethanol

Cristobalite

Zinc Oxide

1333-66-4 Carbon Black.

Heavy Paraffinic Oil.

Titanium Dioxide.

§ Antimony Compound. [% Antimony]

VOC (Volatile Organic Compounds) Total - lbs./gal.

VOC Less Water & Federally Exempt Solvents - Tos.igal.

Flash Point (%) / HMIS (NFPA) Rating (health - flammability - reactivity)

§ Nickel Compound, [% Nickel]

§ Zinc Compound. [% Zinc]

Weight per Gallon (lbs.)

Percent Water

107-21-1 S Ethylene Glycol.

111-76-2 \$ 2-Buloxyethanol

64742-54-7

14464-46-1

1332-58-7

13463-67-7

1314-13-2

# Material Safety Data Sheet

The Sherwin-Williams Co. 101 Prospect Ave. N.W. Cleveland, OH 44115

ACGIH

TLV

C 50

25

0.05

2

10

10

3.5

OSHA

<STEL> <STEL>

Not Established

Not Established

C 50

25

5

5

0.05

10[5]

10[5]

3.5

PEL

Units

PPM

PPM (Skin)

Mg/M3

Mg/M3

Mg/M3

Mg/M3

Mg/M3

as Dust

[Resp. Fraction]

Mg/M3 as Dusi

Emergency telephone number Information telephone number Date of preparation

(216) 566-2917 (216) 566-2902 March 1, 1998

01998. The Sherwin-Williams Co.

1F/2

Latex Exterior Finishes - SUPER PAINT™ Latex House & Trim Paint

	1	Gross		High GL	oss	1
		A84 8 512 Tricom Black	A84 W 501 Base A	A85 B 512 Tricom Black	A85 W 501 Base A	
		A84 G 503 Base C	A84 W 506 Tinting White	A85 G 503 Base C	A85 W 596 Tinting White	
		A84 N 510 Chateau Brown	A84 W 507 Super White	A85 R 530 Red Base	A85 W 507 Super White	
1014	Vapor	A84 N 511 Plantation Brown	A84 Y 502 Base B	A85 R 533 Burgundy Base	A85 Y 502 Base B	
	Pressure (mm Hg)	A84 R 533 Burgundy Base	A84 Y 508 Yellow Corn	A85 T 504 Neutral Base		
	0.1	< 3% may be adde	d due to tinting	0-5		
	1.0			1 in Red Ba	sse only	
)	0.6		Na -	0.3 -	1	P
	0.1	0.9 -	2			E
	as Mist	1 in Base	C. anly			C
	as Resp. Dust	0.1 - 1	0.8			k T
	as Resp. Dust	0-	2			В

Incredient subject to the reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313, 40 CFR 372.65 C

→→→ MSDS Text Page Follows

None

0 - 19

0-3

8 [1.0] in Yellow Corn only

8 [0.3] In Yellow Corn only

0 [0.0] - 3 [2.1] 8.8 - 10.3

47:4 - 58.0

0.4 - 0.5

1.0 - 1.3

2 - 0 - 0



None

0-20

0-2

8.7 - 10.3

41.5 - 54.7

0.4 - 0.5

0.9 - 1.1

2" -0 -0

W

#### Section 3 - Physical Data

PRODUCT WEIGHT	See TABLE	EVAPORATION RATE	Slower than Ether
SPECIPIC GRAVITY	1.05-1.41	VAPOR DENSITY	Reavier than Air
BOILING RANGE	232-477 *F	MELTING POINT	N.A.
VOLATILE VOLUME	57-75 t	SOLUBILITY IN WATER	N.A.
p¥	8.5-9.5	PHOTOCHEMICALLY REACTIVE	No

#### Section 4 — Fire And Explosion Hazard Data

```
PLANMABILITY CLASSIFICATION
                                FLASH POINT Not Applicable
                                                                    LEL N.Ap. UEL N.AD.
Not Applicable
EXTINGUISHING MEDIA
```

Carbon Dioxida, Dry Chemical, Alcohol Foam thrusual FIRE and Explosion MAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat. SPECIAL PIRE FIGHTING PROCEDURES

Pull protective equipment including self-contained breathing apparatus should be used. Water apray may be ineffective. If water is used, fog nousles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

#### Section 5 - Health Hazard Data

ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EVE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

ACUTE Health Hazards

EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and upper respiratory system. In a confined area vapors in high concentration may cause beadache, nausea or dizziness. SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure, MEDICAL CONDITIONS AGGREVATED BY EXPOSURE

None generally recognized.

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use. Flush eyes with large amounts of water for 15 minutes. Get medical attention. If in EYES. If SWALLOWED: Get medical attention.

CHRONIC Heelin Hazards

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

Carbon Black is classified by IARC as possibly carcinogenic to humans (group 28) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water or by gavage. There is no evidence to indicate it causes birth defects in humans.

Prolonged overexposure to solvent ingredients in Section II may cause adverse effects to the liver and urinary systems.

Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.

#### Section 6 — Reactivity Data

```
STABILITY - Stable
CONDITIONS TO AVOID
   None known
INCOMPATIBILITY
   Mone known.
HASARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide HAZARDOUS POLYMERIZATION - Will Not Occur
```

#### Section 7 — Spill Or Leak Procedures

```
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
  Remove all sources of ignition. Ventilate and remove with inert absorbent.
WASTE DISPOSAL METHOD
```

Waste from these products is not bezardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility, po not incinerate closed container, Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

#### Section 8 — Protection Information

PRECAUTTONS TO BE TAKEN THE USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.
These contings may contain naterials classified as musance particulates (listed "as Dust" in

Section II) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section II, the applicable limits for nuisance dusts are ACGIH TLV 10 mg./m3 (cotal dust), 3 mg./m3 trespirable fraction), OSHA PEL 15 mg./m3 (rotal dust), 5 mg./m3 (respirable fraction).

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.106.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section II.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NICSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive. PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section II. EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

#### Section 9 — Precautions

```
DOL STORAGE CATEGORY - Not applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
```

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Reep out of the reach of children.

#### Section 10 — Other Regulatory Information

```
CALIFORNIA PROPOSITION 65
WARNING: AGESSO, AGGS14, AGNSSOT, AGNSSG, AGN16, AGNSSG1, AGWS15, AGNSSG1, AGWS9G, AGYS16, AGGC203, A1GR201, A1GW200, A1GW201, A1GY202, ABDBS12, ABGGS03, ABGNS11, ABONS11, ABDNS01, ABGNS06, ABGNS07, ABGNS07, ABGNS07, ABGNS07, ABGNS01, AB
  BI7W415, BI7W496, BI7Y416, B42W41, C1W501 and C1W502 contain a chemical known to the State of
  California to cause cancer.
  A6R503, A6R533, A6Y554, A5B512, A8G513, A8H503, A8H515, A6R533, A8H16, A8H514, A6H524, A6H524, A8H541, A8H502, A6Y558, A16R233, A80Y508, A8OR533, A82Y553, A82Y554, A84B512, A64G503,
  A84N510, A84N511. A84R533, A84W501, A24W506, A84W507. A84Y502. A84Y508, A85G503, A85R533,
  A85T504, A85Y502, A89N510, A89R503, A89Y508, B150214, B150203, B15Y216, B17R433, B17W410,
 E22Gloc, B22N102, B22R101, B22R133, B22W101, B22W102, B22Y10C, B36G300, B36R533, B36W300, B36W302, B36W304, B36W304, B77G500, B77R533, E77W501, E77W502, B77W506,
  and B77Y500 contain chemicals known to the State of California to rause cancer.
```

#### TSCA CERTIFICATION

All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.

The above information perceins to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products may substantially alter the composition and hazards of these products. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.







# **Material Safety Data Sheet**

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company

Address:

1061 Cudahy Place (92110)

P.O. Box 80607

San Diego, California, USA

92138 -0607

Telephone:

1-888-324-7596 (PROSAR)

**Emergency only:** 

1-888-324-7596

Information:

Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)

Chemical Name: Organic Mixture

Trade Name: WD-40 Aerosol

Product Use: Cleaner, Lubricant

MSDS Date Of Preparation: 8/05/09

### 2 - Hazards Identification

**Emergency Overview:** 

DANGER! Flammable aerosol. Contents under pressure. Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye irritation. Avoid eye contact. Use with adequate ventilation. Keep away from heat, sparks and all other sources of ignition.

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.

Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure.

### Suspected Cancer Agent:

No X Yes.

3 - Composition/Information on Ingredients

CAS#	Weight Percent
64742-47-8	45-50
64742-48-9	
64742-88-7	
64742-65-0	<25
64742-47-8	12-18
124-38-9	2-3
Proprietary	<2
and the same of th	<10
	64742-47-8 64742-48-9 64742-88-7 64742-65-0 64742-47-8

#### 4 - First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

5 - Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

Unusual Fire and Explosion Hazards: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

# 6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 - Handling and Storage

Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Storage: Store in a cool, well-ventilated area, away from incompatible materials Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol.

8 - Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	100 ppm TWA (ACGIH) 1200 mg/m3 TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m3 TWA, 10 mg/m3 STEL ACGIH TLV 5 mg/m3 TWA OSHA PEL
LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA (OSHA/ACGIH), 30,000 ppm STEL (ACGIH)
Surfactant	None Established
Non-Hazardous Ingredients	None Established

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations

where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 - Physical and Chemical Properties

9 - Physical and Chemica Boiling Point:	323°F (minimum)	Specific Gravity:	0.817 @ 72°F
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	110 PSI @ 70°F	Vapor Density:	Greater than 1
Percent Volatile:	74%	VOC:	412 grams/liter (49.5%)
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Light amber liquid/mild odor
Flash Point:	131°F (concentrate) Tag Closed Cup	Flammable Limits: (Solvent Portion)	LEL: 1.1% UE:: 8.9%

#### 10 - Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate

Incompatibilities: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 - Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard. None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

## 12 - Ecological Information

No data is currently available.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

14 - Transportation Information\_

DOT Surface Shipping Description: Consumer Commodity, ORM-D IMDG Shipping Description: Un1950, Aerosols, 2.1, LTD QTY

# 15 - Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not contain chemicals regulated under California Proposition 65.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

Canadian Environmental Protection Act: One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

Canadian WHMIS Classification: Class B-5 (Flammable Aerosol)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

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**HMIS Hazard Rating:** 

Health - 1 (slight hazard), Fire Hazard - 4 (severe hazard), Reactivity - 0 (minimal hazard)

SIGNATURE:

TITLE: Director of Global Quality Assurance

REVISION DATE: August 2009

SUPERSEDES: March 2009



# **Material Safety Data Sheet** Catalog No. 27272

SECTION I - General Information

Product Name: REDI-CHEM®Dental A Developer Catalog No. 27272

Chemical Family:

Photographic Developer

Proper D.O.T. Shipping Name:

Not Regulated

Manufacturer: ALLIED Diagnostic Imaging, Inc. 5440 Oakbrook Parkway

Norcross, GA 30093

Formula:

Aqueous Mixture

D.O.T. Hazard Classification:

Not Applicable

Manufacturer's Phone Number: (770) 448-0250 **CHEMTREC Phone Number:** (800) 424-9300

SECTION II - Product and Hazardous In	gredients Informatio	n		SARA	
Item #3905	CAS#	PERCENT	PEL (TWA)	RQ/TI	<u>PQ</u>
Potassium Sulfite	10117-38-1	1-5	N/A	N/A	N/A
Sodium Sulfite	7757-83-7	1-5	N/A	N/A	N/A
Hydroquinone	123-31-9	1-5	2 mg/m3	1#	500#
Sodjum Carbonate	497-19-8	1-5	N./A	N/A	N/A
Water	7732-18-5	90-95	N/A	N/A	N/A

Contains less than 0.05% Nitrilotriacetic acid, trisodium salt (CAS# 5064-31-3). The International Agency for Research on Cancer (IARC) lists Nitrilotriacetic acid, trisodium salt as Group 2B (Possible Carcinogen). Carcinogens present on 0.1% or more are required to be listed on Material Safety Data Sheets.

#### SECTION III - Physical Data

Boiling Point: >212° F

Vapor Pressure (mmHg): 17.0 Vapor Density (mmIIg): 0.6 Solubility in Water: Complete

Appearance and Odor: Pale yellow, odorless

Specific Gravity: 1.075

Percent Volatile by Weight: 95%

Evaporation Rate: N/A

pH: 10.20

#### SECTION IV - Fire and Explosion Hazard Data

Flash Point: None

Extinguishing Media: Use method appropriate for surrounding fire.

Special Fire Fighting Procedures: Use protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosions Hazards: When heated to decomposition, it can emit toxic fumes of SO<sub>2</sub>, CO<sub>2</sub>, and possibly CO.

# SECTION V - Health Hazard Data TLV (ACGIH): Hydroquinone (2 mg/m3)

#### Effects of Overexposure:

Inhalation: Low hazard for ordinary industrial handling. Eyes: Vapor may cause irritation. Contact may cause burns. Skin: Repeated and prolonged contact may cause irritation. Ingestion: Do Not take internally. May be harmful if swallowed.

Pure Component Toxicology Information

Hydroquinone: Moderately toxic by oral ingestion. It is a skin and eye irritant and may cause an allergic reaction in sensitive individuals. Hydroquinone also may cause brown staining of the conjunctiva following prolonged direct eye contact with the solid and may depigment the skin following repeated skin contact under some circumstances.

Page 1 of 3

5440 Oakbrook Parkway • Norcross, GA 30093-2251 PHONE: (770) 448-0250 • FAX: (770) 448-0257



# Material Safety Data Sheet Catalog No. 27272

Hydroquinone is a CNS stimulant based on animal studies. Although hydroquinone is not listed as a human carcinogen, it has caused cancer in some animal studies.

Sodium Sulfite and Potassium Sulfite: Slightly toxic by oral ingestion. It is a slight to moderate skin, eye, and respiratory tract irritant. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, hives, weakness and diarrhea following ingestion.

Sodium Carbonate: Dusts and concentrated solutions would probably cause moderate to severe eye irritation. Respiratory irritant. Ingestion may result in irritation of the mouth, throat and stomach due to the irritating nature of sodium carbonate.

#### Evidence of:

Carcinogen: Hydroquinone Teratogenicity: N/A Reproductive Toxicity: N/A

Mutagenicity: Sodium Sulfite, Hydroquinone

Synergistic Products: N/A

### **Emergency First Aid Procedures:**

Eyes: Flush with large amounts of water for 15 minutes. Seek medical attention. Skin: Wash skin with soap and water. If irritation occurs, seek medical attention.

Ingestion: Induce vomiting only as directed by medical personnel. Seek medical attention immediately giving full

details of amount ingested and toxicity.

Inhalation: Move to fresh air.

#### SECTION VI - Reactivity Data

Stability: Stable.

Incompatibility: Strong acids, strong bases.

Hazardous Decomposition Products: When heated to decomposition, it can emit toxic fumes of  $\mathrm{SO}_2$ ,

CO2 and possibly CO.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

#### SECTION VII - Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: Wear protective clothing as specified in Section VIII. Neutralize with sodium bicarbonate. If federal, state and local laws permit, flush to sewer with large amounts of water. Waste Disposal: Neutralize with sodium bicarbonate. If federal, state, and/or local laws permit, flush to sewer with large amounts of water. Otherwise, dispose of contaminated product and materials used in cleaning up the spill in a manner approved for this material. Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

#### SECTION VIII - Special Protection Information:

Respiratory Protection (Specify Type): Should not be necessary under normal conditions. If exposed to vapors that exceed TLV or PEL, wear approved vapor respirator.

Ventilation: Good local mechanical ventilation should be sufficient.

Protective Equipment:

Gloves: Impervious gloves. Eyes: Wear protective goggles.

Other: As necessary to prevent skin contact. Eyewash facilities in vicinity of use.

#### SECTION IX -Regulatory Information



# Material Safety Data Sheet Catalog No. 27272

U.S. California Prop 65: none

# Carcinogenicity Classification (components present at 0.1% or more):

The International Agency for Research on Cancer (IARC):

Sodium Sulfite: 3 (Classification not possible from current data)
Potassium Sulfite: 3 (not classifiable as to carcinogenicity to humans)

Hydroquinone: 3 (not classifiable as a carcinogen)

NOTE: Contains less than 0.05% Nitrilotriacetic acid, trisodium salt (CAS# 5064-31-3). The International Agency for Research on Cancer (IARC) lists Nitrilotriacetic acid, trisodium salt as Group 2B (Possible Carcinogen).

U.S. National Toxicology Program (NTP): none

U.S. Occupational Safety and Health Administration (OSHA): none

#### SECTION X-Special Precautions

Precautions to be Taken in Handling and Storage: Do not store or consume food, drink or tobacco in surrounding area. Do not store near strong acids or bases. Wash thoroughly after handling.

The information contained in this material safety data sheet is furnished without warranty of any kind. The user should consider this data a supplement to other information gathered and must make independent determination of suitability and completeness of information from this and other sources to assure proper use and disposal of the materials and the health and safety of employees and customers. This statement is incorporated as part of this Material Safety Data Sheet.

Revised: 3-31-08

# NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Dustin Kapson		Date/Time Prepared _	2-11-10/3:00 pm
Preparer's Affiliation Consultant			
Purpose of Investigation Soil Vapor Ir	ntrusion Investigation		And the second states of the second states and the second states are second states and the second states are se
I. OCCUPANT:			
Interviewed (Y) N			
Last Name: Sharma	First Name:	Kanwal	
Address: 126 Wildey Street, Tarrytow	n, New York		······································
County: Westchester			
Home Phone:	Office Phone: 914-3	32-0008	
Number of Occupants/persons at this l			A A A A
2. OWNER OR LANDLORD: (Che	ck if same as occupant	)	
Interviewed: (Y)/N	<b>***</b>		
Last Name: Eikhof			
Address: 3121 East Main Street, Suite	100, Mohegan Lake, Nev	/ York	and the same
County: Westchester			
Home Phone:	Office Phone: 914-5	26-4995	
3. BUILDING CHARACTERISTIC	es		
Type of Building: (Circle appropriate	response)		
Residential School Industrial Church	The same of the sa	Multi-use	

If	the	property	is	residential,	type?	(Circle	appropriate	response)	)
----	-----	----------	----	--------------	-------	---------	-------------	-----------	---

Ranch Raised Ranch Cape Cod Duplex	2-Family Split Level Contemporary Apartment House	3-Family Colonial Mobile Home Townhouses/Condos
Modular	Log Home	Other:
If multiple units, how many	5	
If the property is commercia	ıl, type?	
Business Type(s) Vide	o Store/Retail	
Does it include residence	s (i.e., multi-use)? Y	If yes, how many?
Other characteristics:		
Number of floors 1	Bu	Iding age_34
Is the building insulated	ŶŊN Ho	w air tight? Tight Average Not Tight
4. AIRFLOW		
Use air current tubes or trac	cer smoke to evaluate	airflow patterns and qualitatively describe:
Airflow between floors		
NA		
Airflow near source The source potentially is through	ahout the unit. Airflow	varies based on the locations of air ducts and openings.
ALL ALL SECTION AND ADDRESS OF THE PARTY OF		S.
Outdoor air infiltration		X
		s are properly sealed. The only source of outdoor air is
when customers open the ma	in entrance door on trie	South side of the dist.
Infiltration into air ducts		
	ot operating. The force	hot air furnace locally circulates air into a return vent and
out of supply vents.	A STANSON OF A 1- B 1 COMMUNICATION AND ADDRESS ASSESSMENT ASSESSM	

5.	BASEMENT AND CONS	TRUCTION CHARA	CTERISTICS	(Circle all that ap	ply)
	a. Above grade construction	on: wood frame	concrete	stone	brick
	b. Basement type:	full	crawlspace	slab	other None
	c. Basement floor:	concrete	dirt	stone	other None
	d. Basement floor:	uncovered	covered	covered with	None
	e. Concrete floor:	unsealed	sealed	sealed with	
	f. Foundation walls:	poured (	block	stone	other
	g. Foundation walls:	unsealed	sealed	sealed with	resistance and the second
	h. The basement is:	wet	damp	dry	moldy
	i. The basement is:	finished	unfinished	partially finish	ed
	j. Sump present?	Y(N)			
	k. Water in sump?	Y/N/hot applicable			
Ba	sement/Lowest level depth	below grade: 0	_(feet)		
	entify potential soil vapor en		ximate size (e.;	g., cracks, utility	ports, drains)
U	tility penetrations and slab join	is.			
6.	HEATING, VENTING an	d AIR CONDITION	ING (Circle all	that apply)	
	pe of heating system(s) used				y)
		Heat pump	riot :	water baseboard	
	Hot air circulation Space Heaters Electric baseboard	Stream radiati Wood stove	ion Radi	ant floor loor wood boiler	Other
TI	Space Heaters	Stream radiati Wood stove	ion Radi	ant floor	Other
ті	Space Heaters Electric baseboard	Stream radiati Wood stove	ion Radi Outc	ant floor loor wood boiler osene	Other
	Space Heaters Electric baseboard  re primary type of fuel used  Natural Gas Electric	Stream radiati Wood stove  is:  Fuel Oil Propane Coal	ion Radi Outc Kerc	ant floor loor wood boiler osene	Other

Air conditioning	Central Air Window units	Open Wi	indows	None
	4			
Are there air dis	stribution ducts present? (Y)'N			
Describe the sup there is a cold a diagram.	oply and cold air return ductwork, and its c ir return and the tightness of duct joints. In	ondition w idicate the	here visible, i locations on t	ncluding whether he floor plan
Air ducts are in g	ood condition and joints appear tight. A cold air	return is lo	cated in the cer	ntral portion of the
building and supp	ply vents are distributed throughout the retail spa	ice. See Fig	gure 1.	to be a second to the second t
			a para ( a mar matrix market m	
7. OCCUPAN	CY	2		
Is basement/low	rest level occupied? (Full-time) Occas	sionally	Seldom	Almost Never
	General Use of Each Floor (c.g., familyroo	m, bedroo	m, laundry, w	orkshop, storage)
Basement				w.
l <sup>st</sup> Floor	Video Store/Retail			•
2 <sup>nd</sup> Floor	and an extension and a first less than 12 persons years a generally under the design of the second s			ii a
3 <sup>rd</sup> Floor	and the second section of the section of			70 <b>4</b>
4 <sup>th</sup> Floor				-
8. FACTORS T	THAT MAY INFLUENCE INDOOR AIR (	QUALITY		
a. Is there an	attached garage?		Y/N	
	arage have a separate heating unit?		MUNY	
c. Are petrole stored in th	eum-powered machines or vehicles ne garage (e.g., lawnmower, atv, car)			
d. Has the bu	ilding ever had a fire?		Y/N When	?
e. Is a kerose	ne or unvented gas space heater present?		Y/N When	27
	orkshop or hobby/craft area?	Y/{V)	Where & Typ	e?
g. Is there sm	oking in the building?	Y (N)	How frequent	ly?
	ning products been used recently?	Y N	When & Type	7

h. Have cleaning products been used recently?

i. Have cosmetic p	roducts been used	recently?	1 (1)	When & Type	
		5			
j. Has painting/sta	ining been done ir	the last 6 mor	oths? Y (N)	Where & Who	on?
k. Is there new car	pet, drapes or oth	ner textiles?	YN	Where & Who	en?
l. Have air freshen	ers been used rec	ently?	Y (N)	When & Type	27
m. Is there a kitch	m. Is there a kitchen exhaust fan?			If yes, where	vented?
n. Is there a bathı	room exhaust fan?	<b>?</b>	YN	If yes, where	vented?
o. Is there a clothe	s dryer?		Y (N)	If yes, is it ve	nted outside? Y /
p. Has there been	a pesticide applica	ation?	Y (N)	When & Type	e?
Are there odors in	the building?		Y (N	<b>)</b>	
(e.g., chemical manuf boiler mechanic, pest	acturing or laborate icide application, c	ory, auto mecha osmetologist			
(e.g., chemical manuf boiler mechanic, pest If yes, what types c	acturing or laborate icide application, c	ory, auto mecha osmetologist			
(e.g., chemical manuf boiler mechanic, pest If yes, what types o If yes, are their clos Do any of the buildh	acturing or laborate icide application, confection of solvents are used thes washed at wor	ory, auto mecha osmetologist  1?  k?	Y/N		and the second distribution of the second Assessment of the second asse
(e.g., chemical manuf boiler mechanic, pesti If yes, what types of If yes, are their close Do any of the building response)  Yes, use dry-	acturing or laborate icide application, confection, co	ory, auto mecha osmetologist  ?  tk?  darly use or we  (weekly)  tly (monthly or	Y/N ork at a dry-cle		and the second distribution of the second Assessment of the second asse
(e.g., chemical manuflooiler mechanic, pesting lifyes, what types of the building response)  Yes, use dry- Yes, use dry- Yes, work at there a radon mit	acturing or laborate icide application, confection, co	ory, auto mecha osmetologist  ? k?  darly use or we  (weekly) tly (monthly or	Y/N ork at a dry-cle less)) tructure? Y (1	aning service? No Unknown	(Circle appropria
(e.g., chemical manuf boiler mechanic, pesti If yes, what types of If yes, are their close Do any of the building response)  Yes, use dry- Yes, use dry- Yes, work at Is there a radon mit Is the system active	acturing or laborate icide application, confection, co	ory, auto mecha osmetologist  !?  !k?  !larly use or we  (weekly) !tly (monthly or vice  - the building/s	Y/N ork at a dry-cle less)) tructure? Y (1	aning service? No Unknown	(Circle appropria
(e.g., chemical manuf boiler mechanic, pesti If yes, what types of If yes, are their cloud Do any of the buildharesponse)  Yes, use dry- Yes, use dry- Yes, work at Is there a radon mit Is the system active  9. WATER AND SE	acturing or laborate icide application, confection, co	ory, auto mecha osmetologist  !?  !k?  !larly use or we  (weekly) !tly (monthly or vice  - the building/s	Y/N ork at a dry-cle less)) tructure? Y (1	aning service? No Unknown	(Circle appropria
If yes, are their clot  Do any of the building response)  Yes, use dry- Yes, use dry-	acturing or laborate icide application, confiscion of solvents are used thes washed at working occupants regularly cleaning regularly cleaning infrequenta dry-cleaning service igation system for or passive?	ory, auto mechasosmetologist  !?  !k?  !larly use or we  (weekly)  tly (monthly or vice  • the building/s  Active/Passive	Y/N ork at a dry-cle less)) tructure? Y (1	aning service?  No Unknown  Date of Insta	(Circle appropria
(e.g., chemical manuflooiler mechanic, pesting lifyes, what types of the lifyes, are their cloud of the building response)  Yes, use dry-yes, use dry-yes, work at the system active  9. WATER AND SE Water Supply:	racturing or laborate icide application, confiscion of solvents are used thes washed at worth a occupants regularly cleaning regularly cleaning infrequent a dry-cleaning servingation system for or passive?  EWAGE  Public Water	ory, auto mechasosmetologist  !?  !k?  !larly use or we  (weekly)  tly (monthly or vice  the building/s  Active/Passive  Drilled Well  Septic Tank	Y/N  ork at a dry-cle  less)  tructure? Y (1)  Driven Well  Leach Field	aning service?  No Unknown  Date of Insta  Dug Well  Dry Well	(Circle appropriate)  Ilation:  Other:

- c. Responsibility for costs associated with reimbursement explained? Y/N
- d. Relocation package provided and explained to residents?

Y/N

### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: None

First Floor: See Figure 1

### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Figure 2

# 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae 2000 Photoionization Detector

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Rending (ppm)	Photo ** Y/N
Center	Clorox Disinfectant Wipes	16 oz.	U	See MSDS Attached, Isopropanol***	0.0	N
Center	Pledge	32 oz.	U	See MSDS Attached	0.0	N
Center	Windex	32 oz.	U	See MSDS Attached, Isopropanol***	0.0	N
	A CONTRACTOR OF THE CONTRACTOR					
-						
W-1990.   \$ 100.1   17 mm		1				

<sup>Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
Photographs of the front and back of the product containers can replace hand written list of chemical ingredients. However, the photographs much be of good quality and ingredient labels must be legible.
\*\*\* Chemical present in product and detected in indoor air sample at a concentration exceeding the RDL.</sup> 



### The Clorox Company 1221 Broadway Oakland, CA 94612 Tel. (510) 271-7000

# Material Safety Data Sheet

7 1044041	SH CLOROX® DISIN		
Description: MOISTENED		CITRUS FRAGRANCE	
Other Designations	Distr	ibutor	Emergency Telephone Nos.
EPA Reg. No. 5813-58	1221 B	es Company troadway CA 94612	For Medical Emergencies call: (800) 446-1014 For Transportation Emergencies Chemtrec (800) 424-9300
I Health Hazard Data		III Hazardous	s Ingredients
Eye Contact: Can cause moderate eye irritation.  ngestion: Liquid should be practically non-toxic if ingested.  Skin Contact: Prolonged skin contact may produce minor irr		Ingredient n-Alkyl (C14, 60%; C1 C12, 5%; C18, 5%) di benzyl ammonium chi	limethyl-
FIRST AID: EYES- Flush with plenty of water. Call a physic persists. IF SWALLOWED- Drink a glassful of water. Call a control center. SKIN- Wash thoroughly with soap and water NHALATION- If breathing is effected, move to fresh air.	a physician or poison	n-Alkyl(C12, 68%, C1 Dimethyl Ethylbenzyl ammonium chloride	
Under normal consumer use conditions the likelihood of any effects are low.	adverse health	Isopropanol CAS #67-63-0	1- 5% 200 ppm/400 ppm¹ 400 ppm²
		<sup>1</sup> TLV-TWA- Threshold STEL- Short Term Ex <sup>2</sup> PEL- OHSA Permiss	d Limit Value-Time Weighted Average. xposure Limit sible Exposure Limit
		None of the ingredien carcinogen lists.	nts in this product are on the IARC, NTP or OSHA
V Special Protection and Precaution	ns		ition and Regulatory Data
No special protection or precautions have been identified for under directed consumer use conditions.  The following recommendations are given for production factoristions and situations where there is increased potential discale or prolonged exposure.  Hygienic Practices—Wear safety glasses. Use rubber or nitricontact liquid, especially for prolonged periods.  Engineering Controls: Use general ventilation to minimize exposure.  Nork Practices: Avoid eye and skin contact and inhalation of Avoid contact with food. Not for personal cleansing.	cilities and for other for accidental, large- ile gloves if in exposure to vapor or	U.S. DOT Proper Shir EPA- SARA Title III/C 311/312. This product 304/CERCLA or Section	CERCLA: Product may be regulated under Sections ct contains no chemicals regulated under Section
KEEP OUT OF THE REACH OF CHILDREN		VII Reactivity	/ Data
VI Spill Procedures/Waste Disposal Spill Procedures: Absorb and containerize. Wash residual of sewer. Contact the sanitary treatment facility in advance to a process washed down material.  Waste Disposal: Disposal must be made in accordance with state and local regulations.	assure ability to	Stability: Mixing with s formaldehyde gas.	sodium hypochlorite may release small amounts of o not use or store near heat or open flame.
VIII Fire and Explosion Data		IX Physical D	Data
Flashpoint: >119°F Method: Closed cup. Unusual Fire and Explosion Hazards: None	dati usha utu 5-5-au	Specific Gravity	>119°F 0.99 g/cc 5.0-6.0 Llquid is completely dispersible

Fire Hazard Hazardous Material 0 **National Fire Information System** Protection Fire Hazard 4 Health Reactivity (HMIS) Association (NFPA) Reactivity 0 Specific Hazard Off-white. Aerosol. See Section 9. Protective None required. Emergency WARNING: CONTENTS UNDER PRESSURE. Overview Clothing Section 1. Chemical Product and Company Identification 94430 Code **PLEDGE AEROSOL - LEMON Product Name** 433170 PMS# Industrial/Institutional: Furniture care. Product Use Validation Date 5/28/2002 126026006 MSDS# Print Date 5/28/2002 U.S. Headquarters No Previous Validation. Supersedes Drackett Professional A Division of (800) 851-7145 In Case of S.C. Johnson Commercial Markets, Inc. Emergency 8310 16th Street Sturtevant, Wisconsin 53177-0902 Phone: (888) 352-2249

Ingredients	CAS#	% by Weight	Exposure Limits	LC50/LD50
Propané	74-98-6	1-5	OSHA (United States). TWA: 1800 mg/m <sup>3</sup> ACGIH (United States). TWA: 4508 mg/m <sup>3</sup>	Not available.
Isobutane	75-28-5	1-5	Not available.	VAPOR (LC50): Acute: 0.0057 ppm 0.25 hour(s) [Rat].
Butane	106-97-8	1-5	OSHA (United States). TWA: 1900 mg/m³ ACGIH (United States). TWA: 1900 mg/m³	Not available.
Isoparaffinic Hydrocarbon Solvent	68920-06-9	5-10	Not available.	Not available.
Silicones	63148-62-9 7732-18-5	5-10 30-60	Not available.  Not available.	DERMAL (LD50): Acute: 19400 mg/kg [Rabbit]. Not available.

Section 3. Hazards Identification		
Routes of Entry	Inhalation. Skin contact. Eye contact.	
Potential Acute Health Effects		
Eyes	None known.	
Skin	None known.	
Inhalation	None known.	
Ingestion	None known.	
Medical Conditions Aggravated by Overexposure:	None known.	
See Toxicological Information	(section 11)	

Section 4. First Aid Measures		
Eye Contact	Rinse with plenty of running water.	
Skin Contact	Rinse with plenty of running water.	
Inhalation	No specific first aid measures are required.	
Ingestion	No specific first aid measures are required.	

Section 5. Fire Fighting Measures		
Flammability of the Product Flash Points	NFPA 30B Level 1 Aerosol. CLOSED CUP: <-7°C (19.4°F).	
Products of Combustion	None known.	
Fire Fighting Media and Instructions	Use water spray to keep fire-exposed containers cool. Dry chemical, carbon dioxide. Fight fire from protected location or maximum possible distance. In case of fire and/or explosion do not breathe fumes.	
Protective Clothing (Fire)	Put on appropriate personal protective equipment (see Section 8).	
Special Remarks on Fire and Explosion Hazards	Aerosol product - Containers may rocket or explode in heat of fire.	

Section 6. Accidental Release Measures		
Personal Precautions	Put on appropriate personal protective equipment (see Section 8).	
Environmental Precautions and Clean-up Methods	Eliminate all ignition sources. In the event of major spillage: Use appropriate containment to avoid environmental contamination. Take up with sand or other non-combustible material. Place in suitable clean, dry containers for disposal by approved methods.	

Section 7. Handling and Storage		
Handling	Do not puncture or incinerate. Do not use or spray on floors. FOR INDUSTRIAL USE ONLY	
Storage	Store in a dry, cool and well-ventilated area. Protect from freezing. Keep away from heat, sparks and flame. Do not puncture or incinerate. Pressurized container: protect from sunlight and do not expose to temperature exceeding 120°F (50°C). Do not pierce or burn, even after use. KEEP OUT OF REACH OF CHILDREN.	

Section 8. Exposure Controls/Personal Protection			
Engineering Controls	No special ventilation requirements. General room ventilation is adequate.		
Personal Protection	Eyes No special requirements under normal use conditions.		
	Hands No special requirements under normal use conditions.		
Respi	ratory No special requirements under normal use conditions.		
	Feet No special requirements under normal use conditions.		
	Body No special protective clothing is required.		

Section 9. Physical and Chemical Properties		
Physical State and Appearance	Liquid. (Aerosol.)	
Odor	Lemon like.	
Color	Off-white.	
ρH	Not available.	
Specific Gravity	0.891	
Solubility in water	Dispersible.	

Section 10. Stability	and Reactivity		
Stability and Reactivity	The product is stable.		
Conditions of Instability	Excessive heat.	Marine Control of the	
Incompatibility with Various Substances	Not available.	*	
Hazardous Decomposition Products	None known.		
Hazardous Polymerization	Will not occur.		

Section 11. Toxicological Information			
Acute toxicity	ORAL (LD50) Estimated to be greater than 5000 mg/kg (rat).		
Effects of Chronic Exposure	None known.		
Other Toxic Effects	Not available.		

# Section 12. Ecological Information

Not available.

# Section 13. Disposal Considerations

If possible, recycle empty aerosol cans to the nearest steel recycling center. Use up package or give to Waste Information someone who can. Dispose of according to all federal, state and local regulations.

# Section 14. Transport Information

**DOT** Classification

DOT Proper

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

Shipping Name TDG Classification

> TDG Proper Shipping Name

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

# Section 15. Regulatory Information

Reporting in this section is based on ingredients disclosed in Section 2

US Regulations

Federal Clean air act (CAA) 112 accidental release prevention: Butane

Clean air act (CAA) 112 regulated flammable substances: Isobutane, Propane, Butane CERCLA: Hazardous substances.: Isobutane, Propane

State New Jersey: Isobutane, Propane, Butane Massachusetts spill list: Isobutane, Propane, Butane

Massachusetts RTK: Isobutane, Propane, Butane Pennsylvania RTK: Isobutane, Propane, Butane

This product is not subject to the reporting requirements under California's Proposition 65.

Registered Product Not applicable.

Information

Canadian Regulations

WHMIS Classification CLASS A: Compressed gas. CLASS B-5: Flammable aerosol.

WHMIS Icon



Registered Product Not applicable. Information

Chemical Inventory Status

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Section 16. 0	Other Information	
Other Special Considerations	Not available.	
Version	0.01	

#### Notice to Reader

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.



Windex Powerized Glass Cleaner (RTU)

HMIS NFPA		NFPA	Personal protective equipment
Health	0	0	None Required
Fire Hazard	1 1	1	Matte I/shanad
Reactivity	0	0	D 11. 14. 0005 05

Version Number: 3

Preparation date: 2005-05-20

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Windex Powerized Glass Cleaner (RTU)

MSDS #:

126011004

Product code:

90122, 90135, 90139, 90940, CB006722, CB807701, 3694044, 3694052

Cleaning product.

Manufacturer, importer, supplier:

Consumer Branded Professional Products, Div.

JohnsonDiversey, Inc.

Recommended use:

8310 16th Street

Sturtevant, Wisconsin 53177-0902

Phone: (888) 352-2249

Emergency telephone number:

1-800-851-7145 (Prosar); 1-651-917-6133 (Int'l Prosar); 01-800-710-3400 (México)

### 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

Principle routes of exposure:

Eyes, Skin, Inhalation, Ingestion.

Eye contact: Skin contact:

None known. None known.

Inhalation:

None known.

Ingestion:

None known.

# 3. COMPOSITION/INFORMATION.ON, INGREDIENTS

HAZARDOUS COMPONENTS				I DEC Dament	LC50 Inhalation
	CAS#	Weight %	LD50 Oral	LD50 Dermal	Control of the second s
Ingredient(s)			FOOD malka (rot)	12800 mg/kg (rabbit)	16000 ppm/8H (rat)
Isopropyl alcohol	67-63-0	1 - 5%	5000 mg/kg (rat)	12000 mg/kg (rabbit)	(OCCO PARTIES)

# 4. FIRST AID MEASURES

Eye contact:

Rinse with plenty of water.

Skin contact:

Rinse with plenty of water.

Inhalation:

No specific first aid measures are required. No specific first aid measures are required.

Ingestion:

None known.

**Aggravated Medical Conditions:** 

#### 5. FIRE-FIGHTING MEASURES

Sultable extinguishing media:

Dry chemical, water spray, foam, carbon dloxide.

Specific hazards:

Although this product has a flash point below 200 Deg. F, it is an aqueous solution containing an alcohol

and does not sustain combustion.

Unusual hazards:

None known

Specific methods:

No special methods required

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Extinguishing media which must not be used for safety reasons: None.

# 6. ACCIDENTAL RELEASE MÉASURES

Personal precautions:

Use personal protective equipment

Windex Powerized Glass Cleaner (RTU)

**Environmental precautions** and clean-up methods:

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

# 7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes. COMBUSTIBLE LIQUID AND VAPOR. Keep away from open flames, hot surfaces and sources of Ignition. Handle in accordance with good industrial hygiene and safety practice. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

Storage:

Keep tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Keep out of the reach of children.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

No special ventilation requirements. General room ventilation is adequate.

Personal Protective Equipment

Eye protection: Hand protection: Skin and body protection: Respiratory protection:

No special requirements under normal use conditions No special requirements under normal use conditions No special requirements under normal use conditions No special requirements under normal use conditions

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice

Ingredient(s)	CAS#	ACGIH	OSHA	Mexico
Isopropyl alcohol	67-63-0	400 ppm (STEL) 200 ppm (TWA)	980 mg/m³ 400 ppm	1225 mg/m³ (STEL) 980 mg/m³ (TWA)

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

Liquid 11,45

Appearance:

Color:

Odor:

pH:

Specific gravity: Density: VOC:

Flash point: Solubility:

0.996 0.996

Liquid

Blue

3.8 131 (°F) 55 (°C)

Ammoniacal

Soluble

**Bulk density:** 

Dilution pH: Vapor density:

Evaporation rate: Boiling point/range: Melting point/range:

Decomposition temperature: Autoignition temperature:

No information available No information available Viscosity: Partition coefficient (n-octanol/water): No information available

Solubility in other solvents:

No information available

No information available

No information available.

No information available

No information available

Not determined

Not determined

Not determined

#### 10. STABILITY AND REACTIVITY

Stability:

Polymerization:

Hazardous decomposition products:

Conditions to avoid:

The product is stable

Hazardous polymerization does not occur. None reasonably foreseeable.

Do not freeze.

# 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information:

See Section 3

Chronic toxicity:

None known

Specific effects

Carcinogenic effects: Mutagenic effects: Reproductive toxicity: None known None known None known

Target organ effects:

None known

# 12. ECOLOGICAL INFORMATION AND ASSESSED.

**Environmental Information:** 

When used for its intended purpose this product should not cause adverse effects in the environment

Oral LD50 estimated to be greater than 5000 mg/kg. Dermal LD50 estimated to be > 2000 mg/kg.

# 13. DISPOSAL CONSIDERATIONS

#### Waste from residues / unused products:

Dispose of according to all federal, state and local applicable regulations

#### 14. TRANSPORT INFORMATION

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information

### 15. REGULATORY INFORMATION

**International Inventories** 

All components of this product are listed on the following inventories: U.S.A. (TSCA).

**U.S. Regulations** 

California Proposition 65: This product is not subject to the reporting requirements under California's Proposition 65

Ingredient(s)	CAS#	MARTK:	NJRTK:	PARTK:	RIRTK:	ILRTK:	CTRTK
Hexyloxyethanol	112-25-4	-	Listed	Listed	-		7
Ammonium hydroxide	1336-21-6	Listed	Listed	Listed	-	Listed	Listed
Water	7732-18-5		-	-		-	
Isopropyl alcohol	67-63-0	Listed	Listed	Listed	Listed	Listed	Listed

A / SARA Ingredient(s)	CAS#	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Hexyloxyethanol	112-25-4	0.1 - 1.5%			Listed.
Ammonium hydroxide	1336-21-6	0.1 - 1.5%	1000	Later and the second se	Listed.
Isopropyl alcohol	67-63-0	1 - 5%	100	200	Listed.

#### SARA 311/312 Hazard Categories

N Immediate: N Y Delayed: Fire: Reactivity: N Sudden Release of Pressure: N

WHMIS hazard class: Not for sale in Canada.

Ingradiant/e)	CAS#	NPRI
Isopropyl alcohol	67.62.6	Listed

16. OTHER IN O	

Reason for revision:

Not applicable NAPRAC

None

Prepared by: Additional advice:

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

# NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

			= .		14 40/0.45
Preparer's Name Dustin Kar					
Preparer's Affiliation Cons	ultant		Phone No.	908-668-7	777
Purpose of Investigation Sc					
I. OCCUPANT: Vacant					* e-
Interviewed: YN					
Last Name:	Fi	irst Name:	And consisting and consistency of the consequence.	Many appares records and appares to the control of	
Address:					
County:					
Home Phone:	Office	Phone:		A) A(4	
Number of Occupants/perso					
2. OWNER OR LANDLO Interviewed: (Y) N	RD: (Check if sar	me as occupant	)		
Last Name: Eikhof	Fir	rst Name: To	m	and addressed in the second control of the second s	uur takah se dee muside
Address: 3121 East Main St					
County: Westchester	nation*				
Home Phone:	Office	e Phone: 914-	526-4995		
3. BUILDING CHARACT	ERISTICS				
Type of Building: (Circle a	ppropriate respons	se)			
Residential Industrial	School Church	Commercia Other:			

If the property is residentia	d, type? (Circle approprie	ite response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how many	y? <u>5</u>	
If the property is commerc	ial, type?	
Business Type(s) Fo	rmer Dollar Store/Retail	
Does it include residence	es (i.e., multi-use)? Y (t	If yes, how many?
Other characteristics:		
Number of floors 1	Build	ding age 34
Is the building insulated	YN How	air tight? Tight (Average) Not Tight
4. AIRFLOW		
Use air current tubes or tr	acer smoke to evaluate a	irflow patterns and qualitatively describe:
Airflow between floors		
De la Contraction de la Contra	A many or service and a servic	and the same of th
Airflow near source		
	ughout the unit. Airflow wit	hin the unit varies based on the locations of the air ducts
and openings. Air can flow b	etween units above ceiling	/partition walls.
	// All (all A P V	
Action will not deliberate processing and additional and additional and additional and additional and additional and additional additional and additional		
me i		
Outdoor air infiltration	mal Doors and windows a	re properly sealed. The only source of outdoor air is
when customers open the ma	ain entrance door on the so	outh side of the unit, however, this unit currently is
vacant/unoccupied.		
vacanti unoccupiou.		
Infiltration into air ducts		
The air conditioning unit was	not operating. The forced	hot air furnace locally circulates air into a return vent and
out of supply vents.	A Maria Company of the Company of th	

5. BASEMENT AND CONSTRU	ICTION CHARA	CTERISTICS	(Circle all that ap	oly)
a. Above grade construction:	wood frame	concrete	stone (	brick
b. Basement type:	full	crawlspace	slab	other None
c. Basement floor:	concrete	dirt	stone	other None
d. Basement floor:	uncovered	covered	covered with _	lone
e. Concrete floor:	unscaled	sealed	sealed with	
f. Foundation walls:	poured	(block)	stone	other
g. Foundation walls:	unsealed	sealed	sealed with Pa	aint
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finish	ed
j. Sump present?	Y /(N)			
	N (not applicable	1		
Basement/Lowest level depth belo	w grade: 0	_(feet)		
Identify potential soil vapor entry	points and appro	oximate size (e.	g., cracks, utility	ports, drains)
Utility penetrations and slab joints.			a = 100 cm	
THE COLUMN TWO IS NOT THE PROPERTY OF THE PROP				
		de des explications à communique que many a replica que p		
6. HEATING, VENTING and A	ID CONDITION	ING (Circle all	that apply)	
				v)
Type of heating system(s) used in	this bunding: (c)			,
Hot air circulation	Heat pump		water baseboard liant floor	
Space Heaters Electric baseboard	Stream radia Wood stove		door wood boiler	Other
	Tr doct of the			
The primary type of fuel used is:				
Natural Gas	Fuel Oil		rosene	
Electric	Propane	Sol	ar	
Wood	Coal			
Domestic hot water tank fueled k	y: Natural Gas		Andrews A.	
Boiler/furnace located in: Ba	asement Out	1	in Floor	Other

Air	conditionir	ıg:
-----	-------------	-----

-	-
Central	Air
Comman	All

Window units Open Windows

None

4

Are there air distribution ducts present?



Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

there is a coi liagram.	d all Lettin and the education of gard	
Air ducts are	in good condition and joints appear tight. A cold air r	eturn is located in the central portion of the
The second secon	supply vents are distributed throughout the retail spac	
	A CONTRACTOR OF THE PROPERTY O	
7. OCCUP	ANCY	
Is basement	lowest level occupied? Full-time Occas	ionally Seldom Almost Never
Level	General Use of Each Floor (e.g., familyroon	n, bedroom, laundry, workshop, storage)
AND SOLVE SOLVE		
Basement		
1 <sup>st</sup> Floor	Former Dollar Store/Retail	
2 <sup>nd</sup> Floor		and the same of th
3 <sup>rd</sup> Floor		
4 <sup>th</sup> Floor		
8. FACTO	RS THAT MAY INFLUENCE INDOOR AIR Q	UALITY
	c an attached garage?	Y/N
	he garage have a separate heating unit?	Y/N/NA
c. Are pe stored	troleum-powered machines or vehicles in the garage (e.g., lawnmower, atv, car)	Y / N /(NA) Please specify
d. Has th	e building ever had a fire?	Y (N) When?
e. Is a ke	rosene or unvented gas space heater present?	Y/N Where?
f. Is ther	e a workshop or hobby/craft area?	Y (N) Where & Type?
g. Is ther	e smoking in the building?	Y (N) How frequently?
h. Have	cleaning products been used recently?	Y (N) When & Type?

5	
j. Has painting/staining been done in the last 6 months?	Y / Where & When?
k. Is there new carpet, drapes or other textiles?	Y/N Where & When?
I. Have air fresheners been used recently?	Y / When & Type?
m. Is there a kitchen exhaust fan?	Y / N If yes, where vented?
n. Is there a bathroom exhaust fan?	(Y) N If yes, where vented? Roof
o. Is there a clothes dryer?	Y (N) If yes, is it vented outside? Y / N
p. Has there been a pesticide application?	Y/N When & Type?
Are there odors in the building?  If yes, please describe:	y (N)
Do any of the building occupants use solvents at work? (e.g., chemical manufacturing or laboratory, auto mechanic or boiler mechanic, pesticide application, cosmetologist	Y (N) r auto body shop, painting, fuel oil delivery
If yes, what types of solvents are used?	and the same of th
If yes, are their clothes washed at work?	Y/N
Do any of the building occupants regularly use or work at response)	t a dry-cleaning service? (Circle appropriat
	(No)
response)  Yes, use dry-cleaning regularly (weekly)  Yes, use dry-cleaning infrequently (monthly or less)	(No) Unknown
response)  Yes, use dry-cleaning regularly (weekly)  Yes, use dry-cleaning infrequently (monthly or less)  Yes, work at a dry-cleaning service	(No) Unknown
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service  Is there a radon mitigation system for the building/struct is the system active or passive?  Active/Passive  9. WATER AND SEWAGE	(No) Unknown
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service  Is there a radon mitigation system for the building/struct is the system active or passive?  Active/Passive  9. WATER AND SEWAGE  Water Supply:  Public Water  Drilled Well  Dri	No Unknown cure? Y (N) Date of Installation:
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service  Is there a radon mitigation system for the building/struct Is the system active or passive? Active/Passive  9. WATER AND SEWAGE  Water Supply: Public Water Drilled Well Dri	No Unknown  Fure? Y N Date of Installation:  iven Well Dug Well Other:  ach Field Dry Well Other:

c. Responsibility for costs associated with reimbursement explained? Y/N

d. Relocation package provided and explained to residents?

Y/N

### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: None

First Floor: See Figure 1

### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Figure 2

### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae 2000 Photoionization Detector

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (ppm)	Photo ** Y/N
	None				0.0	
						0750000
	- III - IIII - III					
		1				
		1				
				Additional distriction of the second		
	Control of the Contro					
						-
						-
				and the second s		
					Marie	
						minute and an article and a second a second and a second
						a manager and a second
	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1					
		-				
		-		The state of the s		

Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
 \*\* Photographs of the front and back of the product containers can replace hand written list of chemical ingredients. However, the photographs much be of good quality and ingredient labels must be legible.

### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's NameDustin Kap	son	Date/Time P	repared 2-11-10/2:45 pm
Preparer's Affiliation Consu	ultant	Phone No	908-668-7777
Purpose of Investigation_So	il Vapor Intrusion Investigation		and the second s
1. OCCUPANT:			
Interviewed: (Y) N			
Last Name; Yarrobino	First Name:	Ronald	
Address: 138 Wildey Street	Tarrytown, New York		Committee of the Commit
County: Westchester			
Home Phone:	Office Phone: 97	14-769-5045	
	as at this location 0-25 A		
2. OWNER OR LANDLO	RD: (Check if same as occupat	nt)	
Interviewed: (Y) N			
Last Name: Eikhof	First Name:	Tom	
Address: 3121 East Main St	reet, Suite 100, Mohegan Lake,	New York	Parameter speece sales of the s
County: Westchester	and the second s		
Home Phone:	Office Phone: 91	4-526-4995	- 12-10-10-10-10-10-10-10-10-10-10-10-10-10-
3. BUILDING CHARACT  Type of Building: (Circle a)			
Residential		ial)Multi-use	
Industrial			w. secondar

If the property is residenti	al, type? (Circle appropris	ate response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how man	y? <u>5</u>	
If the property is commercial	ial, type?	
Business Type(s) La	undromat/Retail	
Does it include residence	ces (i.e., multi-use)? Y (	If yes, how many?
Other characteristics:		
Number of floors 1	Build	ling ago 34
Is the building insulated	N How	air tight? Tight Average Not Tight
Airflow between floors		irflow patterns and qualitatively describe:
	the drying machine rooms	nin the unit varies based on the locations of air ducts and is inward toward the drying machines. Air can flow
Outdoor air infiltration		
mer was was, successful with the first the second state of the contract of the second state of the second		re properly sealed. The only source of outdoor air is
when customers open the ma	ain entrance door on the so	uth side of the unit.
Infiltration into air ducts The air conditioning unit was out of supply vents.	not operating. The forced h	not air furnace locally circulates air into a return vent and

5. BASEMENT AND CONSTRU	CTION CHARA	CTERISTICS	(Circle all that ap	oply)
a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other None
c. Basement floor:	concrete	dirt	stone	other None
d. Basement floor:	uncovered	covered	covered with_	None
e. Concrete floor:	unscaled	sealed	scaled with	
f. Foundation walls:	poured (	block	stone	other
g. Foundation walls:	(unsealed)	sealed	sealed with	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finish	ed
j. Sump present?	Y (N)			
	N)/ not applicable			
Basement/Lowest level depth below	v grade: 0	_(feet)		
Identify potential soil vapor entry  Rear closet/utility room has minor cra				
Slab joints are present.	madady all tribilly perfect = a this distribution of the properties the state of th		and a responsibility for the contract from the contract of the	egyppage-oppose mikelik grim lake a land and and a standard a standard grip of time. See a law law
6. HEATING, VENTING and AI  Type of heating system(s) used in t  Hot air circulation  Space Heaters  Electric baseboard		cle all that app Hot		y) Other
The primary type of fuel used is:				
Natural Gas Electric Wood	Fuel Oil Propane Coal	Ker Sola	osene nr	
Domestic hot water tank fueled by	: Natural Gas	المعاولة ال المعاولة المعاولة ال	TO JOHN STATE OF THE STATE OF T	
Boiler/furnace located in: Bas	ement Outd	oors (Mai	n Floor	Other

Air	conditioning:	
CALL	Committeenings	



Window units Open Windows

None

4

Are there air distribution ducts present?



Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

magram.			*
Air ducts are	in good condition and joints appear tight. A cold air	return is located in the cent	ral portion of the
building and s	supply vents are distributed throughout the retail spa	ace. See Figure 1.	AND STATE OF THE S
Angenningan viva arminim service of Suphan Brown of the Armed Const.	And the second s	We are the second of the secon	a da manamana a un acada a desa desa desa desa desa desa desa
7. OCCUPA	ANCY		
Is basement/	lowest level occupied? Full-time Occa	sionally Seldom	Almost Never
Level	General Use of Each Floor (e.g., familyroo	om, bedroom, laundry, wo	orkshop, storage)
Basement			
1 <sup>st</sup> Floor	Laundromat/Retail		
2 <sup>nd</sup> Floor	environmental in a service of the contract of		
3 <sup>rd</sup> Floor	A CONTRACTOR OF THE CONTRACTOR	the state of the s	ē.
4 <sup>th</sup> Floor			
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR	QUALITY	
a. Is there	an attached garage?	YN	
b. Does th	e garage have a separate heating unit?	Y/N/HA)	
c. Are pet stored i	roleum-powered machines or vehicles in the garage (e.g., lawnmower, atv, car)	Y / N /(NA) Please specify	
d. Has the	building ever had a fire?	Y/N When	?
c. Is a ker	osene or unvented gas space heater present?		
f. Is there	a workshop or hobby/craft area?	X	2?
g. Is there	e smoking in the building?		y?
h. Have c	leaning products been used recently?	Y/N When & Typo	? Constantly - Laundry Detergents

i. Have cosmetic p	roducts been used	recently?	Y(N)	When & Type	?
		5			
j. Has painting/sta	ining been done it	the last 6 mon	ths? Y/W	Where & Whe	n?
k. Is there new car				Where & Whe	en?
l. Have air freshen	ers been used rec	ently?	Y/(1)	When & Type	?
m, Is there a kitch	en exhaust fan?		Y(N)	If yes, where	vented?
n. Is there a bath	room exhaust fan	•	YIN	If yes, where	vented?
o. Is there a clothe	es dryer?		(Y)/N	If yes, is it ver	nted outside (Y)/ N
p. Has there been	a pesticide applica	ation?	Y 16	When & Type	?
Are there odors in	the building?	lry Detergents	(Y)/ N		ng a sala ng kana da sa a sa a sa a sa a sa a sa a sa
Do any of the building (e.g., chemical manuf boiler mechanic, pest	facturing or laborat	ory, auto mecha osmetologist	me or auto oody		, fuel oil delivery,
	thes washed at wo		Y/N		
Do any of the buildi	ng occupants regi	ilarly use or wo	ork at a dry-cle	aning service?	(Circle appropriate
Yes, use dry-	-cleaning regularly -cleaning infrequer a dry-cleaning ser	itly (monthly or	less)	(No) Onknown	
Is there a radon mit Is the system active	tigation system for		tructure? Y/((	Date of Instal	llation:
9. WATER AND SI	EWAGE				
Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other:
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other:
10. RELOCATION	INFORMATION	V (for oil spill r	esidential emer	gency)	
	ons why relocation			V	
	oose to: remain in		ate to friends/fa	mily reloc	cate to hotel/motel

- c. Responsibility for costs associated with reimbursement explained? Y/N
- d. Relocation package provided and explained to residents?

Y/N

### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: None

First Floor: See Figure 1

### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Figure 2

### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used:	MiniRae 2000 Photoionization Detector	_

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading	Photo ** Y/N
Throughout	Laundry Detergents	1 Gal.	ď	See MSDS Attached***	0.0	N
Throughout	Clorox Bleach	1 Gal.	U	See MSDS Attached	0.0	N
		-				
	Market Control of the					
	Name					
	And the second s					
inclinate for any ve Hilliam						
			- Constitution of the Cons			
		-				

Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
 Photographs of the front and back of the product containers can replace hand written list of chemical ingredients. However, the photographs much be of good quality and ingredient labels must be legible.
 Various detergents are utilized in the laundromat by patrons on a daily basis.

Back to: Laundry Detergent | Residential Home

### MATERIAL SAFETY DATA SHEET

**Restore Products Company** 

Date of Issue:

August 3, 1997

5170 North St. Albans

Shoreview, Minnesota 55126

Product Name: LAUNDRY DETERGENT

Phone: 651,765,0137 Facsimile: 651,765,0029

NFPA HAZARD IDENTIFICATION SYSTEM

HAZARD RATINGS:

0=Least

1=Slight HEALTH =

2=Moderate

FIRE =

3=High

REACTIVITY = EQUIPMENT =

4=Severe

SECTION I - PRODUCT DESCRIPTION

PRODUCT NAME:

LAUNDRY DETERGENT CONCENTRATE

**GENERAL DESCRIPTION:** 

Heavy Duty Detergent

CHEMICAL NATURE:

Natural Surfactant/Solvent/Builder Blend

PRODUCT CODE:

608

NE

SECTION II - PRODUCT COMPOSITION (OSHA Listed Potentially Hazardous Ingredients)

Contains no hazardous ingredients.

SECTION III - PHYSICAL PROPERTIES

**BOILING RANGE:** 

 $1.12 \pm 2\%$ SPECIFIC GRAVITY: (Water = 1)

VAPOR PRESSURE AT 20C: (MM of HG)

Equivalent to water

VAPOR DENSITY: (Air = 1)

Equivalent to water

SOLUBILITY IN WATER: SOLUBILITY IN SOLVENT: Infinite Miscible

**EVAPORATION RATE:** 

NE Clear slightly viscous liquid

APPEARANCE: ODOR:

Citrus

PH RANGE:

 $8.9 \pm .2$ 

SECTION IV - FIRE AND EXPLOSION DATA

LOWER FLAMMABILITY LIMITS: (% In Air)

Not pertinent Not pertinent

FLASH POINT: (And Method) FLAMMABILITY CLASSIFICATION:

Not flammable

UNUSUAL FIRE/EXPLOSION HAZARDS:

Known known

RECOMMENDED EXTINGUISHING MEDIA: SPECIAL FIRE FIGHTING PROCEDURES:

Water spray, carbon dioxide, dry chemical powder

DURES: None known

### SECTION V - HEALTH INFORMATION

ACUTE TOXICITY: Non-toxic

THRESHOLD LIMIT VALUE: No limit known

EFFECTS OF OVEREXPOSURE: Ingestion: Irritation of the stomach can develop following ingestion. Eye contact: This material will cause eye irritation. Skin contact: Dermatitis and skin sensitization can develop in extremely sensitive people. Skin absorption: Systemically toxic concentrations will probably not be absorbed through the skin in humans. Inhalation: None known

OTHER EFFECTS OF OVER EXPOSURE: None known

### **EMERGENCY FIRST AID PROCEDURES:**

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. If irritation persists have eyes examined and treated by medical personnel.

SKIN CONTACT: If irritation occurs remove contaminated clothing and footwear. Wash material off the skin with plenty of soap and water. Wash clothing and footwear before reuse.

INHALATION: No treatment needed.

INGESTION: Drink water to dilute. Induce vomiting only if advised by physician or poison control center. Call poison control center.

### SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal conditions CONDITIONS TO AVOID: None known

INCOMPATIBILITY WITH OTHER MATERIALS: None known HAZARDOUS DECOMPOSITION MATERIALS: None known

HAZARDOUS POLYMERIZATION: Will not occur

### SECTION VII - FIRE AND SPILL/LEAK PROCEDURES

IN CASE OF FIRE: No special precautions

PROCEDURES IF MATERIAL IS SPILLED OR RELEASED: Where possible flush down drain to waste treatment sewer, otherwise on small spills, use chemical absorbent and sweep up. For large spills, contain and collect.

WASTE DISPOSAL PROCEDURES: Dispose of this product or its residues in accordance with all local, state and federal requirements.

### SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: None required for recommended use

LOCAL EXHAUST: Normal room ventilation

PROTECTIVE GLOVES AND CLOTHING: None required under normal conditions.

EYE PROTECTION: None required for recommended use. If need is determined use safety glasses or face shield.

OTHER PROTECTIVE EQUIPMENT: As determined by or recommended by federal state or local regulations.

### SECTION IX - ADDITIONAL PRECAUTIONS

No additional precautions.

The information herein is presented in good faith and believed to be correct as of the date hereof. However, Restore Products Company makes no representation as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purposes prior to use.

No representation or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature with respect to the product or to the information herein is made hereunder.

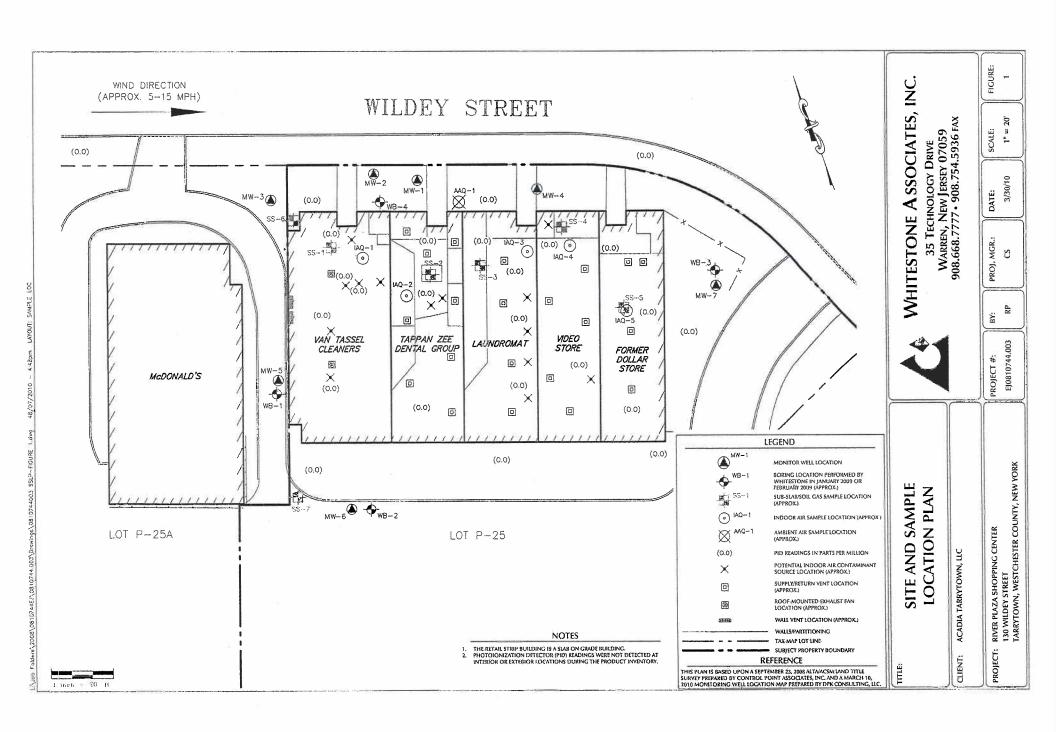
Restore Products Company shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or the use of or reliance upon information contained herein.

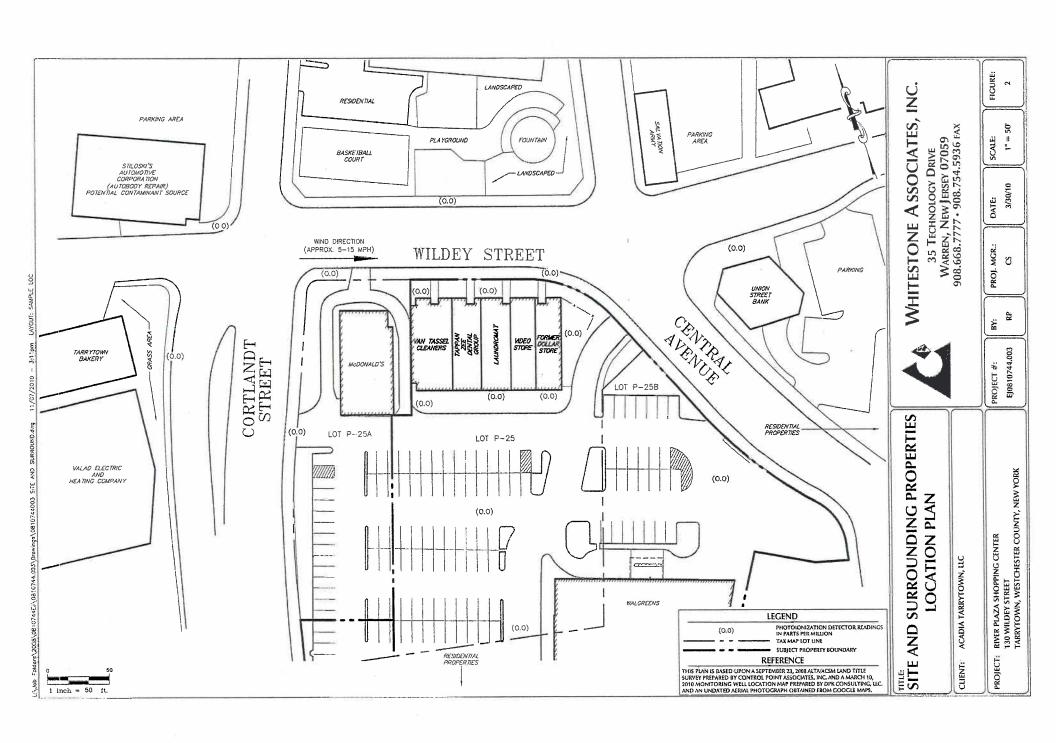


## **The Clorox Company** 1221 Broadway Oakland, CA 94612 Tel. (510) 271-7000

### **Material Safety Data Sheet**

	BULAR-BLEACH		TIC OUR ODINE ODOR
Description: CLEAR, LIGH		WITH A CHARACTERIS	TIC CHLORINE ODOR
Other Designations	Distr	ibutor	Emergency Telephone Nos.  For Medical Emergencies call:
Clorox Bleach EPA Reg. No. 5813-50	1221 B	es Company roadway CA 94612	(800) 446-1014 For Transportation Emergencies Chemtrec (800) 424-9300
II Health Hazard Data		III Hazardous I	ngredients
DANGER: CORROSIVE. May cause severe irritation or dan skin. Vapor or mist may irritate, Harmful if swallowed. Keep children.	out or reach or	Ingredient Sodium hypochlorite CAS# 7681-52-9	Concentration Exposure Limit 6.15% Not established
Some clinical reports suggest a low potential for sensitization exposure to sodium hypochlorite if skin damage (e.g., irritatio exposure. Under normal consumer use conditions the likelih health effects are low.	ood of any adverse	Sodium hydroxide CAS# 1310-73-2	<1% 2 mg/m <sup>3:1</sup> 2 mg/m <sup>3;2</sup>
Medical conditions that may be aggravated by exposure to hi of vapor or mist: heart conditions or chronic respiratory probl asthma, emphysema, chronic bronchitis or obstructive lung d	ems such as		
FIRST AID:  Eye Contact: Hold eye open and rinse with water for 15-20 n contact lenses, after first 5 minutes. Continue rinsing eye. C	all a physician.	<sup>1</sup> ACGIH Threshold Limi	it Value (TLV) - Ceiling
<u>Skin Contact</u> : Wash skin with water for 15-20 minutes. If Irril a physician.			posure Limit (PEL) – Time Weighted Average (TWA)
ingestion: Do not induce vomiting. Drink a glassful of water. develops, call a physician. Do not give anything by mouth to person.	an unconscious		in this product are on the IARC, NTP or OSHA
Inhalation: Remove to fresh air. If breathing is affected, call	a physician.	carcinogen lists.	
IV Special Protection and Precautior	18	V Transportat	ion and Regulatory Data
No special protection or precautions have been identified for under directed consumer use conditions. The following recogiven for production facilities and for other conditions and situities increased potential for accidental, large-scale or prolonged Hygienic Practices: Avoid contact with eyes, skin and clothinafter direct contact. Do not wear product-contaminated cloth periods.  Engineering Controls: Use general ventilation to minimize exmist.	mmendations are uations where there d exposure. ng, Wash hands ing for prolonged	Sections 311/312 and of This product does cont hypochiorite <7.35%) t	CERCLA: Bottled product is not reportable under contains no chemicals reportable under Section 313. ain chemicals (sodium hydroxide <0.2% and sodium that are regulated under Section 304/CERCLA.  All components of this product are on the U.S. TSCA
Personal Protective Equipment: Wear safety glasses. Use rigid of the glasses of t	rubber or nitrile		
KEEP OUT OF REACH OF CHILDREN			
VI Spill Procedures/Waste Disposal		VII Reactivity	
Spill Procedures: Control spill. Containerize liquid and use a residual liquid; dispose appropriately. Wash area and let dry multiple products, responders should evaluate the MSDS's cincompatibility with sodium hypochlorite. Breathing protection enclosed, and/or poorly ventilated areas until hazard assess Waste Disposal: Dispose of in accordance with all applicable.	n. For spills of of the products for on should be worn in ment is complete.	Reacts with other hous	se and storage conditions. Strong oxidizing agent, sehold chemicals such as toilet bowl cleaners, rust dies or ammonia containing products to produce hazardoe and other chlorinated species. Prolonged contact wit g or discoloration.
local regulations.		IN Division D	
VIII Fire and Explosion Data		IX Physical Da	
		I	approx. 212°F/100°C





### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's NameDust	in Kapson		_Date/Time Prepared	1-11-11/1:30 pm
	Consultant			
Purpose of Investigatio	n Post-Mitigation Indoo	or Air Sampling		
1. OCCUPANT: Vac	ant			
Interviewed: Y/N				
Last Name:	F	irst Name:		*****
Address:				accase composition
County:				
4	Office			
Number of Occupants/	persons at this location	Ag	e of Occupants	
2. OWNER OR LAN	DLORD: (Check if sa	me as occupant	)	
Interviewed: Y/N				
	Fi			
Address: 3121 East M	lain Street, Suite 100, Mo	ohegan Lake, N	ew York	a discussion in the first of th
County: Westchester				
Home Phone:	Offic	ce Phone: 914	-526-4995	
3. BUILDING CHAI	RACTERISTICS			
Type of Building: (C	ircle appropriate respon	rse)		
Residential	School		Multi-use	

Ranch		ate response)
Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how many	? 5	
If the property is commerci	al, type?	
Business Type(s) For	mer Dentist's Office	
Does it include residence	es (i.e., multi-use)? Y/	If yes, how many?
Other characteristics:		
Number of floors 1	Buil	ding age 35
Is the building insulated?	Ø/N How	air tight? Tight / Average / Not Tight
Airflow between floors		airflow patterns and qualitatively describe:
A state		A Company of the Comp
Airflow near source	ughout the unit. Airflow w en units above ceiling/par	ithin the unit varies based on the locations of air ducts and
Airflow near source The source potentially is through openings. Air can flow between the control of the control	ughout the unit. Airflow we en units above ceiling/par mal. Doors and windows	ithin the unit varies based on the locations of air ducts and tition walls.

5. BASEMENT AND CONSTRU	CTION CHARA	ACTERISTICS	(Circle all that ap	ipiy)
a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other None
c. Basement floor:	concrete	dirt	stone	other None
d. Basement floor:	uncovered	covered	covered with	None
e. Concrete floor:	unsealed	sealed	sealed with	
f. Foundation walls:	poured	block	stone	other
g. Foundation walls:	unscaled	sealed	sealed with	aras y spania spani
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finish	ed
j. Sump present?	Y /(N)			
	N /(not applicable			
Electrical outlets are located in the flo are throughout. Slab joints are presented in the floor.		ormer patient roo	oms and utility pene	etrations
6. HEATING, VENTING and AI  Type of heating system(s) used in t  Hot air circulation  Space Heaters	his building: (ci Heat pump Stream radia	rcle all that app Hot tion Rad	oly – notě primar water baseboard iant floor	
Electric baseboard	Wood stove	Out	door wood boiler	Other
The primary type of fuel used is:				
Natural Gas Electric Wood	Fuel Oil Propane Coal	Ker Sola	osene ur	
Domestic hot water tank fueled by	:Natural Gas	· · · · · · · · · · · · · · · · · · ·		
Boiler/furnace located in: Bas	ement Out	loors (Mai	n Floor	Other

Air conditioning	Air	con	ditio	ning	
------------------	-----	-----	-------	------	--



Window units Open Windows

None

4

Are there air distribution ducts present?

Ø/N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

				tral portion of the
building and st	ipply vents are distributed throughout the ret	and you are the state of the st		
And the second s				
				ngay ngay ngay ngay ngay ngay ngay ngay
o cover i v	V CON			
OCCUPAN		Occasionally	Seldom	Almost Never
basement/lo	west level occupied.	0.4.0		
<u>evel</u>	General Use of Each Floor (e.g., famil	lyroom, bearoo	m, laundry, w	orkshop, storage)
asement				
<sup>st</sup> Floor	D ( 11 Office)			
<sup>id</sup> Floor				<b>-</b>
rd Floor	Account to and many facilities and a second			<del>-</del>
<sup>th</sup> Floor				-
	TOTAL TOTAL OF THE CORD	ATD OTLAT PTV		
	THAT MAY INFLUENCE INDOOR A	MK QOMINI I	_	
a. Is there a	n attached garage?		Y/(§)	
b. Does the	garage have a separate heating unit?		Y/N/NA	
c. Are petro	leum-powered machines or vehicles the garage (e.g., lawnmower, atv, car)		Y/N/NA Please specify	
d. Has the b	ouilding ever had a fire?		Y/N When	?
e. Is a keros	sene or unvented gas space heater prese	nt?	Y/N Where	2?
f. Is there a	workshop or hobby/craft area?	Y /(N)	Where & Typ	e?
g. Is there s	moking in the building?	Y/(N)	How frequent	ly?
				3?

i. Have cosmetic products been used recently?	Y /🕥	When & Type?	- company
5			
j. Has painting/staining been done in the last 6 months?	Y/N	Where & When	NOTE: THE RESIDENCE AND ADDRESS OF THE PARTY AND ADDRESS OF THE PARTY AD
k. Is there new carpet, drapes or other textiles?	Y / 🔃	Where & When	1?
l. Have air fresheners been used recently?	Y (N)	When & Type?	
m. Is there a kitchen exhaust fan?	YN	If yes, where ve	ented?
n. Is there a bathroom exhaust fan?	Øи	If yes, where v	ented? Roof
o. Is there a clothes dryer?	Y /(\b)	If yes, is it ven	ted outside? Y / N
p. Has there been a pesticide application?	Y /(N)	When & Type?	
Are there odors in the building?  If yes, please describe:	Y/(0)		
If yes, what types of solvents are used? Former use of x-re			
If yes, are their clothes washed at work?	Y/N		
Do any of the building occupants regularly use or work at response)	a dry-clea	aning service? (	(Circle appropriate
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service		Unknown	
Is there a radon mitigation system for the building/structule.  Is the system active or passive?  Active Passive	are?⊗/N	Date of Install	lation: July 2010
9. WATER AND SEWAGE			58
Water Supply: Public Water Drilled Well Driv	ven Well	Dug Well	Other:
Sewage Disposal: Public Sewer Septic Tank Lea	ch Field	Dry Well	Other:
10. RELOCATION INFORMATION (for oil spill residen	ıtial emer	gency)	
a. Provide reasons why relocation is recommended:	NA		
b. Residents choose to: remain in home relocate to	friends/far	nily reloc	ate to hotel/motel

- c. Responsibility for costs associated with reimbursement explained?
- d. Relocation package provided and explained to residents?

Y/N

Y/N

б

### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: None

First Floor: See Figure 1

### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Figure 2

### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae 2000 Photoior	nization Detector
--	-------------------

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading	Photo ** Y/N
	None				0.0	
						-
			A SAME THE REAL PROPERTY AND A SAME THE PROPERTY AND A SAME THE REAL PROPERTY AND A SAME THE PROPERTY AND A SAME THE PROPERTY AND A		and the section of th	
					4	
						-
					Description of the Control of the Co	
				di erren aria antara		
			1,			-
			1			
			1			

Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
 Photographs of the front and back of the product containers can replace hand written list of chemical ingredients. However, the photographs much be of good quality and ingredient labels must be legible.
 \*\*\* Chemical present in product and detected in indoor air sample at a concentration exceeding the RDL.

	4.15	ANIAIN/010				<u>i</u>		1.01.					3 1	<b>1</b>
		ANALYSIS	PAGE	of_ <b>2</b>	Date Re	ec'd in Lab	: <i>J</i>	119/10	)	Δ	LPHA	Job#	100	42 V
ANALY	CHAIN OF CUSTO	Project Information	A TOP A		Repor	t Informa	tion - E	Data Deli	verable	es l	Billing II	nforma	ition	
320 Forbes Blvd, Ma FEL: 508-822-9300	nsfield, MA 02048 FAX: 508-822-3288	Project Name: River	Plaza Shoa	in Coale	□ FAX	*				×	Same as	s Client	info PO#:	
Client Information		Project Location: Tar			UADE		cker.	•						
Client: Latherto	s loss Assacratos		744.003		] (	(Default based	on Regula	atory Criteria I	ndicated)	_				
						ther Forma AIL (standa		eport)		- 1	Regulate	ory Re	quirements/	Report Lim
Warren, NJ 87059 ALPHA Quote #:						itional Deli	verables			_	tate/Fed	_	rogram	Criteria
	668 - 7777	Turn-Around Time			Report	to: (if different t	than Project N				υ¥	DE	4 DOH	,
	754- 5936					Daz.	ח א	-desar	100					
	ewhitestive asso		SH (only confirmed if pre-ap	proved!)							AN	IALYS	IS	
These samples have	e been previously analyzed by	Alpha Date Due: 200	Time:			91	-			/	///	//	///	
Other Project Sp	pecific Requirements/	Comments:								/5/	/ / /	//	///:	
										10/		ES	6/-	
	A	ll Columns Be	low Mus	st Be	Fille	ed O	ut			Ap		8 / K	o /	
ALPHA Lab ID (Lab Use Only)	Sample ID	Date   Start Time   Er	ection Initial	Final	Sample Matrix*	Sampler's Initials	Can Size	ID ID	- Flow	70-14 by 1	APH SIM FIXED S	70-134 10-47	Sample Con	nments (i.e. Pi
578.1	55-1		859 28.5	l,o	SV	DK		16870	037	X				
2	55-2		902 30.0	7.5	SV	DK	64	1589 0	103	X				
3	55-3		905 27.5	1.5	sv	- DK	66	1529 08	784	χ				
¥	SS-4		904 29.0	1.0	SV	DK		975 0	- 1	Υ				
7	\$\$ - \$		911 29.0	1.5	sv	DN		1612 01		Y				
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Page 39 of 39

APPENDIX J
Sub-Slab Depressurization
System Specification Sheets



Made in USA with US and imported parts.

HS fans offer a proven solution

for tough radon mitigation jobs, providing up to 25 times the suction of inline tube fans to

deal with sand, tight soil or clay

sub-slab material.

# High Suction Series

by RadonAway

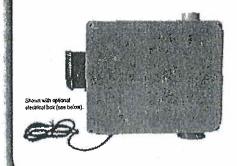


Radon Fans

FEATURES

- Internal condensate bypass
- Brackets for vertical mounting indoors or outdoors
- Inlet: 3.0" PVC / Outlet: 2.0" PVC
- · Weight: 18 lbs.
- · Size: 15.5"Wx13.3"Hx8.2"D
- Warranty: 1 year
   (3-year option available)

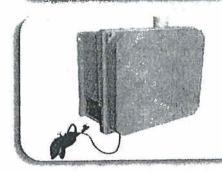
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Fan Specifications

		Man			c Pres	C		
Model	Watts	Max. Pressure "WC	0"	10"	15"	20"	25"	35"
H\$2000	150-270	118	110	72	40	• • • •		
HS3000	105-195	27	40	33.	30	23	18	-
HS5000	180-320	50	53	47	42	38	34	24

Each fan includes: 6ft 18 ga power cord with 3 prong plug. Electrical box and switch sold separately (see below).



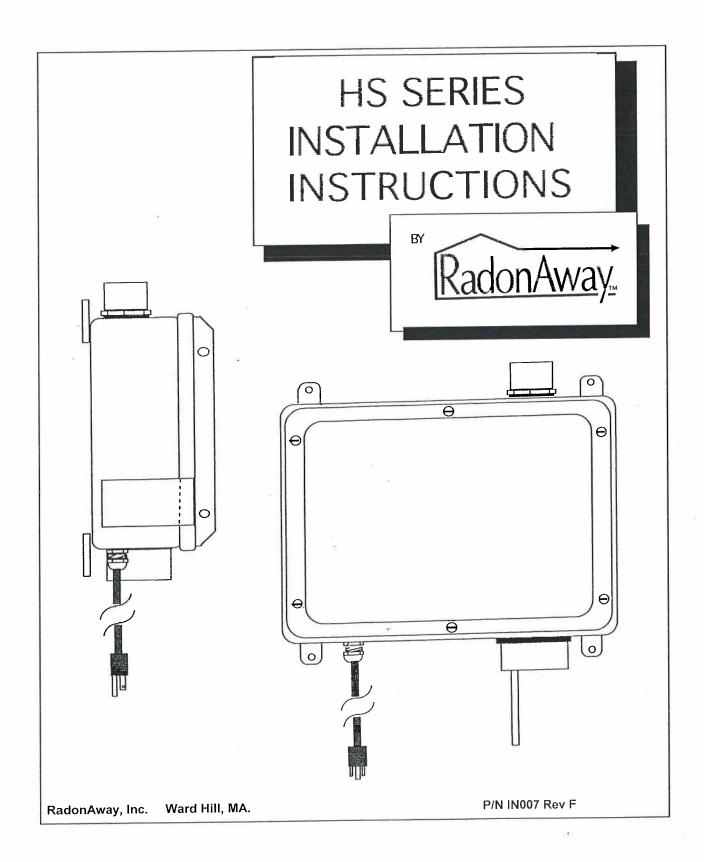
# Fan Pricing (call for full catalog)

Model	P/N				
HS2000	23004-1				
HS3000	23004-2				
H\$5000	23004-3				



### Accessories for HS Series

ltem	P/N
Optional 3-year Warranty	HS 3YR
2" Schedule 40 Vent Muffler	24002
Switched Electrical Box (no power cord)	20003
Magnehelic Manometer 0-50" WC	50001-2
2" x 2" Flex Coupling (black)	79020
2" x 3" Flex Coupling (black)	79027
3" x 3" Flex Coupling (white)	79037
3" x 3" Flex Coupling (black)	79010





# RadonAway Ward Hill, MA. HS Series Fan Installation Instructions

# Please Read and Save These Instructions.

# DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

- 1. **WARNING!** Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible or flammable materials.
- 2. **WARNING!** Do not use fan to pump explosive or corrosive gases.
- WARNING! Check voltage at the fan to insure it corresponds with nameplate.
- 4. WARNING! Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
- 5. **NOTICE!** There are no user serviceable parts located inside the fan unit. **Do NOT attempt to open.** Return unit to the factory for service.
- 6. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.
- 7. **WARNING!** In the event that the fan is immersed in water, return unit to factory for service before operating.
- 8. **WARNING!** Do not twist or torque fan inlet or outlet piping as Leakage may result.
- WARNING! Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.

INSTALLATION INSTRUCTIONS (Rev F) for DynaVac High Suction Series

HS2000 p/n 23004-1 HS3000 p/n 23004-2 HS5000 p/n 23004-3

### 1.0 SYSTEM DESIGN CONSIDERATIONS

### 1.1 INTRODUCTION

The DynaVac is intended for use by trained, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of the DynaVac. This instruction should be considered as a supplement to EPA standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

### 1.2 ENVIRONMENTALS

The DynaVac is designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the DynaVac should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F. The DynaVac is thermally protected such that it will shut off when the internal temperature is above 104 degrees F. Thus if the DynaVac is idle in an area where the ambient temperature exceeds this shut off, it will not restart until the internal temperature falls below 104 degrees F.

### 1.3 ACOUSTICS

The DynaVac, when installed properly, operates with little or no noticable noise to the building occupants. There are, however, some considerations to be taken into account in the system design and installation. When installing the DynaVac above sleeping areas, select a location for mounting which is as far away as possible from those areas. Avoid mounting near doors, fold-down stairs or other uninsulated structures which may transmit sound. Insure a solid mounting for the DynaVac to avoid structure-borne vibration or noise.

The velocity of the outgoing air must also be considered in the overall system design. With small diameter piping, the "rushing" sound of the outlet air can be disturbing. The system design should incorporate a means to slow and quiet the outlet air. The use of the RadonAway Exhaust Muffler, p/n 24001, is strongly recommended.

### 1.4 GROUND WATER

Under no circumstances should water be allowed to be drawn into the inlet of the DynaVac as this may result in damage to the unit. The DynaVac should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the DynaVac with water in installations with occasional high water tables.

In the event that a temporary high water table results in water at or above slab level, water will be drawn into the riser pipes thus blocking air flow to the DynaVac. The lack of cooling air will result in the DynaVac cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the DynaVac be disconnected until the water recedes allowing for return to normal operation.

### 1.5 CONDENSATION & DRAINAGE

(WARNING!: Failure to provide adequate drainage for condensation can result in system failure and damage the DynaVac).

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation.

The use of small diameter piping in a system increases the speed at which the air moves. The speed of the air can pull water uphill and at sufficient velocity it can actually move water vertically up the side walls of the pipe. This has the potential of creating a problem in the negative pressure (inlet) side piping. For DynaVac inlet piping, the following table provides the minimum recommended pipe diameters as well as minimum pitch under several system condition. Use this chart to size piping for a system.

Pipe Diam.	Minimur	n Rise per Foo	t of Run*
	@ 25 CFM	@ 50 CFM	@ 100 CFM
4"	1/32 "	3/32 "	3/8 "
3"	1/8 "	3/8 "	1 1/2 "



\*Typical operational flow rates:

HS3000, or HS5000 HS2000 20 - 40 CFM 50 - 90 CFM

All exhaust piping should be 2" PVC.

### 1.6 "SYSTEM ON" INDICATOR

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A Magnehelic pressure gauge is recommended for this purpose. The indicator should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the gauge with water in installations with occasional high water tables.

### 1.7 SLAB COVERAGE

The DynaVac can provide coverage of well over 1000 sq. ft. per slab penetration. This will, of course, depend on the sub-slab aggregate in any particular installation and the diagnostic results. In general, sand and gravel are much looser aggregates than dirt and clay. Additional suction points can be added as required. It is recommended that a small pit (2 to 10 gallons in size) be created below the slab at each suction hole.

### 1.8 ELECTRICAL WIRING

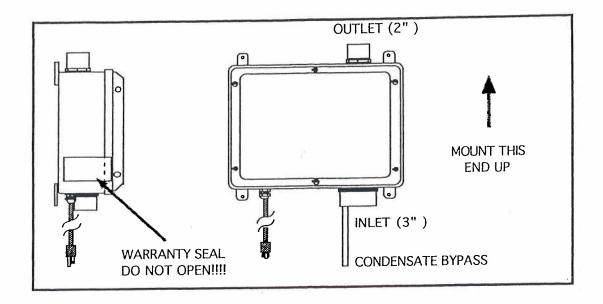
The DynaVac plugs into a standard 120V outlet. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.

### 1.8a ELECTRICAL BOX (optional)

The optional Electrical Box (p/n 20003) provides a weathertight box with switch for outdoor hardwire connection. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit.

### 1.9 SPEED CONTROLS

Electronic speed controls can NOT be used on HS series units.



### 2.0 INSTALLATION

### 2.1 MOUNTING

Mount the DynaVac to the wall studs, or similar structure, in the selected location with (4) 1/4" x 1 1/2" lag screws (not provided). Insure the DynaVac is both plumb and level.

### 2.2 DUCTING CONNECTIONS

Make final ducting connection to DynaVac with flexible couplings. Insure all connections are tight. Do not twist or torque inlet and outlet piping on DynaVac or leaks may result.

### 2.3 VENT MUFFLER INSTALLATION

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed above the roofline at the end of the vent pipe.

### 2.5 OPERATION CHECKS

 $\underline{\hspace{0.5cm}}^{\hspace{0.5cm} \text{Make final operation checks by verifying all connections are tight and }}$  leak-free.

Insure the DynaVac and all ducting is secure and vibration-free.

Verify system vacuum pressure with Magnehelic. Insure vacuum pressure is less than the maximum recommended as shown below:

 DynaVac
 HS2000
 14" WC

 DynaVac
 HS3000
 21" WC

 DynaVac
 HS5000
 40" WC

(Above are based on sea-level operation, at higher altitudes reduce above by about 4% per 1000 Feet.)
If these are exceeded, increase number of suction points.

Verify Radon levels by testing to EPA protocol.

#### Addendum

#### PRODUCT SPECIFICATIONS

Model	Maximum			al CFM vs S mmended (				Power* Watts @
	Static Suction	0"	10"	15"	20"	25"	35"	115 VAC
HS2000	18"	110	72	40	-	-		150-270
HS3000	27"	40	33	30	23	18	-	105-195
HS5000	50"	53	47	42	38	34	24	180-320

<sup>\*</sup>Power consumption varies with actual load conditions

Inlet: 3.0" PVC Outlet: 2.0" PVC

Mounting: Brackets for vertical mount

Weight: Approximately 18 lbs.

Size: Approximately 15"W x 13"H x 8"D

Minimum recommended inlet ducting (greater diameter may always be used ):

HS3000, HS5000 --- 2.0" PVC Pipe

HS2000 --- Main feeder line of 3.0" or greater PVC Pipe

Branch lines (if 3 or more) may be 2.0" PVC Pipe

Outlet ducting: 2.0" PVC

Storage temperature range: 32 - 100 degrees F.

Thermally protected

Locked rotor protection

Internal Condensate Bypass

#### IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the HS Series Fan for shipping damage within 15 days of receipt. Notify RadonAway of any damages immediately. Radonaway is not responsible for damages incurred during shipping. However, for your benefit, Radonaway does insure shipments.

There are no user serviceable parts inside the fan. Do not attempt to open. Return unit to factory for service.

Install the HS Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

#### WARRANTY

Subject to any applicable consumer protection legislation, RadonAway warrants that the HS Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of one (1) year from the date of manufacture (the "Warranty Term"). Outside the Continental United States and Canada the Warranty Term is one (1) year from the date of manufacture.

RadonAway will replace any Fan which fails due to defects in materials or workmanship. The Fan must be returned (at owner's cost) to the RadonAway factory. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway.

RadonAway is not responsible for installation, removal or delivery costs associated with this Warranty.

EXCEPT AS STATED ABOVE, THE HS SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping cost to and from factory.

RadonAway 3 Saber Way Ward Hill, MA 01835 TEL. (978) 521-3703 FAX (978) 521-3964

Record the following information for your records:

Serial No.\_\_\_\_\_\_Purchase Date\_\_\_\_\_\_



## INSTALLATION & OPERATING INSTRUCTIONS Instruction P/N IN015 Rev E FOR CHECKPOINT IIa TM P/N 28001-2 & 28001-3 RADON SYSTEM ALARM

## INSTALLATION INSTRUCTIONS (WALL MOUNTING)

Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. NOTE: The Checkpoint Ha is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.

Drill two ¼" holes 4" apart horizontally where the unit is to be mounted.

Install the two 1/4" wall anchors provided.

Hang the CHECKPOINT IIa from the two mouting holes located on the mounting bracket. Tighten the mounting

screws so the unit fits snugly and securely against the wall.

Drill a 5/16" hole into the side of the vent pipe about 6" higher than the top of the unit.

Insert the vinyl tubing provided about 1" inside the suction pipe.



Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

#### CALIBRATION AND OPERATION.

The CHECKPOINT IIa units are calibrated and sealed at the factory to alarm when the vacuum pressure falls below the factory setting and should not normally require field calibration. Factory Settings are:

28001-2 -.25" WC Vacuum 28001-3 -.10" WC Vacuum

#### To Verify Operation:

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on in about two or three seconds and the green light should go out.

#### WARRANTY INFORMATION

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective material and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs to and from factory.

Manufactured by: RadonAway Ward Hill, MA (978)-521-3703 • Adjustable zero

#### **Checkpoint II System Alarm**

#### Features:

- · Audible alarm if system shuts down
- Green and red LED readout
- Factory preset to activate at .25"WC
- Low voltage

Downloadable Installation Instructions For the Checkpoint II



#### About RadonAway

For over 20 years, RadonAway has been a pioneer of the <u>radon</u> industry and the leading manufacturer of <u>radon</u> fans and <u>radon in water</u> aeration systems.

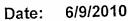
#### **Radon Information**

- Radon FAQs
- Fixing a Radon Problem
- Testing for Radon
- Radon Info Links

#### **Industry Links**

- EPA IAQ / Radon
- American Association of Radon Scientists & Technologists (AARST)
- NEHA National Radon Proficiency Program
- Radon Leaders Saving Lives
- More Links

#### Connect and Share





## BUILDING PERMIT

One Depot Plaza, Tarrytown, New York 10591-3199

## THIS PERMIT IS TO BE DISPLAYED AT THE JOB SITE AND PROTECTED FROM THE ELEMENTS

This is to certify that the permission is hereby granted for: SOIL VAPOR EXTRACTION SYSTEM

Parcel: 01/02/0000/0/P25

Owner: ACADIA-NODDLE TAR.DEV.

Located At: 124-138 WILDEY STREET **Applicant Information** 

2010-6363 **Building Permit #:** 

ACADIA-NODDLE TAR.DEV.

1311 MAMARONECK AVE **SUITE 260** 

Permit Type: INTERIOR ALTERATION

WHITE PLAINS NY 10605

All work shall be executed in strict compliance with the permit application, the provisions of the Tarrytown Building Code and Zoning Ordinance, any and all Ordinances of the Board of Trustees of the Village of Tarrytown, approved plans, the NYS Uniform Fire Prevention and Building Codes, and all other laws, rules and regulations which apply. The building permit does not constitute authority to build in violation of any federal, state, or local law other rule or regulation.

#### SPECIAL CONDITION

- ALL WORK SHALL CONFORM WITH NYSBC, PCNYS, LOCAL LAW AND NYSDEC/NYSDOH WHETHER OR NOT SPECIFICALLY STATED ON PLANS
- SEPARATE PLUMBING AND ELECTRICAL PERMITS TO BE OBTAINED
- CONTRACTOR SHALL SUBMIT CERTIFICATION LETTER THAT WORK WAS COMPLETED PER NYSBC - INSTALLATION AND TESTING OF SUB-SLAB DEPRESSURIZATION SYSTEM MUST BE CERTIFIED BY DESIGN PROFESSIONAL
- ARB APPROVAL IS REQUIRED FOR ANY PART OF THE EXHAUST THAT MAY BE SEEN FROM A PUBLIC STREET
- FINAL CLOSEOUT PAPERS TO BE SUBMITTED TO THE BUILDING DEPARTMENT - NYSDEC/NYSDOH ACCEPTANCE LETTER FOR INSTALLATION SHALL BE SUBMITTED TO VILLAGE PRIOR TO ISSUANCE OF A CERTIFICATE OF COMPLETION

Fees:

**Building Permit - Renovation** 

23977 Check #:

\$200.00

Total:

\$200.00

Permission is hereby granted to proceed with the work as set forth in the specification, plans or statements now on file in th Department. Any amendments made to the original plans or specifications must be submitted for approval. Final inspection will not be scheduled until final plumbing and final electrical inspections are completed where applicable

Cost of Construction:

\$15,000.00

Permit Expires: 6/9/2011

Village Engined / Building Inspect Michael J. McGarvey, P.E.

#### RECEIVED

By Douglas Austin at 3:46 pm, Aug 18, 2011



Robert P. Astorino County Executive

Cheryl Archbald, MD MPH Acting Commissioner of Health

March 21, 2011

Acadia Noddle c/o Acadia Realty 1131 Mamaroneck Ave. – Suite 260 White Plains, NY 10605 Attn: Mark O'Connor, LLC Mgr.

> RE: Renewal Certificate to Operate Van Tassel Cleaners

Dear Mr. O'Connor:

Receipt of your fees for the above-referenced facility is hereby acknowledged. Please be advised that our records reveal that your facility is being operated in compliance with applicable County Laws and Regulations.

Enclosed please find your renewal Certificate to Operate, which is valid until December 31, 2011.

Very truly yours,

Paul Kutzy, P.E.

Assistant Commissioner

Bureau of Environmental Quality

Fax: (914) 813-5158

PK:pcp Enclosure

cc: File

Department of Health 145 Huguenot Street New Rochelle, New York 10801

Telephone: (914) 813-5000

RECYC



obert P. Astorino ounty Executive spartment of Health neryl Archbald, MD, MPH, FAAP

ting Commissioner of Health

## Westchester County Department of Health

Bureau of Environmental Quality CERTIFICATE TO OPERATE SOURCES OF AIR CONTAMINATION

aci	ilitv	Info	rma	tion:

**Emission Point Number: 001** 

acility Name: Van Tassel Cleaners

Facility Telephone:

treet Address: 130 Wildey Street Tarrytown, NY

unicipality:

acility Owner Information:

wner's Name: Acadia Noddle C/o Acadia Realty

Owner Telephone: (914) 288-8111

ailing Address: 1131 Mamaroneck Avenue Suite 260 White Plains, NY 10605

escription Process:

o operate one (1) Sub-slab deprressurization system (SSDS) for removal of tetrachloroethene and associated volatile organic compounds from eneath the building per NYSDEC and NYSDOH requirements. The system consist of a four inch diameter PVC pipe in the sub-base mediately below the building's floor slab and extend vertically upward above the roof; one (1)blower (Radonaway model HS-5000) capable of echanically venting a maximum of 53 cfm; sampling port at the base of the unit; in-line magnahelic dial vaccum gauge and alarm system.

ne Certificate supersedes any earlier Certificate to Operate issued for this source by the Department pursuant to Chapter 873, Article XIII, Section 73.1306.1 of the Laws of Westchester County.

nat the operation of this source is in accordance with the source description, approved plans, and emission limits for this source on file with the spartment.

ne source of air contamination shall be operated in compliance with the provisions of Chapter 873, Article XIII of the Laws of Westchester County and NYCRRR.

his certificate shall be suspended or revoked as provided by the laws of Westchester County, if this source of air contamination is maintained or operated her than in compliance with the above.

r contaminants collected by air cleaning devices shall be handled and disposed of in an approved manner.

R THE COMMISSIONER

Cheryl Archbald, MD, MPI, EMP Acting Commissioner of Health

Paul Kutzy, P.E., Assistant Commissioner Bureau of Environmental Quality

Certificate Issued:

03/21/2011

Certificate Expires:

12/31/2013

145 Huguenot Street • 8th Floor New Rochelle, N.Y. 10801

THIS PERMIT MUST BE POSTED CONSPICUOUSLY

#### APPENDIX A

**EMISSION POINT: 001** 

PERMIT NUMBER: 52-7309

CONTAMINANT	ACTUAL EMISSION RATE LB./HR.	PERMISSIBLE EMISSION RATE LB./HR.
Tetrachloroethene (127-18-4)	0.0000437	0.0000437
* * * * *		

#### NOTE:

SEE ATTACHED TABLE 1 AIR EMISSION CALCULATIONS BY WHITESTONE ASSOCIATES FOR A COMPLETE LIST OF CONTAMINANTS.



#### TABLE 1 AIR EMISSIONS CALCULATIONS

#### Van Tassel Cleaners 130 Wildey Street

#### Tarrytown, Westchester County, New York

Compound	CAS Number	Detected Concentration (ug/m3)	Adjusted Concentration (mg/m3)	Hourly Emissions (lbs/hr)	Yearly Emissions (lbs/year)
2.4-Trichlorobenzene	120-82-1	977	0.00977	0.0000019	0.01699206
2.4-Trimethylbenzene	95-63-6	14.7	0.0147	0_0000029	0.02556635
1,3,5-Trimethybenzene	108-67-8	4.05	0,00405	0.0000008	0.00704379
2.4-Trimethylpentane	540-84-1	2.78	0.00278	0,000006	0_00483500
-Butanone	78-93-3	112	0.0112	0.0000022	0.01947913
-Ethyltoluene	622-96-8	3.23	0.00323	0,0000006	0 00561764
Acetone	67-64-1	73.8	0.0738	0.0000147	0.12835352
Benzene	71-43-2	4.53	0.00453	0,0000009	0.00787861
Carbon disulfide	75-15-0	1.42	0.00142	0_0000003	0.00246967
Chloroform	67-66-3	4.83	0.00483	0,0000010	0_00840037
Chloromethane	74-87-3	0.718	0,000718	0,0000001	0 00124875
cis-1,2-Dichloroethene	156-59-2	6.37	0.00637	0,0000013	0.01107875
Dichlorodifluoromethane	75-71-8	2.66	0.00266	0.0000005	0,00462629
Ethanol	64-17-5	141	0,141	0.0000280	0.24522827
Ethylbenzene	100-41-4	2.19	0.00219	0,0000004	0.00380886
(sorropanol	67-63-0	51 7	0.0517	0.0000103	0.08991703
-Methyl-2-pentanone	108-10-1	2,21	0,00221	0.000004	0,00384365
c/m-Xylene	106-42-3/108-38-3	7_07	0,00707	0.0000014	0.01229620
o-Xylene	95-47-6	4.07	0.00407	0.000008	0.00707858
Heptane	142-82-5	2.5	0.0025	0.000005	0.00434802
n-Hexane	110-54-3	4 08	0 00408	0.0000008	0_00709597
Propylene	115-07-1	2.16	0.00216	0.000004	0.00375669
Tetrachloroethene	127-18-4	220	0.22	0 0000437	0.38262568
Tetrahydrofuran	109-99-9	109	0.0109	0.0000022	0.01895736
Toluene	108-88-3	40 8	0.0408	0 0000081	0.07095967
rans-1,2-Dichloroethene	156-59-2	6.64	0,00664	0.0000013	0.01154834
Trichloroethene	79-01-6	13 4	0.0134	0.0000027	0 02330538
Trichlorofluoromethane	75-69-4	1.44	0 00144	0,000003	0.00250446

Notes:

The following calculation was utilized to determine the hourly emission rate for each compound listed above:

ER =

(C)(Q)(60 min/hr)(0.02832 m3/ft3) (453.6 gram/lb)(1,000 mg/gram)

ER = Emission Rate (lbs/hr)
C = Concentration (mg/m³)
Q = Flow Rate - Assumed to be constant at 53 cubic feet per minute (CFM)
The highest detected compound concentrations of samples SS-1, SS-2, and SS-3 were utilized to derive the emission rates (lbs/year) were derived by multiplying hourly emission rates by 24 (hours/day) and by 365 (days/year)

O7609!

O7609!

**KEITH T. D'AMBROSIO** 

PROFESSIONAL ENGINEER New York License No. 076095-1

GINEER

# APPENDIX K NYSDEC Correspondences

## New York State Department of Environmental Conservation

Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1620

Phone: (845) 256-3826 • FAX: (845) 255-3414

Website: www.dec.state.ny.us



May 12, 2008

Ms. Sandy Spring Robert Martin Company, LLC 100 Clearbrook Road Elmsford, NY 10523

RE:

River Plaza Site - Site ID: 360084

Supplemental Investigation Work Plan Addendum

Dear Ms. Spring:

The New York State Department of Environmental Conservation (NYSDEC or Department) has revisited analytical requirements in the September 2007 Supplemental Investigation Work Plan (SIWP). In addition to analyzing the soil and groundwater samples for volatile organic compounds (VOCs) and semi-VOCs as outlined in the SIWP, these samples must be analyzed for the full Target Compound List + 30 tentatively identified compounds (TICs)/Target Analyte List (TCL + 30/TAL) using a NYS Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. As such, this letter serves as an Addendum to the above-referenced SIWP. Also, consistent with the SIWP, all analytical data collected during the SIWP will be validated and a data usability summary report (DUSR) will be prepared and submitted in the draft Remedial Investigation Report.

Please feel free to call me at the above number with any questions, and please provide two-week advanced notice of the start of field work..

Sincerely,

ganitEBrain

Janet E. Brown, PE Project Manager

cc:

K. Eck, QuES&T

ec:

R. Mitchell, NYSDOH

R. Pergadia, NYSDEC

A. Tamuno, Esq., NYSDEC

#### **New York State Department of Environmental Conservation**

Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1620

Phone: (845) 256-3000 • Fax: (845) 255-3414

Website: www.dec.ny.gov



Transmitted Via: Email

December 11, 2009

Mr. Keith T. D'Ambrosio, PE Mr. Christopher Seib Whitestone Associates, Inc. 35 Technology Drive Warren, NJ 07059

RE:

RI Report, Supplemental RI/Corrective Action Work Plan; Supplemental RI Work Plan

Site #: 360084

Dear Messrs. D'Ambrosio and Seib:

The New York State Departments of Environmental Conservation and Health ("NYSDEC/NYSDOH" or "the agencies") have reviewed the June 24, 2009 Remedial Investigation Report (RIR) & Supplemental RI(SRI)/Corrective Action Work Plan (CAWP) and the September 30, 2009 Supplemental Remedial Investigation Work Plan (SRIWP). The RIR/SRI, CAWP and SRIWP are disapproved. The comments/reasons for disapproving the RIR & SRI/CAWP and SRIWP are listed below and include the initial NYSDOH comments on the June 2009 document that were provided to Whitestone on July 27, 2009.

#### June 2009 RIR & SRI/CAWP:

- 1. The RIR should be revised and resubmitted to contain all of the data gathered for the Site Characterization/Remedial Investigation into one comprehensive RIR, which defines the full nature and extent of contamination and creates a site conceptual model, consistent with DER-10—Technical Guidance for Site Investigation and Remediation (see below link) and the May 12, 2005 Order on Consent and subsequent December 18, 2008 modification. The revised RIR should include discussion of all relevant/valid data, data summary tables and figures, appending the previous relevant investigations to the comprehensive RIR, as well as address the comments herein. <a href="http://www.dec.ny.gov/docs/remediation\_hudson\_pdf/der10.pdf">http://www.dec.ny.gov/docs/remediation\_hudson\_pdf/der10.pdf</a>)
- 2. A data validation summary discussion should be included in the body of the revised RIR.
- 3. A summary discussion of the Community Air Monitoring Program data should be provided in the report text and the data included on a CD as a document appendix.
- 4. Attached is a February 21, 2006 letter that contained the agencies' comments on the January 2005 Site Charactertization Report/Remedial Action Plan. Many of the comments in that letter were to be addressed in the comprehensive investigation report that was ultimately prepared for this site (see comment 1). To the extent these comments were not addressed in the subsequent submittals, please ensure these items are

covered in the revised RIR or SRIWP, as appropriate (e.g., utility corridors/connections, floor drains, etc., that could act as preferential pathways were not located on the site plans or investigated).

- 5. Section 2.2.1 should speak to the presence/absence of perched groundwater. Previous investigations by others indicated that perched groundwater appeared to be present at the northwest corner of the property.
- 6. Section 2.3 references exceedances of respective soil cleanup objectives (SCOs). Please note that in preparing the revised RIR and site conceptual model that site data should be compared to the appropriate 6 NYCRR Part 375 SCOs.
- 7. Section 2.3 references the March 2004 removal of the 550 gallon fuel oil underground storage tank (UST). Please indicate whether a tank tightness test performed, and if so, please include the results in this discussion.
- 8. Section 2.4 should also mention the May 12, 2008 work plan addendum.
- 9. Section 3.1.1: Please clarify that NYSDEC was not informed of the start of the off-site investigation field work on January 13, 2009 until after the work was completed, and thus did not have an opportunity to perform oversight, or advise of the requirement for full characterization (TCL+30/TAL) per the May 12, 2008 addendum to the *Supplemental Investigation Work Plan* (SIWP) that had not been provided to Whitestone by the previous owner.
- 10. Section 3.2: Page 13 of the SIWP indicated that three rounds of groundwater levels, once every three months, would be collected to determine the direction of groundwater flow. While three rounds were collected, they were too close together (i.e., February 24, 2009, April 2 and 24, 2009) such that potential seasonal changes in groundwater flow direction could not be identified. However, the agencies acknowledge the slight flexure noted between the February and April gauging events. Site monitoring wells should be gauged at the previously-approved frequency to confirm the apparent southwesterly groundwater flow direction remains consistent.

Since the well locations were chosen based on the presumed westerly groundwater flow direction, and there is no monitoring well directly down-gradient based on the identified southwesterly groundwater flow direction, an additional shallow and deep soil boring should be installed and the soil sampled consistent with the September 2007 SIWP and the May 12, 2008 addendum. The shallow boring shall be completed as a monitoring well also consistent with the September 2007 SIWP. If evidence suggests that there is contamination in the deep boring, that boring shall also be completed as a monitoring well; otherwise a groundwater grab sample should be collected and analyzed for the full suite of parameters. See attached figure for approximate boring/well locations. In addition, since there are no characterization data for shallow site soils, a soil sample should be collected from the top 2 feet of the new shallow boring and analyzed for the full suite of parameters.

#### 11. Section 3.5 is deficient for the following reasons:

a. Only the dry cleaner section of this approximately 9,000-square foot (sf) retail building was investigated. According to the document, the other businesses in this retail building include the Tappan Zee Dental Group, a laundromat, a video store, and a Dollar Store. Based on review of the data collected from the dry cleaner shop and the likelihood of a continuous slab under the remainder of the building, a Supplemental Soil Vapor Intrusion (SVI) WP for the remainder of the building should be developed and submitted to the

- agencies, or corrective actions (i.e., an expanded sub-slab depressurization system [SSDS]) should be considered for reducing the potential for exposure to the employees and patrons of those other businesses.
- b. Because tetrachloroethene (PCE) is currently used by this dry cleaner, it is permissible to compare the detected indoor air PCE level to the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) as the potential exists for the PCE detected in the indoor air to be a result of the dry cleaning operation (i.e., dry cleaned clothes), although it is reported that the dry cleaner has used a closed loop system since 1980. The 8th sentence in this section should be revised to reflect only one sample was collection the indoor air. The current sentence is plural which suggests more than one indoor air PCE result which is incorrect.
- c. The 10th sentence states that the "...TCE (trichloroethene) concentration was above the NYSDOH air guideline value in the indoor air sample." The next sentence states that "...the source of the TCE likely is attributable to a source within the dry cleaners." Since TCE was not detected in any of the three sub-slab soil vapor samples, the agencies agree that the source of the TCE detected in the indoor air sample (15.9 ug/m³) is something other than from soil vapor intrusion. However, because this detected concentration exceeds the NYSDOH air guideline of 5.0 micrograms per cubic meter (ug/m³) for TCE, the source of the TCE should be identified through a review of the product inventory, or by conducting a product inventory if one was not completed previously, or by resampling of the indoor air.
- d. The agencies disagree with the final sentence of Section 3.5, which is nearly identical to the conclusion in the October 13, 2008 letter report found in Appendix F. The conclusion states that "...the PCE level detected in the indoor air sample does not appear to indicate that the PCE contamination beneath the building is contributing to the PCE level detected within the dry cleaners." That statement is indefensible and should be removed from this June 2009 document. That statement is in sharp contrast to the proposal in the document to install an active SSDS beneath the dry cleaners.
- 12. Section 4.1: As noted in comment 1, the revised RIR should be a comprehensive report that includes all relevant site characterization data.
- 13. Section 4.2: A SSDS (i.e., placing a PVC pipe into the sub-base beneath the dry cleaner slab and actively venting to the atmosphere) is proposed only for the dry cleaner portion of the 9,000-sf building. No explanation has been provided as to why the entire building is not being depressurized, especially since there is likely a shared foundation slab with communication via the sub-base material. The potential for vapor migration and intrusion into the other businesses within this retail structure needs to be considered, evaluated, investigated and/or mitigated.
- 14. Section 4.2: The potential for vapor migration and intrusion into the adjacent McDonald's restaurant and the 24,000 sf retail building in the same shopping center plaza should be evaluated/investigated during the proposed supplemental RI and discussed in the revised RI report to support a recommendation for mitigation or no corrective action, as appropriate.
- 15. Section 4.2 makes no mention of a pressure field extension test to show that the system is drawing vapors under the entire slab. Any SSDS design work plan should include details of the confirmation testing (physical and chemical) that would be performed along with operation, monitoring and maintenance requirements.

#### September 2009 Supplemental RIWP:

16. Since the site definition/metes and bounds description (see the December 18, 2008 Modification to the

- Order on Consent) includes the Walgreens parcel this area will also require characterization. Therefore, the SRIWP should be expanded to include investigation of the entire site as defined.
- 17. The SRIWP should be expanded to include the additional groundwater and soil sampling requested above, in addition to the SVI sampling outlined below.
- 18. Based on a review of a survey plan received for the subject property, please also expand the SRIWP to investigate the "possible underground tank from previous survey" noted on the south side of the strip mall building (see attached figure).
- 19. Please provide an updated project schedule. The supplemental investigation work should be completed first and the results included in the comprehensive RIR. Should the data indicate that, for instance, a SSDS is necessary, an Interim Remedial Measure (IRM) work plan should be prepared and submitted to the agencies for review and approval.
- 20. Section 2.1.1: Please include a site plan that shows the entire site, including the tax parcels. This section states that Figure 2 shows the entire site, but it is not reflective of the entire 3.3-acre parcel.
- 21. Section 3.1: A copy of the NYSDOH's product inventory and building questionnaire form that should be filled out for each location/tenant space sampled is attached.
- 22. Section 3.2: The proposed concurrent sub-slab and indoor air samples should be collected over an 8-hour period.
- 23. Section 3.2: The detection limits for TCE, vinyl chloride and carbon tetrachloride must be 0.25 micrograms per cubic meter (ug/m³) for indoor and outdoor air samples. Detection limits for all compounds need to be 1 ug/m³ for sub-slab and soil gas samples as this was a problem in the first round of sampling. During the soil vapor intrusion testing done in March 2008, TCE was detected in the indoor air at 15.9 ug/m³ and the report states that TCE was not detected in sub-slab vapor. However, all of the sub-slab samples had elevated detection limits ranging from 18.4 to 46.8 ug/m³.
- 24. Section 3.2: The air samples collected should have the negative inches of mercury in the SUMMA canisters recorded prior to sample collection and at the end of the 8-hour period.
- 25. Section 3.2: Please note that the heating season runs from November 15<sup>th</sup> through March 31<sup>st</sup>. Page 7 lists November 1<sup>st</sup> as the start of the heating season.
- 26. Section 3.2: Proposed soil vapor sample SS-7 should be shifted to a location just north of MW-5 to better assess vapor migration from the dry cleaners. Please note that the sample location should be off-set by at least 5 feet from MW-5 to avoid short-circuiting from the existing monitoring well.
- 27. Section 3.3: This section is incomplete and will not be accepted as is. A separate document should be submitted that details testing procedures and system design specifications.

In accordance with Subparagraphs and II.E.2 of the fully-executed Consent Order for the River Plaza Shopping Center Site, dated May 25, 2005, as modified on December 18, 2008 (the "Order"), Robert Martin Company, LLC and Acadia Tarrytown, LLC (f/k/a Noddle Tarrytown Development Co., LLC) (collectively referred to as the "Respondent") must notify the NYSDEC in writing of the Respondent's election regarding the

Department's disapproval of the RIR/SRI, CAWP and SRIWP "within 30 days after the date of this letter." As further provided in Subparagraph II.E.2 of the Order, if the "Respondent elects to modify the submittal, Respondent shall, within sixty (60) days after such election, make a revised submittal to the Department that addresses all of the Department's stated reasons for disapproving the first submittal." Should the Respondent elect to revise the above submittals, the revised SRIWP should be submitted (within 60 days of the election), approved and implemented first. The comprehensive RIR would then be revised, and subsequently resubmitted, to include the data generated from the implementation of the SRIWP and the information noted above. Please feel free to call me at (845) 256-3826 with any questions.

Nothing contained herein constitutes a waiver by the Department of any rights under applicable state and federal law or the relevant Order, nor does it constitute a release of any party from obligations under those same laws or the relevant Order.

Sincerely,

Janet E. Brown, PE Project Manager

ec (via emai): R. Masters, Esq., Acadia Tarrytown, LLC

S. Spring, The Robert Martin Company, LLC

G. Berger, The Robert Martin Company, LLC

D. Kapson, Whitestone Associates

A. Tamuno, Esq., NYSDEC OGC

E. Moore, PE, NYSDEC

M. VanValkenburg, NYSDOH

N.Walz, NYSDOH

## FILE

## New York State Department of Environmental Conservation Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1696

Phone: (845) 256-3826 • FAX: (845) 255-3414

Website: www.dec.state.ny.us



February 21, 2006

Mr. Lloyd Roos Robert Martin Company, LLC 100 Clearbrook Road Elmsford, NY 12523

Mr. James M. DeMartinis Senior Hydrogeologist J.R. Holzmacher, PE, LLC 300 Wheeler Road, Suite 303 Hauppauge, NY 11788-4300

RE: River Plaza Shopping Center - Site Characterization Report/Remedial Action Plan Site ID No. - 360084

#### Dear Mr. Roos and Mr. DeMartinis:

The NYSDEC and the NYSDOH have reviewed the January 2005 Site Characterization Report (SCR)/Remedial Action Plan (RAP) and the subsequent March 2005 Geoprobe<sup>TM</sup> Investigation Report, as well as the various historical focused subsurface investigation reports and provide the following comments:

- In general, the site characterization information needs to be supplemented to fully characterize the nature and extent of contamination and facilitate the development of a comprehensive conceptual site model, as well as qualitatively evaluate whether a public health exposure exists or potentially exists (on-site and off-site), per the requirements of DER-10. As such, a supplemental investigation work plan should be prepared to address the items noted herein.
- The conceptual site model should be developed using the information gathered to date, qualified as appropriate, and supplemented with additional information, including a scaled site plan and geologic cross-sections that present sampling locations, areal and vertical extent of soil and groundwater contamination, property lines, groundwater elevations, subsurface geology, locations/elevations of utility corridors, floor drains and other subsurface features that may affect contaminant migration or remedial design.

- More specifically, in developing the site conceptual model, several items noted in the previous work should be addressed/clarified and additional activities performed, as follows:
  - Groundwater flow direction needs to be clarified, both in the reported perched layer and below.
  - If possible, define the extent of the perched water table, or determine where it may discharge, in considering potential contaminant flow paths and exposure scenarios.
  - Define the extent of the silt/clay "confining" layer (i.e., historic borings on the west side of the site did not extend deep enough to confirm the presence of the silt/clay layer in the presumed down-gradient direction, while on the south side, the silt/clay layer does not appear to be present).
  - Based on the location of the dry cleaning machine and the presumed westward groundwater flow direction, a soil boring/groundwater monitoring well should be placed directly west of the dry cleaning machine (i.e., in the McDonald's driveway), and soil and groundwater samples should be collected and analyzed for site constituents (VOCs and SVOCs).
  - Another round of groundwater sampling should be performed since some of the previous investigations noted concerns/uncertainty about sampling procedures and data quality/reliability. Please include sampling procedures, a health and safety plan and quality assurance project plan for additional investigation activities consistent with DER-10. The requested additional sampling and analysis should be performed using a NYS Environmental Laboratory Accreditation Program (ELAP) certified lab and a Data Usability Summary Report (DUSR) should be prepared per DER-10 requirements.
  - A soil gas/vapor intrusion survey should be performed in accordance with the NYSDOH Soil Vapor Intrusion Guidance Manual. Utility corridors, floor drains, etc. should be located on site plans as mentioned above and investigated as they could also act as a migration pathway for subsurface vapors or groundwater, depending on their location/depth.
  - Additional indoor soil sample collection should be attempted (e.g., west of the dry cleaning machine in the presumed down-gradient direction). An attempt should be made to determine the cause and extent of the shallow refusal (refusal at 2 feet bgs) encountered below the building slab noted in a previous investigation. As we discussed, based on the site history and 1982 site boring logs you provided in December 2005, it's likely that refusal occurred due to the presence of an old foundation or floor slab (rather than bedrock), the presence of which could complicate evaluation of potential historical source areas and soil vapor behavior.
  - Historic boring logs for the 1982 construction of River Plaza indicate that bedrock is was not encountered at depths up to 35 feet bgs. Depending on the results of the additional investigation activities discussed herein, it may be necessary to determine

whether bedrock has been affected by site constituents, since chlorinated solvents tend to sink due to their specific gravity. While a concern was noted about drilling through the potential confining layer and creating a contaminant migration pathway to the bedrock, alternate drilling/well installation methods can be employed to address this concern.

- While the NYSDEC/NYSDOH (the Agencies) are conceptually in agreement with the proposed use of Regenesis' Hydrogen Release Compound (HRC) to treat residual contamination, a detailed remedial action work plan will need to be prepared and signed by a NYS licensed professional engineer, and approved by the Agencies, prior to implementation. Collection of natural attenuation parameters and other information outlined in the HRC project evaluation form available on the Regenesis website may be considered/performed during this supplemental site investigation phase in order to expedite the remedial design.
- The Agencies will accept the previously submitted historical documents as fulfilling the records search requirement noted in the consent order.

Please feel free to call me at (845) 256-3826 with any questions.

Sincerely,

gandelswin

Janet E. Brown, PE Project Manager

Encl.

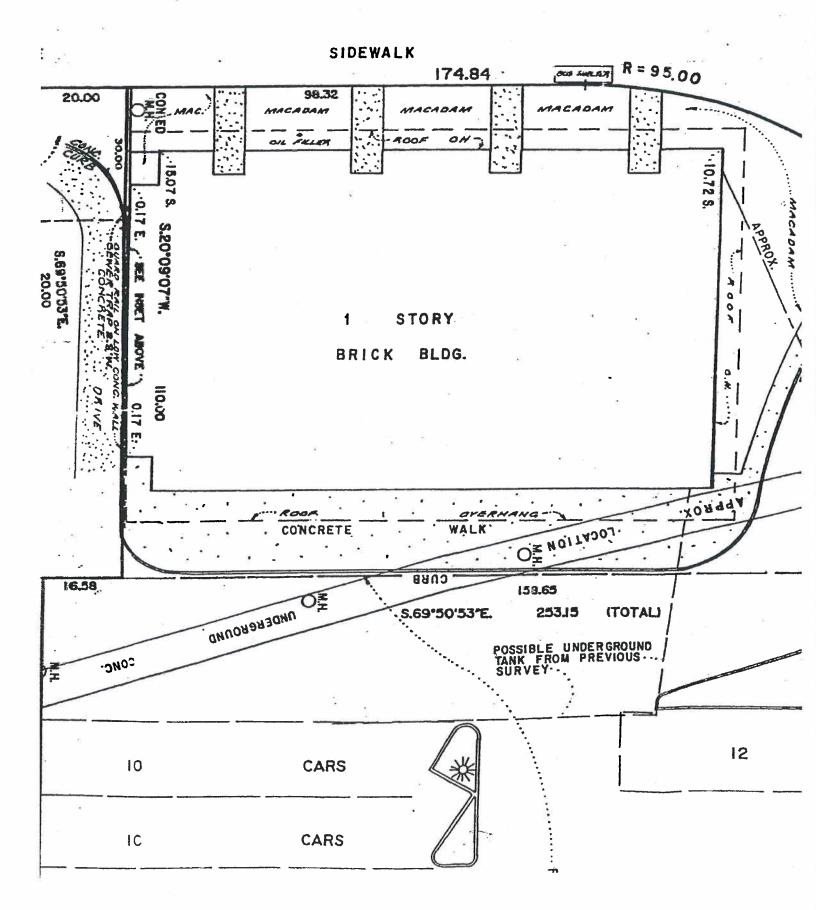
cc:

R. Pergadia, PE, NYSDEC DER, RHWE (electronic copy via email)

A. Tamuno, Esq. NYSDEC DEE, (electronic copy via email)

B. Callaghan, NYSDOH (electronic copy via email)

## DEY STREET



#### NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name		Date/Time Prepared _	
Preparer's Affiliation		Phone No	
Purpose of Investigation_			
1. OCCUPANT:			
Interviewed: Y/N			
Last Name:		First Name:	
Address:	——————————————————————————————————————		
County:			
Home Phone:	Offi	ce Phone:	
Number of Occupants/pe	rsons at this locatio	n Age of Occupants	_124-,114-11
2. OWNER OR LANDI	LORD: (Check if s	ame as occupant)	
Interviewed: Y/N			
Last Name:	F	First Name:	<del></del>
Address:			
County:			ž.
Home Phone:	Off	ice Phone:	
3. BUILDING CHARA	CTERISTICS		
Type of Building: (Circl	e appropriate respo	nse)	
Residential Industrial	School Church	Commercial/Multi-use Other:	

## If the property is residential, type? (Circle appropriate response) 3-Family 2-Family Ranch Colonial Raised Ranch Split Level Contemporary Mobile Home Cape Cod Townhouses/Condos Apartment House Duplex Log Home Other: Modular If multiple units, how many? \_\_\_\_\_ If the property is commercial, type? Business Type(s) If yes, how many? \_\_\_\_\_ Does it include residences (i.e., multi-use)? Y/N Other characteristics: Building age Number of floors How air tight? Tight / Average / Not Tight Is the building insulated? Y / N 4. AIRFLOW Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe: Airflow between floors Airflow near source Outdoor air infiltration Infiltration into air ducts

5.	BASEMENT AND CONS	STRUCTION	CHARACTI	ERISTICS (C	Circle all that ap	ply)
	a. Above grade constructi	on: wood	l frame co	ncrete	stone	brick
	b. Basement type:	full	cra	awlspace	slab	other
	c. Basement floor:	conc	rete dir	t	stone	other
	d. Basement floor:	unco	vered co	vered	covered with	
	e. Concrete floor:	unse	aled sea	aled	sealed with	
	f. Foundation walls:	pour	ed blo	ock	stone	other
	g. Foundation walls:	unse	aled sea	aled	sealed with	
	h. The basement is:	wet	da	mp	dry	moldy
	i. The basement is:	finisl	ned un	finished	partially finish	ed
	j. Sump present?	Y/N	Ī			
	k. Water in sump?	Y/N/not ap	plicable			
Ba	sement/Lowest level depth	below grade:	(fee	et)		
Ide	entify potential soil vapor e	ntry points ar	d approxima	ite size (e.g.,	cracks, utility j	oorts, drains)
	HEATING, VENTING and pe of heating system(s) use			ll that apply	– note primary	)
	Hot air circulation Space Heaters		pump m radiation	Hot wa Radian	ter baseboard t floor	
	Electric baseboard	· ·	d stove		or wood boiler	Other
Th	e primary type of fuel used	l is:	*			
	Natural Gas Electric Wood	Fuel Prop Coal	ane	Kerose Solar	ne	
Do	mestic hot water tank fuel	ed by:			<del>-</del>	
Во	iler/furnace located in:	Basement	Outdoors	Main F	loor	Other

Air condition	ing:	Central Air	Window units	Open V	Vindows	None
			4			
Are there air	distribution du	cts present?	Y/N			
Describe the there is a cold diagram.	supply and colo	l air return duc l the tightness o	twork, and its co	ndition dicate th	where visible, in le locations on t	cluding whether ne floor plan
7. OCCUPA	ANCY	u <b>pied?</b> Full-t	ime Occasi	ionally	Seldom	Almost Never
Level						rkshop, storage)
Basement  1 <sup>st</sup> Floor  2 <sup>nd</sup> Floor  3 <sup>rd</sup> Floor  4 <sup>th</sup> Floor						
4 <sup>th</sup> Floor	-					
8. FACTOR	S THAT MAY	INFLUENCE I	NDOOR AIR Q	UALITY	7	
a. Is there	an attached gai	age?			Y/N	
b. Does the	garage have a	separate heatin	g unit?		Y/N/NA	
		l machines or veg., lawnmower, a			Y / N / NA Please specify_	
d. Has the	building ever h	ad a fire?			Y/N When?	
e. Is a kero	sene or unvent	ed gas space hea	ater present?		Y/N Where	
f. Is there	a workshop or l	nobby/craft are	a?	Y/N	Where & Type	?
g. Is there	smoking in the	building?		Y/N	How frequently	?

Y / N When & Type?

h. Have cleaning products been used recently?

i. Have cosmetic p	roducts been use	d recently?	Y / N	When & Typ	pe?
		5	5		
j. Has painting/sta	ining been done	in the last 6 mo	onths? Y/N	Where & Wl	nen?
k. Is there new car	rpet, drapes or o	ther textiles?	Y / N	Where & Wh	nen?
l. Have air freshen	iers been used re	cently?	Y/N	When & Typ	pe?
m. Is there a kitch	en exhaust fan?		Y/N	If yes, where	vented?
n. Is there a bathı	room exhaust far	1?	Y/N	If yes, where	vented?
o. Is there a clothe	es dryer?		Y / N	If yes, is it ve	ented outside? Y / N
p. Has there been	a pesticide appli	cation?	Y/N	When & Typ	pe?
Are there odors in If yes, please desc			Y/N		
If yes, what types of If yes, are their clot			Y/N		2)
If yes, are their clot	thes washed at wo	ork?	Y/N		
Do any of the building response)	ng occupants reg	ularly use or w	ork at a dry-cle	aning service?	'(Circle appropriate
Yes, use dry-	cleaning regularly cleaning infreque a dry-cleaning ser	ntly (monthly or	·less)	No Unknown	
s there a radon miti to the system active of		r the building/s Active/Passive		I Date of Insta	ıllation:
O. WATER AND SE	WAGE	€			
Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other:
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other:
10. RELOCATION	INFORMATION	N (for oil spill r	esidential emerg	gency)	
a. Provide reason	ns why relocation	n is recommend	led:		
b. Residents cho	ose to: remain in	home reloca	ate to friends/fan	nily reloc	cate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y/N

d. Relocation package provided and explained to residents?

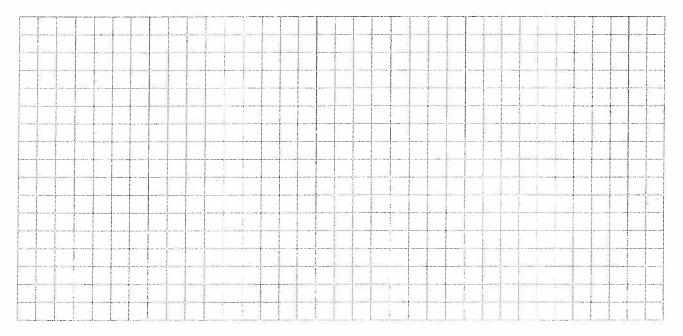
Y/N

6

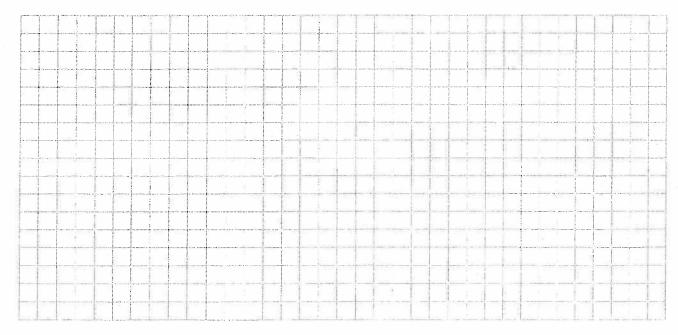
#### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

#### **Basement:**



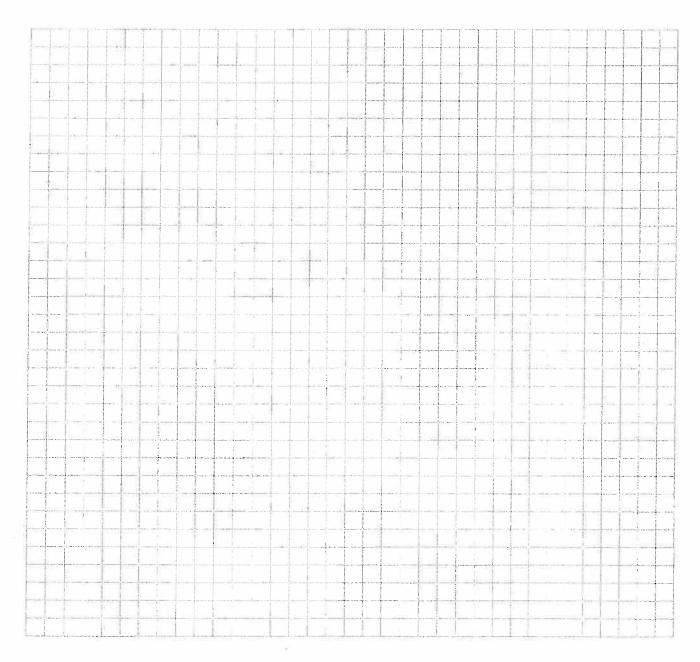
#### First Floor:



#### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



4.7	DDAD	TIME	A CHYNTH WITH		A R CE OUT
1.5.	PROID	PERCON	INVEN	HUKY	FURN

Make & Model of field instrument used:	
List specific products found in the residence that have the potential to affect indoor air qualit	v.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y/N
	3					
	41					
	· · · · · · · · · · · · · · · · · · ·					
		-				

<sup>\*</sup> Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)

<sup>\*\*</sup> Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

### **New York State Department of Environmental Conservation**

Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1620

Phone: (845) 256-3000 • Fax: (845) 255-3414

Website: www.dec.ny.gov

Transmitted by: E-mail

February 3, 2010

Mr. Keith T. D'Ambrosio, PE – Principal, Environmental Services Mr. Christopher Seib, Director, Environmental Services Whitestone Associates, Inc. 35 Technology Drive Warren, NJ, 07059

RE: River Plaza Site; NYSDEC Site #: 360084

Supplemental Remedial Investigation Work Plan (Rev.1)

Dear Messrs. D'Ambrosio and Seib:

The New York State Departments of Environmental Conservation and Health ("NYSDEC/NYSDOH" or "the agencies") have reviewed the January 21, 2010 above-referenced work plan and approve the plan based on acceptance of the following conditions:

1. Temporary borings/wellpoints that aren't completed as monitoring wells shall be properly abandoned by in accordance with Section 3.3(e) of the current draft of DER-10 *Technical Guidance for Site Investigation and Remediation* available at the following link: <a href="http://www.dec.ny.gov/docs/remediation">http://www.dec.ny.gov/docs/remediation</a> hudson pdf/der10.pdf;

2. Two soil samples should be collected from one of the soil borings in the immediate vicinity of the former/suspected UST and analyzed for the full TCL+30/TAL – one from the top 2 feet and one deeper, based on field screening and visual/olfactory observations;

3. One shallow (top 2 feet) soil sample shall also be collected from one of the borings on the west side of the Walgreens and analyzed for the full TCL+30/TAL; and

4. Once the locations of the utility corridors, floor drains, etc (potential preferential pathways) are identified, it may be appropriate to sample in these locations (e.g., pipe bedding) to confirm presence/absence of potential site constituents.

Please feel free to call me at (845) 256-3826 with any questions. Please indicate acceptance of the above conditions and provide 10-days notice prior to the start of the field work.

Sincerely,

gantEBrain

Janet E. Brown, PE Project Manager

ec (via emai): R. Masters, Esq., Acadia Tarrytown, LLC



- S. Spring, The Robert Martin Company, LLC
- G. Berger, The Robert Martin Company, LLC
- D. Kapson, Whitestone Associates
- A. Tamuno, Esq., NYSDEC OGC
- E. Moore, PE, NYSDEC
- N.Walz, NYSDOH

## New York State Department of Environmental Conservation Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1620

Phone: (845) 256-3000 • Fax: (845) 255-3414

Website: www.dec.ny.gov

Transmitted via: Email

May 12, 2010

Mr. Keith T. D'Ambrosio, PE Mr. Christopher Seib Whitestone Associates, Inc. 35 Technology Drive Warren, NJ 07059

RE: River Plaza; NYSDEC site #: 360084

April 7, 2010 Interim Remedial Measure (IRM) Work Plan

Dear Messrs. D'Ambrosio and Seib:

The New York State Departments of Environmental and Health (NYSDEC/NYSDOH or the agencies) have reviewed the above-referenced work plan and find it acceptable based on the following conditions:

1. The title of the IRM Work Plan should be changed to Sub-slab Depressurization System Design Plan.

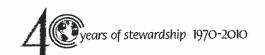
Alexander B. Grannis Commissioner

2. Based on the results of the communication testing, there appears to be adequate radial influence with only one suction point. However, once the actual system is installed, post-mitigation testing will need to be performed to verify that the fan is adequately sized. This testing should consist of repeating the communication testing in all of the earlier test holes, as well as performing indoor air testing in the immediately adjacent tenant space, Tappan Zee Dental Group.

3. Section 3.2 should clarify that based on the NYSDOH SVI guidance and the PCE subslab and indoor air concentrations detected in the two immediately adjacent tenant spaces (i.e., Tappan Zee Dental Group and the Laundromat) that reasonable and practical actions to identify the sources and reduce exposures should be taken. As such, a sub-slab depressurization system will be installed to mitigate indoor air impacts to these spaces.

4. Section 4.3 presents operation and maintenance elements to be conducted following mitigation. The NYSDEC has developed a Site Management Plan (SMP) template (attached) that we encourage remedial parties to use to expedite this phase of the project. This template covers institutional and engineering controls; operation, monitoring and maintenance activities; and periodic certifications.

In order to move forward in an expeditious manner, the agencies suggest that the text of the design plan be modified to address the above items, then a full electronic copy along with replacement text/title pages mailed to us that we will insert into the existing hard copy. This should be done before the installation commences.



Please feel free to contact me or Nate Walz at (845) 256-3826 or (518) 402-7880, respectively, with any questions.

Sincerely,

Janet E. Brown, PE

ec (via email):

Project Manager

J. Hogan, Acadia Tarrytown, LLC

J. Hill, Acadia Tarrytown, LLC

D. Kapson, Whitestone Associates

E. Moore, NYSDEC Region 3

N. Walz, NYSDOH

## New York State Department of Environmental Conservation Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1696

Phone: (845) 256-3000 • Fax: (845) 255-3414

Website: www.dec.ny.gov

Transmitted Via: Email

August 3, 2011

Mr. Keith D'Ambrosio, PE Mr. Christopher Seib Whitestone Associates, Inc. 35 Technology Drive Warren, NJ 07059

Re: River Plaza Shopping Center Site, NYSDEC Site No.: 360084

April 2011 Comprehensive Remedial Investigation (RI)/Final Engineering Report (FER) & Corrective Action Work Plan (CAWP), including the Site Management Plan (SMP)

Dear Messrs. D'Ambrosio and Seib:

The New York State Departments of Environmental Conservation and Health (NYSDEC/NYSDOH) have reviewed the above-referenced document and provide the following comments:

- 1. Section 2.1.1 and Appendix A Please replace the metes & bounds (M&B) description in Appendix A with the new site survey which includes the updated M&B, and update any references to the site survey and M&B as appropriate throughout the document.
- 2. Because this report is a comprehensive RI report, all activities performed and all data being considered (from 1990s to present) need to be discussed/evaluated consistent with the RI requirements set forth in DER-10. This includes everything from the data quality review/Data Usability Summary Report (DUSR) preparation, how the data fit into/support the conceptual site model to discussions of how temporary borings were abandoned. NYSDEC/NYSDOH understand that several limited investigations were performed by others prior to Whitestone's involvement and that some of the information that should be included in the comprehensive RI report may be unavailable/unable to be obtained. If that is the case, please note as appropriate in the updated report. Some specifics are outlined in the comments herein.
- 3. Section 2.3.1 Please update the references to the July 1998 and August 1998 PSI reports to indicate they were finalized on October 15, 1998. The NYSDEC has a June 25, 2003 copy of a Phase I Environmental Site Assessment prepared by ATC Associates, but does not have the August 2003 version. Please email a pdf of that document at your earliest convenience.
- 4. Section 2.3.1 summarizes various site investigations performed by others in the late 1990s/early 2000s. Since these data are being considered in the development of the conceptual site model, the raw data must undergo a data quality review to the extent possible. Ideally, if Category B data packages are available, a full data quality review and DUSR should be prepared for each sample delivery group. If something less rigorous is available (e.g., Category A), the raw data should still undergo a data quality review and a DUSR prepared to the extent possible. If the raw data are unavailable/unable to be obtained, please also note that in the appropriate sections of the revised report and discuss how these data are considered in the overall context of the site conceptual model. Please append the additional DUSRs and raw data to the revised report (on CD only) and discuss in the report text as appropriate. Please refer to DER-10, Section 3.14(b)



- regarding electronic data summary (EDS) submittal requirements and comment 6 below. Also, when discussing data/making data comparisons to applicable standards, criteria and guidance values (SCGs), please provide actual concentrations or ranges and the applicable standards (if a comparison).
- 5. Section 2.3.2 summarizes work Whitestone and Quest did in 2008 and 2009. As in comment 3, please include the DUSRs and the raw data (CD) for these investigations and discuss in the report text as appropriate, consistent with DER-10.
- 6. The NYSDEC now requires all data to be submitted in the Electronic Data Deliverable (EDD) format. See the NYSDEC website for instructions on how to prepare and submit the data to the Department <a href="http://www.dec.ny.gov/chemical/62440.html">http://www.dec.ny.gov/chemical/62440.html</a>. This includes all boring data, well construction data, soil vapor and soil vapor intrusion data, soil and groundwater sampling data, field parameters, etc. The Department understands that several limited investigations were previously performed by others at this site. At this time, please provide all of the Whitestone/Quest data in the required EDD format (2008 to present) with data validation qualifiers added as appropriate, as well as the following limited historical data: location latitude/longitude (lat/long) coordinates for all site wells and all detected groundwater concentrations (for trend analysis). Monitoring well lat/long coordinates can be determined using Google Earth if no coordinates exist on file, or the locations can be obtained with a GPS (GPS accuracy is acceptable); see also DER-10 Section 3.14(c)4.
- 7. All data detected above the applicable standards, criteria and guidance values (SCGs) used to support the site conceptual model should be summarized on tables and figures. For instance, while Figure 7 and Table 8 are informative semi-quantitative summaries, figures and tables should be prepared that present the actual compounds and concentrations exceeding the applicable SCGs with the specific SCGs also included for comparison. Trend graphs presenting site-related groundwater concentrations through time should also be included. [Attached is a copy of a working draft of soil and groundwater summary table that I had prepared to help evaluate the site data back in the mid-2000s, prior to Whitestone's involvement and prior to the updated 6 NYCRR Part 375 and associated soil cleanup objectives (SCOs). I would forward the Excel table to you as a starting point, but I no longer have it electronically].
- 8. Since the site related constituents have caused minor impacts to groundwater, the site soil data should also be compared to the 6 NYCRR Part 375 Protection of Groundwater SCOs and discussed/presented in the text/tables.
- 9. Section 2.4, second bullet, Section 4.2.2 and Figure 3, regarding utility corridors Please update Figure 3 to show how the sanitary sewer connects to the building. Section 4.2.2 states that the combined sewer line invert of 7 feet, below ground surface (fbgs) and other utilities are not located below the groundwater table and would not impact contaminant migration if present. However, based on the groundwater discussion in Section 2.2.1, groundwater levels were reported to range from 6 to 8 fbgs. Even if the utilities were above the groundwater table, leaks into pipe bedding could occur and make its way to the shallow groundwater, which is in close proximity, and/or could follow the bedding. Please address this inconsistency.
- 10. Since the report will be revised, please include the finalized Environmental Easement and proof of recording in an appendix and reference in the text as appropriate.
- 11. The response to Comments 25 on page 19 states that the SVI investigation was conducted within the heating season. Please include the actual date the sampling was performed.
- 12. Appendix D (on the CD) was supposed to contain the raw data; however, the raw data were not included on the CD. Please include all the raw data considered in the site conceptual model.
- 13. Section 4.3.3 Please update the text to indicate how the vacuum/communication test holes were sealed/abandoned after testing. Abandonment of temporary borings should also be discussed in the appropriate sections of the report.

- 14. Section 4.5 should also include a summary of the community air monitoring data from Whitestone's 2008-2009 work also (include all of Whitestone's/Quest's work through the present). The data should be included in Appendix H as well.
- 15. Section 4.6 should also include a summary of the data validation for all data supporting the site conceptual model (i.e., all of Whitestone's/Quest's data, as well as whatever level of data quality review was done or is able to be performed on the previous investigation work completed by others; see also comments 4 and 5 above). Also please note that the data validation qualifiers should be added to the tables in the revised report, as well as included in the EDD submittal (see also comments 4 and 6 above).
- 16. Section 5.2 The Westchester County Department of Health (WCDOH) certificate to operate the source of air pollution contamination included in Appendix J and discussed in Section 5.2, expires on 12/31/10. I understand from our recent discussion that a 3-year certificate has been applied for. Please include the updated certificate if it's available by the time the revised report is ready for submittal or indicate the 3-year certificate is pending. Please also include the referenced Table 1 air emissions calculations by Whitestone, that's supposed to be attached to the WCDOH certificate in Appendix J.
- 17. Section 5.3.2 mentions that the negative inches of mercury contained in the Summa canisters was noted on the chain of custody forms (COCs). However the raw data and COCs were not included in Appendix D. Please include the COCs in the updated report that present that information.
- 18. Section 7.0 should be re-titled Site Management Plan (SMP) Summary, and the report retitled Comprehensive RI/FER. Please submit the SMP as a stand-alone document and just summarize it in this section.
- 19. Section 7.5 monitoring/inspection schedule table Please update the cover system inspection matrix to read "soil/asphalt/concrete."
- 20. Figures 6 and 8 as-builts need to be stamped and signed by a NYSPE.
- 21. Appendix C Please add the coordinates (lat/long) of the sample locations to this table.
- 22. Appendix F If separate waste characterization for disposal samples were collected, please include these data in the appendix.

#### Site Management Plan (SMP) comments (Appendix N):

- 1. Please add the site address on the cover of the SMP.
- 2. Please update the SMP as necessary/appropriate consistent with the above comments on the RI/FER.
- 3. At bottom of page 19, change "bailer" to "boiler".
- 4. Section 2.3.1 references a sample HASP in Appendix D, however the appendix flysheet says Appendix A. Please correct as appropriate.
- 5. Page 30, Table 11 Contact Numbers Please revise since D. Kapson is no longer with Whitestone.
- 6. In Section 2.5.3.1, it is suggested that the text be clarified to indicate that the employee should not endanger themselves to remove another from a life-threatening situation.
- 7. Page 36, Table 8 Please add asphalt and concrete under the matrix for the site cover/cap. Also, regarding Table 8, SSDS inspection, Section 4.3.1 notes that the dry cleaning tenant will regularly inspect the SSDS to ensure it is functioning. Will the tenant inspections be documented, and if so how/where, etc.?
- 8. Section 3.3.1 Please also note that the area is served by public water, therefore there no exposure concerns to low level residual groundwater contamination.
- 9. Section 3.3.1.2 It is the Department's understanding, based on our recent conversation, that the on-site monitoring wells have not yet been abandoned. Please revise the text to keep the first part of paragraph 3 (i.e., "The NYSDEC will be notified....") and indicate that the monitoring

- wells are proposed for abandonment in the near future in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures."
- 10. Page 39 Please correct the typo (inspection).
- 11. Please have a NYSPE sign/stamp the as-builts for the SSDS and the cover/cap plan (see comment 20 above).
- 12. Section 4.2.1 Please correct the referenced appendix from I to E. Please check the referenced appendices throughout the SMP as several appear to be mis-referenced.
- 13. Section 4.2.2 Please correct the referenced appendix from J to F.
- 14. Section 4.2.5 There appear to be no trouble-shooting guidelines in Appendix F as indicated in the text and flysheet, just the component manuals.
- 15. Section 4.3.1 indicates that the tenant will be regularly inspecting the SSDS to ensure it's functioning. This should be reflected on Table 8 on page 36.
- 16. Section 4.3.2 Please correct the referenced appendix from K to G or D, as appropriate. Appendix D is the Site Wide Inspection Form and the Appendix G flysheet indicates the appendix contains the Engineering Control System Inspection Checklist, while the form included in the Appendix is a generic Routine Maintenance Report (no checklist). If the intent is to use the "Routine Maintenance Report" this report should be expanded/tailored to the site to include the items (checklist) in section 4.3.2 (e.g., vacuum blower/fan, piping, system alarm, etc), as well as the cover system components (i.e., it should include any site specific engineering controls.
- 17. Sections 4.4.1 and 5.1.2 Please correct the referenced appendix from K to G or D, as appropriate. Please also update the table of contents to reflect the corrected appendix titles.
- 18. Section 5.3 Please change Certificate of Completion to release letter.
- 19. Page 51, Appendix A Excavation Work Plan needs an appendix flysheet.
- 20. Page 51, A-1, Notification. Please change the notification as follows: Ms. Janet Brown, Project Manager and Mr. Edward Moore, Regional Remediation Engineer.
- 21. Page 55, A-9, Cover System Restoration Please note that no demarcation layer currently exists as no soil was removed. Please also change the references Section 1.4.4 to 1.4.3, as 1.4.4. does not exist.
- 22. Pages 55-56, A-10, Backfill from Off-Site Sources As indicated Ecological Resources SCOs are not applicable, but state what SCOs are applicable.
- 23. Table 5 Same comment as similar table in RI/FER.
- 24. Appendix B Please include the updated survey map with metes and bounds description.
- 25. Appendix C Please include the recorded environmental easement (with proof of recording).
- 26. Appendix D Expand to include a section for SSDS inspection.
- 27. Appendix E Please include stamped/signed as builts.
- 28. Appendix G see comments 16 and 17 above.

Please submit a revised document that addresses the above comments and provide the associated data as outlined above within 60 days, consistent with the Order on Consent. Please feel free to call or email me at 845-256-3826 or <a href="mailto:jebrown@gw.dec.state.ny.us">jebrown@gw.dec.state.ny.us</a> with any questions.

Sincerely,

Janet E. Brown, P.E.

Project Manager

Janut El Brain

Enclosure

G. Saccento, Acadia Tarrytown, LLC E. Moore, NYSDEC ec:

N. Walz, NYSDEC

PPM / INA/INA NOTE TO SEE THE INVSDEC TAGM

River Plaza Shopping Center - Summary of Various Subsurface Investigation Results

Soil (mg/kg) Detected	Concentration Ranges

CORNER STO

Soil (mg/kg) Detected Concer	PSI, 1998	ATC, 2003	5 CNA, 2003	Tank removal JRH, April 2004	subsurf. invest. JRH, April 2004	under slab JRH, March 2005	W.	NYSDEC TAGM RSCO
Investigation By, Date PCE								
PĊË	0.136-1.829	0.0079	0.012-0.42	0.038	0.001J	ND		1.4
TCE	ND	ND	ND	ND	ND	* ND		0.7
cis-1,2-DCE	ND	ND	0.011	ND	ND	ND		NS NS
vinyl chloride	ND	ND	0.018-0.024	ND	ND	ND		0.2
acetone	ND	ND	0.17-0.43	ND	ND	(9') 0.276	9	0.2
1,2,4,5- tetramethylbenzene	NA	ND	ND	0.0064	ND	ND	matsumment and a sub-	10
1,3,5-trimethylbenzene	NA	ND	ND	0,0078	ND	ND	kasa wananan makanin	3,3
p-diethylbenzene	NA	ND	ND	0,019	ND	NA:	\	10
p-ethylloluene	NA	ND	ND	0.011	ND	NA		10
methylene chloride	0.136(B)	ND	ND	ND	ND	ND	- moments - e-con	0.
acenarthene	NA	ND	ND	0.030J	0.083	NA.		50
anthracene	NA.	ND	ND	0.060-0.350	0.39-0.53	NA		50
benzo/alanthracene	NA	0.69	0.36-0.94	0.27-1.8	0.093-2.9	NA		0.224 or MDL
benzo(a) pyrene	NA	0.78	0.44-1.1	0.37-1.6	0.12-2.6	NA.		0.061 or MDL
benzo(c)fluoranthene	NA	0.46-0.91	0.41-0.94	0.42/1.7	0.14-2.6	) NA		0,220 or MDI
benzo(g,h,i)perylene	NA	0.39	ND	0.28-0.87	0.081-1.8	NA		50
benzo(k)fluoranthene	NA	0.48	0.41-0.94	0.21-0.77	0.058-0.98	NA NA		0,220 or MDL
crysene	NA	0.69	0.38-0.83	0.3-1.9	0.4-3.2	NA.		0.4
dibenzo(a,h,)anthracene	NA	ND	ND	0.061-0.32	€0.5	NA	- 10000	0.0143 or MDI
fluoranthene	NA	0.53-1.0	ND	0.42-2.6	0.12-5.4	NA		50
flourene	NA	ND	ND	ND		NA		50
indeno(1,2,3-cd)pyrene	NA	ND	0.47	0.25-0.9	0.041-1.7	NA	=m::::m:m:m:n::	3.2
naphthalene	NA	ND	0.015	0,029	ND		Wall with the second	13
phenanthrene	NA NA	0,44-0,49	ND	0.14-0.8	1.1-1.3	, NA		50
pyrene	NA	0.51-1.0	ND	0.45-2.7	0_092-4.0	NA	magamanana_a r angc_r	50

See notes on page 2.

insprobability PLACOSPIE A Come to the Country (1000)

#### Groundwater (ug/L) Detected Concentration Ranges

		1		subsurf. invest.	aw only	under slab only		NYSDEC TOGS
Investigation Report By, Date	PSI, 1998	ATC, 2003	CNS, 2003	JRH, April 2004	JRH, Oct 2004		JRH, March 2005	standards/guidance value(*
PCE	8-43	5	ND	0.8J-5.4	0.8J-6.8	2.78	1,9-3,6	<u></u>
TCE	2	ND	ND	ND		ND	0.52	5
cis-1.2-DCE	2	ND	ND	4.7	4.7-9	NA.	0.47-2.4	5
vinyl chloride	ND	13	ND	5.1-11	3-12	ND	8.9	2
acetone	ND:	ND	ND	ND		8,41	NA.	50°
1,2,4,5- tetramethylbenzene	NA.	ND	ND	ND	ND	NA	NA NA	5
1,3,5-trimethylbenzene	NA.	ND	ND	ND	ND	ND	NA.	5
p-diethylbenzene	NA.	ND	ND	ND		NA	ND	NS
p-ethyltoluene	NA.	ND	ND	ND	ND	NA.	ND	NS NS
methylene chloride	ND	ND	ND	ND	14B-15B	ND	ND	5
MTBE	NA	ND	13	ND	· ND	ND	ND	10
chloroform	NA.	ND	ND	, ND	ND	ND	0.5-3	1 0.1740
acenapthene	NA NA	NA	NA	ND	NA.	NA.	NA.	
anthracene	NA	NA	NA	ND	NA	NA	NA	
benzo(a)anthracene	NA	NA	NA	ND	NA	NA	NA	
benzo(a) pyrene	NA	NA	NA NA	ND	NA NA	NA	NA	12 no 110 pc
benzo(b)fluoranthene	NA.	NA	NA	ND	NA.	NA	NA	
benzo(g,h,i)perylene	NA NA	NA	NA	ND	NA	NA	NA	
benzo(k)fluoranthene	NA NA	NA.	NA	ND	NA	NA	NA	
ciysene	NA.	NA	NA	ND	NA	NA	NA	
dibenzo(a,h,)anthracene	NA NA	NA	NA	ND	NA	NA.	NA.	
fluoranthene	NA	NA	NA	ND		NA	NA NA	
flourene	NA	NA	NA	ND	NA.	NA	NA	
indeno(1,2,3-cd)pyrene	NA	NA	NA	ND		NA	NA	- Le-Armanan Walles
naphthalene	NA	NA	NA	ND	- Interest	NA	NA	
phenanthrene	NA	NA	NA	ND		NA.	NA	
pyrene	NA	NA	NA	ND	NA	NA	NA	

ND = not detected

NA = not analyzed NS = not sampled

B = detected in blank

J = estimated concentration

-- = no standard

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APPENDIX L
Previous Investigation Data
Tables by Whitestone

### SOIL SAMPLING AND ANALYSES DATA SUMMARY

### River Plaza Shopping Center 124 to 134 Wildey Street

Tarrytown, Westchester County, New York

	SAMPLE ID:		MW-5		WB-1		MW-6S			WB-2			MW-7S			WB-3			WB-4	
WHITESTONE	LAB ID:	A	AC42169-005	A	C42169-001		AC42868-004	4	P	C42868-	001		AC42868-00:	5		AC42868-00	)2		AC42868-003	13
VALUESTONE	COLLECTION DATE:		1/13/2009		1/13/2009		2/20/2009			2/20/200	19		2/19/2009			2/19/2009			2/19/2009	
A ASSOCIATES INC.	SAMPLE DEPTH (fbgs):		13.5 to 14.0		18.5 to 19.0		13.0 to 13.5			15.0 to 15	5.5		12.5 to 13.0			19.5 to 20.0	)		20.0 to 20.5	i
A look of the control	SAMPLE MATRIX:		Soil		Soil		Soil			Soil			Soil			Soil			Soil	
NALYTE	NYSDEC RPSCO	Result	Flg RL	Result	Flg RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS (VOs)																				
Total VO TICs	NA	~	~	~	~	ND			ND			ND			ND			ND		
,1,1-Trichloroethane	0.68	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,1,2,2-Tetrachloroethane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,1,2-Trichloro-1,2,2-trifluoroethane	NA	ND	0.0074	ND	0.0074	ND	J	0.0063	0.0089	J	0.0068	0.0088	J	0.0065	0.019	J	0.0062	ND	J	0.006
,1,2-Trichloroethane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,1-Dichloroethane	0.27	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,1-Dichloroethene	0.33	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,2,3-Trichloropropane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND	-11/2	0.0065	ND		0.0062	ND		0.006
,2,4-Trimethylbenzene	3.6	ND	0.0015	ND	0.0015	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0012	0.0016		0.001
,2-Dichlorobenzene	1.1	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
1,2-Dichloroethane	0.02	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND	***	0.0062	ND		0.006
,2-Dichloropropane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,3,5-Trimethylbenzene	8.4	ND	0.0015	ND	0.0015	ND		0.0013	ND	UJ	0.0014	ND		0.0013	ND		0.0012	ND		0.001
,3-Dichlorobenzene	2.4	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,3-Dichloropropane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
,4-Dichlorobenzene	1.8	ND	0.0074	ND	0.0074	ND		0.0063	ND	***	0.0068	ND		0.0065	ND		0.0062	ND		0.006
,4-Dioxane	0.1	ND	0.37	ND	0.37	ND		0.31	ND		0.34	ND		0.33	ND		0.31	ND		0.32
2-Butanone	0.12	ND	0.0074	ND	0.0074	ND	UJ	0.0063	0.039		0.0068	ND	UJ	0.0065	ND	UJ	0.0062	ND	UJ	0.0063
2-Chloroethylvinylether	NA	ND	0.0074	ND	0.0074	ND	UJ	0.0063	ND		0.0068	ND	UJ	0.0065	ND	UJ	0.0062	ND	UJ	0.0063
-Hexanone	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
-Isopropyltoluene	NA	ND	0.0015	ND	0.0015	ND		0.0013	ND	UJ	0.0014	ND		0.0013	ND		0.0012	ND		0.001
-Methyl-2-pentanone	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Acetone	0.05 {500}	0.084	0.037	0.083	0.037	0.043		0.031	0.19		0.034	ND		0.033	ND		0.031	ND		0.032
Acrolein	NA NA	ND	UJ 0.037	ND	UJ 0.037	ND		0.031	ND		0.034	ND		0.033	ND		0.031	ND		0.032
Acrylonitrile	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Benzene	0.06	ND	0.0015	ND	0.0015	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0012	ND		0.001
Bromodichloromethane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Bromoform	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Bromomethane	NA	ND	UJ 0.0074	ND	UJ 0.0074	ND	UJ	0.0063	ND	UJ	0.0068	ND	UJ	0.0065	ND	UJ	0.0062	ND	UJ	0.0063
Carbon disulfide	2.7	ND	0.0074	0.026	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND	03	0.0062	ND	0,3	0.0063
Carbon tetrachloride	0.76	ND	0.0074	ND	0.0074	_		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.0063
Chlorobenzene	1.1	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Chloroethane	NA NA	ND	UJ 0.0074	ND	UJ 0.0074	ND		0.0063	ND	UJ	0.0068	ND		0.0065	ND		0.0062	ND		0.006
Chloroform	0.37	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Chloromethane	NA NA	ND	0.0074	ND	0.0074	ND		0.0063	ND	UJ	0.0068	ND		0.0065	ND		0.0062	ND		0.0063
is-1,2-Dichloroethene	0.25	ND	0.0074	ND	0.0074	ND		0.0063	ND	03	0.0068	ND		0.0065	ND		0.0062	ND		0.006
is-1,3-Dichloropropene	NA NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Dibromochloromethane	NA NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.006
Dichlorodifluoromethane	NA NA	ND	0.0074	ND	0.0074	ND	UJ	0.0063	ND		0.0068	ND	UJ	0.0065	ND	UJ	0.0062	ND	UJ	
thylbenzene	1 1	ND	0.0074	ND	0.0074	ND	UJ.	0.0003	ND		0.0008	ND	OJ			Oì			UJ	0.006
sopropylbenzene	NA	ND	0.0015	ND	0.0015	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0012	ND		0.001
n&p-Xylenes	0.26	ND	0.0013	ND	0.0013	ND		0.0013	ND		0.0014			0.0013	ND		0.0012	ND		0.0013
Methylene chloride	0.05	ND	0.003	ND	0.003	ND		0.0023				ND		0.0026	ND		0.0025	ND		0.0025
						_			ND		0.0068	ND		0.0065	0.0075		0.0062	ND		0.0063
1ethyl-t-butyl ether	0.93	ND	0.0015	ND	0.0015	ND		0.0013	ND		0.0014	ND		0.0013	ND	-	0.0012	ND		0.0013

Whitestone Associates, Inc.

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## TABLE 2 SOIL SAMPLING AND ANALYSES DATA SUMMARY

### River Plaza Shopping Center 124 to 134 Wildey Street

Tarrytown, Westchester County, New York

A	SAMPLE ID:		MW-5	T	WB-1	T	MW-6S			WB-2		Г	MW-7S			WB-3			WB-4	
A MURTECTONIE	LAB ID:	Λ	C42169-005	^	C42169-001		AC42868-004	1	Α.	AC42868-0	01		AC42868-005			AC42868-002				2
WHITESTONE	COLLECTION DATE:		1/13/2009	_	1/13/2009		2/20/2009	4				-		)					AC42868-003	3
A CCOCIATECINIC	SAMPLE DEPTH (fbgs):		13.5 to 14.0	+						2/20/2009		-	2/19/2009		<del></del>	2/19/2009			2/19/2009	
ASSOCIATES, INC.	SAMPLE MATRIX:	-	- Air		18.5 to 19.0		13.0 to 13.5			15.0 to 15.	.5		12.5 to 13.0			19.5 to 20.0			20.0 to 20.5	
ANALYTE		D14	Soil	Daniela	Soil	Domile	Soil	- DI	D 1	Soil	DI	D 1	Soil	D.	n 1	Soil	D.	D 1	Soil	
ANALYTE - Dutulhannana	NYSDEC RPSCO	Result	Flg RL	Result	Flg RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
n-Butylbenzene n-Propylbenzene	3.9	ND ND	0.0015	ND ND	0.0015	ND ND		0.0013	ND ND	UJ	0.0014	ND		0.0013	ND		0.0012	ND		0.0013
o-Xylene	0.26	ND	0.0015	ND	0.0015	ND	-	0.0013	ND		0.0014	ND ND		0.0013	ND ND		0.0012	ND		0.0013
sec-Butylbenzene	11	ND	0.0015	ND	0.0015	ND		0.0013	ND	UJ	0.0014	ND		0.0013	ND		0.0012	ND ND		0.0013
Styrene	NA NA	ND	0.0074	ND	0.0074	ND		0.0013	ND	OJ.	0.0068	ND		0.0013	ND		0.0012	ND		0.0013
t-Butyl Alcohol	NA NA	0.082	0.037	ND	0.037	ND		0.0003	ND		0.034	ND		0.0033	ND		0.0002	ND		0.0032
-Butyl Alcohol	NA NA	ND	0.0015	ND	0.0015	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0012	ND		0.032
Tetrachloroethene	1.3	0.029	0.0074	ND	0.0013	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0012	ND		
Toluene	0.7	0.0026	0.0074	0.0018	0.0074	ND		0.0003	ND		0.0008	ND			ND ND					0.0063
trans-1,2-Dichloroethene	0.19	ND	0.0013	ND	0.0013	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0012	ND		0.0013
trans-1,3-Dichloropropene	0,19 NA	ND ND	0.0074	ND	0.0074	ND		0.0063	ND ND		0.0068	ND		0.0065	ND		0.0062	ND ND		0.0063
Trichloroethene	0.47	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		
Trichlorofluoromethane	NA	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		0.0063
Vinyl chloride	0.02	ND	0.0074	ND	0.0074	ND		0.0063	ND		0.0068	ND		0.0065	ND		0.0062	ND		
Xylenes (Total)	NA	ND	0.0074	ND	0.0074	ND		0.0003	ND		0.0038	ND		0.0003	ND		0.0002	ND		0.0063
SEMI-VOLATILE ORGANICS (SVOs)	IM	ND	0.0015	IND	0.0013	ND		0.0013	IVD		0.0014	ND		0.0013	ND		0.0012	ND		0.0013
Total SVO TICs	NA	~	~	~	~	74	ī		86	I		83	I		78	J		78	J	
1.2.4-Trichlorobenzene	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
1,2-Diphenylhydrazine	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2,4,5-Trichlorophenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2,4,6-Trichlorophenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2,4-Dichlorophenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2,4-Dimethylphenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2,4-Dinitrophenol	NA	ND	UJ 0.49	ND	UJ 0.51	ND		0.42	ND		0.46	ND		0.43	ND		0.42	ND		0.42
2,4-Dinitrotoluene	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2,6-Dinitrotoluene	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2-Chloronaphthalene	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2-Chlorophenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2-Methylnaphthalene	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2-Methylphenol	0.33	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2-Nitroaniline	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
2-Nitrophenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
3&4-Methylphenol	0.33	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
3,3'-Dichlorobenzidine	NA	ND	UJ 0.098	ND	UJ 0.1	ND	UJ	0.084	ND	UJ	0.093	ND	UJ	0.087	ND	UJ	0.084	ND	UJ	0.084
3-Nitroaniline	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
1,6-Dinitro-2-methylphenol	NA	ND	0.49	ND	0.51	ND		0.42	ND		0.46	ND		0.43	ND		0.42	ND		0.42
4-Bromophenyl-phenylether	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
-Chloro-3-methylphenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
4-Chloroaniline	NA	ND	UJ 0.098	ND	UJ 0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
4-Chlorophenyl-phenylether	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
4-Nitroaniline	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
4-Nitrophenol	NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Acenaphthene	20	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Acenaphthylene	100	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Aniline	NA NA	ND	0.098	ND	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084

Whitestone Associates, Inc.

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### SOIL SAMPLING AND ANALYSES DATA SUMMARY

### River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York

	CAMPI EID	7	MW 5			WD 1			MWG			WB-2		T	MW-7S			WB-3		Г	WB-4	
A NA h www.comes.com	SAMPLE ID:		MW-5			WB-1	1	-	MW-6S			WB-2 AC42868-			AC42868-005			AC42868-00	22		AC42868-003	2
■ WHITESTONE	LAB ID:	P	AC42169-00	)5		C42169-00	1	-	AC42868-00	14								2/19/2009			2/19/2009	,
ACCOCIATEC INC	COLLECTION DATE:		1/13/2009			1/13/2009		-	2/20/2009			2/20/200			2/19/2009			19.5 to 20.0			20.0 to 20.5	
ASSOCIATES, INC.	SAMPLE DEPTH (fbgs):		13.5 to 14.0	)	1	8,5 to 19.0	1	-	13.0 to 13.5	)		15.0 to 1.	5.5		12.5 to 13.0			Soil	J		Soil	
	SAMPLE MATRIX:	D 1:	Soil	bi	D 1	Soil	DI	D to	Soil	DI	D L	Soil	DI	D14	Soil	DI	Donale		RL	Result		RL
ANALYTE	NYSDEC RPSCO	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL 0.004	Result	Flg	RL	Result	Flg	RL	Result	Flg	0.084	ND	Flg	0.084
Anthracene	100	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND ND		0.087	ND ND		0.084	ND		0.084
Benzidine	NA .	ND		0.49	ND		0.51	ND		0.42	ND		0.46	ND			-		0.084	ND		0.42
Benzo[a]anthracene	1 1 (1)	ND		0.098	ND 0.42		0.1	ND		0.084	ND		0.093			0.087	ND 0.45		0.084	2.0		0.084
Benzo[a]pyrene	1 {1}	ND		0.098	0.42		0.1	ND		0.084	ND		0.093	0.73		0.087	0.45 ND		0.084	ND		0.084
Benzo[b]fluoranthene	1	ND		0.098	ND	_	0.1	ND		0.084	ND		0.093	ND		0.087						0.084
Benzo[g,h,i]perylene	100	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Benzo[k]fluoranthene	0.8	ND		0.098	ND		0.1	ND	***	0.084	ND	* * * *	0.093	ND	TIT	0.087	ND	7.17	0.084	ND	111	
Benzoic acid	NA	ND	UJ	0.49	ND	UJ	0.51	ND	UJ	0.42	ND	UJ	0.46	ND	UJ	0.43	ND	UJ	0.42	ND	UJ	0.42
bis(2-Chloroethoxy)methane	NA NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND ND		0.084
bis(2-Chloroethyl)ether	NA	ND		0.098	ND		0,1	ND		0.084	ND		0.093	ND		0.087	ND					
bis(2-Chloroisopropyl)ether	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
bis(2-Ethylhexyl)phthalate	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Butylbenzylphthalate	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Carbazole	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Chrysene	1	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Dibenzo[a,h]anthracene	0.33	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Dibenzofuran	7	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Diethylphthalate	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Dimethylphthalate	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND	-9	0.087	ND		0.084	ND		0.084
Di-n-butylphthalate	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Di-n-octylphthalate	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Fluoranthene	100	ND		0.098	ND		0.1	ND	-	0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Fluorene	30	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Hexachlorobenzene	0.33	ND		0.098	ND	9	0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Hexachlorobutadiene	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Hexachlorocyclopentadiene	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Hexachloroethane	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Indeno[1,2,3-cd]pyrene	0.5	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Isophorone	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Naphthalene	12	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0,084
Nitrobenzene	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
N-Nitrosodimethylamine	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
N-Nitroso-di-n-propylamine	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
N-Nitrosodiphenylamine	NA	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Pentachlorophenol	0.8	ND		0.98	ND		1	ND		0.42	ND		0.46	ND		0.43	ND		0.42	ND		0.42
Phenanthrene	100	ND		0.098	ND		0.1	ND		0.084	ND	- 22	0.093	ND		0.087	ND		0.084	ND		0.084
Phenol	0.33	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084
Pyrene	100	ND		0.098	ND		0.1	ND		0.084	ND		0.093	ND		0.087	ND		0.084	ND		0.084

Whitestone Associates, Inc.

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### TABLE 2 SOIL SAMPLING AND ANALYSES DATA SUMMARY

## River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York

		SAMPLE ID:		MW-5		ī	WB-1	-		MW-6S			WB-2		1	MW-7S		Y	WB-3		T	WB-4	
Α.	14/ urearance					4.0		,						10.1	-					2	-		,
	WHITESTONE	LAB ID:		AC42169-005	)		242169-00	1		AC42868-00	14	A	C42868-0			AC42868-00	3		AC42868-00	12		AC42868-003	,
# V	ACCOCLATECING	COLLECTION DATE:		1/13/2009		_	1/13/2009			2/20/2009			2/20/2009			2/19/2009		-	2/19/2009			2/19/2009	
	ASSUCIATES, INC.	SAMPLE DEPTH (fbgs):		13.5 to 14.0		18	8.5 to 19.0			13.0 to 13.5	5		15.0 to 15	.5		12.5 to 13.0		ļ	19.5 to 20.0	1		20.0 to 20.5	
		SAMPLE MATRIX:		Soil			Soil			Soil			Soil			Soil			Soil			Soil	
ANALYTE		NYSDEC RPSCO	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
METALS						F														0.11			0.11
Mercury		0.18 [0.001-0.2]	~		~	~		~	0.14		0.11	ND		0.12	ND		0.11	ND	_	0.11	ND		0.11
Aluminum		10000	~		~	~		~	7,900		250	13,000		280	11,000		260	13,000		250	6,800		250
Antimony		12	~		~	~		~	ND		2.5	ND		2.8	ND		2.6	ND	- E	2.5	ND		2.5
Arsenic		13 [3-12]	~		~	~		~	ND		2.5	3.4		2.8	ND		2.6	ND		2,5	ND		2.5
Barium		350 [15-600]	~		~	~		~	76		13	110		14	98		13	110		13	41		13
Beryllium		7.2 [0-0.75]	~		~	~		~	ND		0.76	ND		0.83	ND		0.78	ND		0.76	ND		0.76
Cadmium		2.5 [0.1-1]	~		~	~		~	ND		0.76	ND		0.83	ND		0.78	ND		0.76	ND		0.76
Calcium		10,000 [130-35,500]	~		~	~		~	4,500		1,300	ND		1,400	1,900		1,300	1,300		1,300	ND		1,300
Chromium		30 {400} [1.5-40]	~		~	~		~	17	J	6.3	25	J	6.9	36	J	6.5	36	J	6.3	19	J	6.3
Cobalt		20 [2.5-60]	~		~	~		~	7.4	J	3.2	9.3	J	3.5	6.9	J	3.2	9.4	J	3.2	5.8	J	3.2
Copper		50 [1-50]	~		~	~		~	19	J	6.3	15	J	6.9	9.9	J	6.5	13	J	6.3	7.3	J	6.3
Iron		2,000 [2,000-550,000]	~		~	~		~	13,000		250	19,000		280	11,000		260	15,000		250	8,800		250
Lead		63 [200-500]	~		~	~		~	61		6.3	8.5		6.9	7.0		6.5	ND		6,3	ND		6.3
Magnesium		NA [100-5,000]	~		~ _	~		~	4,600		630	3,600		690	3,800		650	3,600		630	2,700		630
Manganese		1,600 [50-5,000]	~		~	~		~	260		13	300		14	110		13	120		13	110		13
Nickel		30 [0.5-25]	~		~	~		~	12		6.3	16		6.9	17		6.5	22		6.3	11		6.3
Potassium		NA [8,500-43,000]	~		~	~		~	1,900	J	630	760	J	690	840	J	650	710	J	630	650	J	630
Selenium		3.9 [0.1-3.97]	~		~	~		~	ND		2.3	ND		2.5	ND		2.3	ND		2.3	ND		2.3
Silver		2.0	~		~	~		~	ND		1.9	ND		2.1	ND		1.9	ND		1.9	ND		1.9
Sodium		NA [6,000-8,000]	~		~	~		~	ND		320	ND		350	ND		320	ND		320	ND		320
Thallium		5	~		~	~		~	ND		1.5	ND		1.7	ND		1.6	ND	-74: -	1.5	ND		1.5
Vanadium		39 [1-300]	~		~	~		~	21		13	25		14	24		13	30		13	18		13
Zinc		109 [9-50]	~		~	~		~	45	J	13	44	J	14	41	J	13	39	J	13	29	J	13
POLYCHLO	RINATED BIPHENYLS (PC	Bs)																					
Aroclor (Total)	)	0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1016		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1221		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1232		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1242		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1248		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1254		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1260		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1262		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
Aroclor-1268		0.1	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
PESTICIDES																							
Aldrin		0.005	~		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
Alpha-BHC		0.02	~		~	~		~	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0013	ND		0.0013
beta-BHC		0.036	~		~	~		~	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0013	ND		0.0013
Chlordane		NA	~		~	~		~	ND		0.013	ND		0.014	ND		0.013	ND		0.013	ND		0.013
delta-BHC		0.04	~		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
Dieldrin		0.005	~		~	~		~	ND		0.0003	ND		0.0014	ND		0.0013	ND		0.0003	ND		0.0003
Endosulfan I		2.4	~		~	~		~	ND		0.0063	ND		0.0014	ND		0.0065	ND	-	0.0063	ND		0.0063
Endosulfan II		2.4	~		~	~		~	ND		0.0063	ND		0.0069	ND ND		0.0065	ND		0.0063	ND		0.0063
Endosulfan II Endosulfan Su	16-4-	2.4	~		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065				ND		0.0063

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#### SOIL SAMPLING AND ANALYSES DATA SUMMARY

#### River Plaza Shopping Center 124 to 134 Wildey Street

#### Tarrytown, Westchester County, New York

		r			Υ			1						7				200				
<b>A</b>	SAMPLE ID:		MW-5			WB-1			MW-6S			WB-2			MW-7S			WB-3			WB-4	
■ MHITESTONE	LAB ID:	Α	C42169-00:	5	A	C42169-0	01		AC42868-004	1	A	AC42868-	001		AC42868-00	5		AC42868-002			AC42868-003	3
A ASSESSIONE	COLLECTION DATE:		1/13/2009			1/13/2009	)		2/20/2009			2/20/200	)9		2/19/2009			2/19/2009			2/19/2009	
ASSOCIATES, INC.	SAMPLE DEPTH (fbgs):		13.5 to 14.0	)		18.5 to 19.	.0		13.0 to 13.5			15.0 to 1:	5.5		12.5 to 13.0			19.5 to 20.0			20.0 to 20.5	
. 655565 11757 1161	SAMPLE MATRIX:		Soil			Soil			Soil			Soil			Soil			Soil			Soil	
ANALYTE	NYSDEC RPSCO	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
Endrin	0.014	2		~	~	3113	~	ND		0.0063	ND		0.0069	ND		0.0065	ND	Ü	0.0063	ND		0.0063
Endrin Aldehyde	NA	?		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
Endrin Ketone	NA	~		~	~		~	ND	174	0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
gamma-BHC	0.1	~		~	~		~	ND		0.0013	ND		0.0014	ND		0.0013	ND		0.0013	ND		0.0013
Heptachlor	0.042	~		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
Heptachlor Epoxide	NA	~		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
Methoxychlor	NA	~		~	~		~	ND		0.0063	ND		0.0069	ND		0.0065	ND		0.0063	ND		0.0063
p,p'-DDD	0.0033	~		~	~		~	ND		0.0032	ND		0.0035	ND		0.0032	ND		0.0032	ND		0.0032
p,p'-DDE	0.0033	?		~	~		~	ND		0.0032	ND		0.0035	ND		0.0032	ND		0.0032	ND		0.0032
p,p'-DDT	0.0033	~		~	~		~	ND		0.0032	ND		0.0035	ND		0.0032	ND		0.0032	ND		0.0032
Toxaphene	NA	~		~	~		~	ND		0.032	ND		0.035	ND		0.032	ND		0.032	ND		0.032
OTHER PARAMETERS				7/												in						- 5.052
Cyanide	27	~		~	~		~	ND		0.32	ND		0.35	ND		0.32	ND	16-	0.32	ND		0.32
Percent Solids	NA	68			66			79			72			77			79			79		

#### NOTES

Shaded and Bold value indicates an exceedence of the NYSDEC Soil Cleanup Objective

All results reported in parts per million (ppm or mg/kg)

RPSCO - NYSDEC Remedial Program Soil Cleanup Objective (Unrestricted Use)

Flg - Data Qualifier

RL - Laboratory Reporting Limit

ND - Not Detected exceeding RL

NA - No Applicable NYSDEC Soil Cleanup Objective

J - Detected at an estimated concentration/Unknown Bias

~ - Not analyzed for this compound

SB - Site Background

[] - Eastern USA Background Level, shown in brackets

{ } - Commercial Soil Cleanup Objective, shown in braces

fbgs - feet below ground surface

UJ - Uknown Bias

Whitestone Associates, Inc.

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## TABLE 3 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MW-5 AND TEMPORARY WELLPOINTS)

#### River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

A	CLIENT ID:	MW-5	WB-1GW	WB-2 GW U/F	WB-3 GW	WB-4 GW U/F	FB	ТВ	FB	ТВ	FB U/F	ТВ
WHITESTONE	LAB ID:	AC42279-001	AC42169-003	AC42868-007	AC42868-008	AC42868-010	AC42169-007	AC42169-008	AC42279-003	AC42279-004	AC42868-013	AC42868-014
ASSOCIATES, INC.	COLLECTION DATE:	1/20/2009	1/13/2009	2/20/2009	2/19/2009	2/20/2009	1/13/2009	1/12/2009	1/20/2009	1/20/2009	2/20/2009	2/17/2009
ANALYTE	TOGS	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Fig RL
VOLATILE ORGANICS (VOs)				1								
Total VO TICs	NA NA	~ ~	~ ~	ND	~ ~	ND	~ ~	~ ~	~ ~	~ ~	ND	ND
1,1,1-Trichloroethane	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
1,1,2,2-Tetrachloroethane	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND I	ND 1.0	ND 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND 1	ND 1	ND 5.0	ND 5,0	ND 5.0	ND 1	ND I	ND 1	ND 1	ND 5.0	ND 5,0
1,1,2-Trichloroethane	1	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND 1	ND 1.0	ND 1.0
1,1-Dichloroethane	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND 1	ND 1.0	ND 1,0
1,1-Dichloroethene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND 1	ND 1.0	ND 1.0
1,2,3-Trichloropropane	NA	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND UJ 1	ND UJ 1	ND 1	ND 1	ND 1.0	ND 1.0
1,2,4-Trimethylbenzene	NA	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
1,2-Dichlorobenzene	3	ND I	ND I	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
1,2-Dichloroethane	0.6	ND 0.5	ND 0.5	ND 0.50	ND 0.50	ND 0.50	ND 0.5	ND 0.5	ND 0.5	ND 0.5	ND 0.50	ND 0.50
1,2-Dichloropropane	1	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1,0
1,3,5-Trimethylbenzene	NA	ND 1	ND I	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND 1	ND 1.0	ND 1.0
1,3-Dichlorobenzene	3	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
1,3-Dichloropropane	NA	ND UJ 1	ND 1	ND 1,0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
1,4-Dichlorobenzene	3	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
1,4-Dioxane	NA NA	ND 50	ND 50	ND 250	ND 250	ND 250	ND 50	ND 50	ND 50	ND 50	ND 250	ND 250
2-Butanone	NA NA	ND 1	ND I	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND 1 ND 1	ND 1.0 ND UJ 1.0	ND 1.0 ND UJ 1.0
2-Chloroethylvinylether	NA	ND 1	ND 1	ND UJ 1.0	ND UJ 1.0	ND UJ 1.0	ND I	ND 1 ND 1	ND UJ 1	ND UJ 1	ND UJ 5.0	ND UJ 5.0
2-Hexanone	NA NA	ND 1	ND UJ 1	ND UJ 5.0	ND UJ 5.0	ND UJ 5.0	ND 1 ND 1	ND 1	ND 0, 1	ND 03 1	ND 03 3.0	ND 03 3.0
4-Isopropyltoluene	NA NA	ND 1	ND I	ND 1.0	ND 1.0 ND UJ 1.0	ND 1,0 ND UJ 1.0	ND 1	ND 1	ND UJ 1	ND UJ I	ND UJ 1.0	ND UJ 1.0
4-Methyl-2-pentanone	NA NA	ND 1	ND 1	ND UJ 1.0	ND UJ 1.0 ND 5.0	ND 5.0	ND 5	ND 5	ND 5	ND 5	ND 5.0	ND 5.0
Accetone	NA 5	ND 5 ND 5	ND 5 ND 5	ND 5.0 ND 5.0	ND 5.0	ND 5.0	ND UJ 5	ND UJ 5	ND 5	ND 5	ND 5.0	ND 5.0
Acrolein	5	ND UJ 1	ND 1	ND 1.0	ND 3.0	ND 3.0	ND UJ 1	ND UJ 1	ND 1	ND I	ND 1.0	ND 1.0
Acrylonitrile Benzene	1	ND 0.5	ND 0.5	ND 0.50	ND 0.50	ND 0.50	ND 0.5	ND 0.5	ND 0.5	ND 0.5	ND 0.50	ND 0.50
Bromodichloromethane	NA NA	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND I	ND 1	ND 1	ND 1	ND 1.0	ND 1,0
Bromoform	NA NA	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
Bromomethane	5	ND R 1	ND R 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND R 1	ND R 1	ND 1.0	ND 1.0
Carbon disulfide	60	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND I	ND 1	ND 1	ND I	ND 1.0	ND 1.0
Carbon tetrachloride	5	ND I	ND 1	ND 1.0	ND 1,0	ND 1.0	ND 1	ND I	ND 1	ND 1	ND 1.0	ND 1.0
Chlorobenzene	5	ND 1	ND 1	ND 1.0	ND 1,0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
Chloroethane	5	ND I	ND 1	ND UJ 1.0	ND UJ 1.0	ND UJ 1.0	ND I	ND 1	ND 1	ND 1	ND UJ 1.0	ND UJ 1.0
Chloroform	NA	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
Chloromethane	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND I	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
cis-1,2-Dichloroethene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND I	ND I	ND 1	ND 1	ND 1.0	ND 1.0
cis-1,3-Dichloropropene	NA	ND 1	ND 1	ND UJ 1.0	ND UJ 1.0	ND UJ 1.0	ND 1	ND 1	ND 1	ND 1	ND UJ 1.0	ND UJ 1.0
Dibromochloromethane	5	ND 1	ND I	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
Dichlorodifluoromethane	5	ND UJ 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND UJ 1	ND UJ I	ND 1.0	ND 1.0
Ethylbenzene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND I	ND 1	ND 1.0	ND 1.0
Isopropylbenzene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND 1	ND 1.0	ND 1.0
m&p-Xylenes	5	ND UJ 2	ND 2	ND 2.0	ND 2.0	ND 2.0	ND 2	ND 2	ND 2	ND 2	ND 2.0	ND 2.0
Methylene chloride	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	2.3	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
Methyl-t-butyl ether	10	ND 0.5	ND 0.5	ND 0.50		ND 0.50	ND 1	ND 1	ND 0.5	ND 0.5	ND 0.50	ND 0.50
n-Butylbenzene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
n-Propylbenzene	5	ND 1	ND 1	ND 1.0		ND 1.0	ND 1	ND 1	ND 1	ND 1	ND 1.0	ND 1.0
o-Xylene	5	ND UJ 1	ND 1	ND 1.0		ND 1,0	ND 1	ND 1	ND 1	ND I	ND 1.0	ND 1.0 ND 1.0
sec-Butylbenzene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1,0	ND 1	ND 1	ND I	ND 1 ND 1	ND 1.0 ND 1.0	ND 1.0 ND 1.0
Styrene	5	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1 ND UJ 5	ND UJ 5	ND UJ 25	ND UJ 25
t-Butyl Alcohol	NA NA	ND 5	ND 5	ND UJ 25	ND UJ 25	ND UJ 25	ND 5	ND 5		ND UJ 3	ND 0J 23	ND 03 23
t-Butylbenzene	NA .	ND 1	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1		ND I	ND 1.0	ND 1.0
Tetrachloroethene	5	ND 1	ND I	ND 1.0	ND 1.0	ND 1.0	ND 1	ND I	ND 1	ND I	ND 1.0	
Γoluene Γο	5	ND I	ND 1	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ן עט ן	I ND I	1.0	1.0 I.0

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## TABLE 3 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MW-5 AND TEMPORARY WELLPOINTS) Biver Place Shapping Center

#### River Plaza Shopping Center 124 to 134 Wildey Street Tarrytown, Westchester County, New York

	CLIENT ID:	MW-5		V	VB-1GW	W	B-2 GW U/F	I w	B-3 GW	T	VB-4 GW U/F	_	FB	-		ТВ	ī	FB	1	TB	T	FB U/F	T	TB	
▶ WHITESTONE	LAB ID:	AC42279-001	,		42169-003		C42868-007		2868-008	+	AC42868-010	+	AC42169-00	7		2169-008	A	C42279-003	A	C42279-004		12868-013		AC42868-014	4
ASSOCIATES, INC.	COLLECTION DATE:	1/20/2009	1		/13/2009		2/20/2009		19/2009	+	2/20/2009	_	1/13/2009		<del>}</del>	2/2009	<u> </u>	1/20/2009	<del>                                     </del>	1/20/2009		20/2009	1	2/17/2009	_
ANALYTE	TOGS		RL	Result	Flg RL	Result	Flg RL		Flg RL	Resul		Re	esult Flg	RL		Flg RL	Result		Result	Flg RL	Result	Flg RL	Resu		RL
Trans-1,2-dichloroethene	5	ND ND	1	ND	1 1	ND	UJ 1.0	ND	UJ 1.0	ND			VD	1	ND	1	ND	1	ND	1	ND	UJ 1.0	ND		1.0
Trans-1,3-dichloropropene	NA NA	-	1	ND	1	ND	UJ 1.0	ND	UJ 1.0	ND			ND	1	ND	1	ND	- 1	ND	1	ND	UJ 1.0	ND	) UJ	1.0
Trichloroethene	5		i	ND	1	ND	UJ 1.0	ND	UJ 1.0	ND			ND	1	ND	1	ND	1	ND	1	ND	UJ 1.0	ND	) UJ	1.0
Trichlorofluoromethane	5	-	Ī	ND	1	ND	1.0	ND	1.0	ND		$\rightarrow$	ND UJ	1	ND	UJ I	ND	1	ND	1	ND	1.0	ND	,	1.0
Vinyl chloride	2	ND	1	ND	1	ND	1.0	ND	1.0	ND			ND.	1 -	ND	1	ND	1	ND	1	ND	1.0	ND	,	1.0
Xylenes (Total)	NA	ND UJ	1	ND	1	ND	1.0	ND	1	ND	1	l N	VD	1	ND	1	ND	1	ND	1	ND	1	ND	,	1
SEMI-VOLATILE ORGANICS (SVOs)	•									*									- 37.						
Total SVO TICs	NA	~	~	~	~	ND		ND		ND			~	~	~	~	~	~	~	~	ND		~		~
1,2,4-Trichlorobenzene	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	N	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
1,2-Diphenylhydrazine	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	1	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2,4,5-Trichlorophenol	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	1	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2,4,6-Trichlorophenol	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2,2	N	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2,4-Dichlorophenol	1	ND	2,1	ND	2	ND	2.2	ND	2.2	ND		N	VD	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2,4-Dimethylphenol	1	ND	2.1	ND	2	ND	2.2	ND	2,2	ND		$\rightarrow$	VD	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2,4-Dinitrophenol	1		11	ND	10	ND	11	ND	11	ND		_	ND	11	~	~	ND	10	~	~	ND	10	~		~
2,4-Dinitrotoluene	5	ND	2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2,6-Dinitrotoluene	5		2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	*	ND	2	~	~	ND	2.0	~		~
2-Chloronaphthalene	NA NA		2.1	ND	2	ND	2,2	ND	2.2	ND		$\rightarrow$	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2-Chlorophenol	NA		2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	~	ND	2_	~	~	ND	2.0	~		~
2-Methylnaphthalene	NA		2.1	ND	2	ND	2.2	ND	2.2	ND		-+-	ND	2.1	~	~	ND	2	-	~	ND	2.0	~		~
2-Methylphenol	NA		2,1	ND	2	ND	2.2	ND	2.2	ND		_	VD	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2-Nitroaniline	5		2.1	ND	2	ND	2.2	ND	2.2	ND		_	VD	2.1	~	~	ND	2	~	~	ND	2.0	~		~
2-Nitrophenol	NA NA		2.1	ND	2	ND	2.2	ND	2,2	ND		$\overline{}$	ND	2.1	~	~	ND	2	ji.	~	ND ND	2.0	~		~
3&4-Methylphenol	NA .		2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
3,3'-Dichlorobenzidine	5		2.1	ND	2	ND	2.2	ND ND	2.2	ND ND			ND ND	2.I 2.1	~	~	ND ND	2	~	~	ND	2.0	~		~
3-Nitroaniline 4.6-Dinitro-2-methylphenol	5 NA		2.1	ND ND	10	ND ND	11	ND ND	11	ND		_	ND	11	~	~	ND	10	<del>~</del>	~	ND	10	\ ~		~
	NA NA		2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
4-Bromophenyl-phenylether 4-Chloro-3-methylphenol	NA NA		2.1	ND	2	ND	2,2	ND	2.2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
4-Chloroaniline	5		2.1	ND	2	ND	2,2	ND	2.2	ND		$\rightarrow$	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
4-Chlorophenyl-phenylether	NA NA		2.1	ND	2	ND	2.2	ND	2,2	ND			ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
4-Nitroaniline	5		2.1	ND	2	ND	2.2	ND	2.2	ND			ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
4-Nitrophenol	NA NA		2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2,1	~ ~	~	ND	2	~	~	ND	2.0	~		~
Acenaphthene	20		2.1	ND	2	ND	2.2	ND	2,2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Acenaphthylene	NA		2,1	ND	2	ND	2.2	ND	2.2	ND	2.2	N	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Aniline	5		2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	1	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Anthracene	NA		2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	1	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Benzidine	5	ND	11	ND	10	ND	11	ND	11	ND	11	N	ND	11	~	~	ND	10	~	~	ND	10	~		~
Benzo[a]anthracene	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	N	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Benzo[a]pyrene	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2.2	l I	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Benzo[b]fluoranthene	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND	2,2	N	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Benzo[g,h,i]perylene	NA	ND	2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Benzo[k]fluoranthene	NA		2.1	ND	2	ND	2.2	ND	2.2	ND		_	ND	2.1	~	~	ND	2	~	~	ND	2.0	~		~
Benzoic acid	NA		2.1	ND	2	ND	11		11	ND				2.1	~	~	ND	2	~	~	ND	10	~		~
bis(2-Chloroethoxy)methane	5		2,1	ND	2	ND	2.2	ND	2.2	ND			ND	2.1	~	~	ND	2		~	ND	2.0	~		~
bis(2-Chloroethyl)ether	1		2.1	ND	2	ND	2.2	ND	2.2	ND				2.1	~	~	ND	2		~	ND	2.0	~		~
bis(2-Chloroisopropyl)ether	5		2,1	ND	2	ND	2.2	ND	2.2	ND			ND	2.1	~	~	ND	2		~	ND	2.0	~		~
bis(2-Ethylhexyl)phthalate	5		2.1	ND	2	ND	2.2	ND	2.2	ND			ND	2.1	~	~	ND	2		~	ND	2.0	~		~
Butylbenzylphthalate	NA		2.1	ND	2	ND	2.2	ND	2.2	ND		_+_	ND	2.1	~	~	ND	2		~	ND	2.0	~		~
Carbazole	NA		2.1	ND	2	ND	2.2	ND	2.2	ND				2.1	~	~	ND	2		~	ND ND	2.0	~		~
Chrysene	NA NA		2.1	ND	2	ND	2,2	ND	2.2	ND			VD	2.1	~	~	ND	2		~	ND	2.0	~		~
Dibenzo[a,h]anthracene	NA NA		2.1	ND	2	ND	2.2		2.2	ND			ND ND	2.1	~	~	ND	2		~	ND ND	2.0	~		~ ~
Dibenzofuran	NA NA		2.1	ND	2	ND	2.2		2.2			_	ND ND	2.1	~	~	ND	2		~			~		~
Diethylphthalate	NA	ND	2.1	ND	2	ND	2,2	ND	2.2	ND	2.2	N	VD	2.1	~	~	ND	2	~	~	ND	2.0	_ ~		~

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## TABLE 3 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MW-5 AND TEMPORARY WELLPOINTS) River Plaza Shopping Center 124 to 134 Wildey Street

# Tarrytown, Westchester County, New York

A	CLIENT ID:	MW-5		WB-1GW	WB-	-2 GW U/F	WB-3 (	3W	W	B-4 GW U/F		FB			TB		FB		TB	F	B U/F		ТВ
WHITESTONE	LAB ID:	AC42279-001		AC42169-003		12868-007	AC42868			C42868-010	A	C42169-0	07	AC	C42169-008	-	C42279-003	AC	42279-004		2868-013	AC42	2868-014
ASSOCIATES, INC.	COLLECTION DATE:	1/20/2009		1/13/2009		20/2009	2/19/20			2/20/2009	_	1/13/2009		_	1/12/2009		1/20/2009	-	/20/2009		20/2009	2/1	7/2009
NALYTE	TOGS	Result Flg Ri	Resul		Result	Flg RL	Result Flg		Result		Result		RL	Result		Resul		Result	Flg RL	Result	Flg RL	Result	Flg R
Dimethylphthalate	NA	ND 2.	_	2	ND	2,2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	^
Di-n-butylphthalate	50	ND 2.	l ND	2	ND	2.2	ND	2.2	ND	2.2	ND		2,1	~	~	ND	2	~	~	ND	2.0	~	^
Di-n-octylphthalate	NA	ND 2.	ND	2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	_ ^
Fluoranthene	NA	ND 2.	l ND	2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	^
Fluorene	NA	ND 2.	l ND	2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	~
Texachlorobenzene	0.04	ND 2.	l ND	2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	
Hexachlorobutadiene	0.5	ND 2.	l ND	2	ND	2.2	ND	2.2	ND	2,2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	^
Hexachlorocyclopentadiene	5	ND 2.	l ND	2	ND	2.2	ND	2.2	ND	2,2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	^
Hexachloroethane	5	ND 2.		2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	^
Indeno[1,2,3-cd]pyrene	NA	ND 2.		2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	
sophorone	NA	ND 2.		2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	
Naphthalene	NA	ND 2.		2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND ND	2.0	~	~
Nitrobenzene	0.4	ND 2.		2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~		2,0	~	~
N-Nitrosodimethylamine	NA NA	ND 2.	_	2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	-	~	ND	2	-	~	ND ND	2.0	~ ~	
N-Nitroso-di-n-propylamine	NA	ND 2.		2	ND	2.2	ND	2.2	ND	2.2	ND		2.1	~	~	ND	2	~	~	ND	2.0	~	
N-Nitrosodiphenylamine	NA	ND 2.		2	ND	2.2	ND	2,2	ND	2.2	ND	-	2.1	~	~	ND ND	10	~	~	ND	10	~	^
Pentachlorophenol	1	ND 1	_	10	ND	11	ND ND	11	ND ND	2,2	ND ND		2.1	~	~	ND	2	~	~	ND	2.0	~	
Phenanthrene	NA 1	ND 2.		2	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND		2.1	~	~	ND	2	<del>-</del> ~	~	ND	2.0	~	
Phenol	NA	ND 2. ND 2.	_	2	ND ND	2.2	ND ND	2.2	ND	2.2	ND	_	2.1	<del>-</del>	~	ND	1.0	~	~	ND	2.0	~	_
Pyrene     METALS - UNFILTERED	NA NA	ND 2.	ND		ND	2.2	ND	2.2	ND	2.2	IND		2.1			ND	1.0			IND	2.0		
Mercury	1.4	~ ~			ND	0.20	~	~	ND	J 0.20	T ~		~	T ~	~	1 ~	~	T ~	~	ND	0.2	~	~
Aluminum	2,000	~ ~	_		1,700	100	~	~	7,400	100	~		~	~	~	~	~	~	~	ND	100	~	~
Antimony	6	~ ~	-	~	ND	7.5	~	~	ND	7.5	~		~	~	~	~	~	~	~	ND	7.5	~	~
Arsenic	50	~ ~	_	~	ND	20	~	~	ND	20	~		~	~	~	~	~	~	~	ND	20	~	~
Barium	2,000	~ ~	_	~	54	25	~	~	130	25	~		~	~	~	~		~	~	ND	25	~	^
Beryllium	3	~ ~	_	~	ND	4.0	~	~	ND	4.0	~		~	~	~	~	~	~	~	ND	4	~	~
Cadmium	10	~ ~		~	ND	2.0	~	~	ND	2.0	~		~	~	~	~	~	~	~	ND	2	~	~
Calcium	NA	~ _ ~	~	~	25,000	1000	~	~	42,000	1000	~		~	~	~	~	~	~	~	ND	1000	2	~
Chromium	100	~ ~	~	~	ND	25	~	~	ND	25	~		~	~	~	~	~	~	~	ND	25	~	
Cobalt	NA	~ ~	~	~	ND	10	2	~	ND	10	~		~	~	~	~	~	~	~	ND	10	~	~
Copper	1,000	~ ~	~	~	ND	25	~	~	ND	25	~		~	~	~	~	~	~	~	ND	25	~	^
ron	600	~ ~	~	2	4,500	150	~	~	8,900	150	~		~	~	~	~	~	~	~	ND	150	~	-
Lead	50	~ ~	~	~	15	5.0	~	~	5.2	5.0	~		~	~	~	~	~	~	~	ND	5	~	- 5
Magnesium	35,000	~ ~	~	~	24,000	1000	~	٧	20,000		~		~	~	~_	~	~	~	~	ND	1000	~	~
Manganese	600	~ ~	~	~	290	25	~	~	370	25	~		~	~	~	~	~	~	~	ND	25	~	
Nickel	200	~ ~	- 4	~	ND	10	~	~	11	10	~		~	~	~	~	~	~	~	ND	10	~	^
Potassium	NA	?	2.2	~	13,000	2500	~	~	6,500	2500	~		~	~	~	~	~	~	~	ND	2500	~	^
Selenium	20	~ ~	~	~	ND	25	~	~	ND	25	~		~	~	.~	~	~	~	~	ND	25	~	~
Silver	100	~ ~		~	ND	10	~	~	ND	10	~		~	~	~	~	~	-~	~	ND	10	~	~
Sodium	20,000	~ ~	_	~	120,000	2500	~	~	33,000	2500	~		~	~	~	-	~	-	~	ND	2500	~	^
Thallium	0.5	~ ~		~	ND	5.0	~	~	ND	5.0	-~		~	-	~	<del>  ~</del>	~	~	~	ND ND	5 25	1	~
Vanadium	NA 5 000	~ ^	~	~	ND 21	25	~	~	ND 31	25	~		~	~	~	<u> </u>	~	L ~	~	ND	25	~	
Zinc PH TERRED	5,000	~ ~		~	31	25	~	~	31	25	_ ~		~	~	~	~	~	~	~	IND	23	~	
METALS - FILTERED	1.4		_		ND	0.20			0.28	J 0.20	_			T ~	~	T ~	~	T ~	~	ND	0.20	~	
Mercury	1.4	~ ~	_	~	ND ND	0.20 100	~	~ ~	0.28 ND	100	~		~	~	~	~	~	~	~	ND	100	~	~
Aluminum	2,000	~ ~	_	~	ND	7.5	~	~	ND	7.5	~		~	~	~	~	~	~	~	ND	7.5	~	^
Antimony	6	~ ~	_	~	ND ND	20	~	~	ND	20	~		~	-	~	\ ~	~	~	~	ND	20	~	
Arsenic Barium	2,000	~ ~	_	~	ND	25	~	~	94	25	~		~	~	~	~	~	-~	~	ND	25	~	
	3	~ ~	_	~	ND ND	4.0	~	~	ND	4.0	~		~	- ~	~	~	~	~	~	ND	4.0	~	_
Beryllium Cadmium	10	~ ~		~	ND ND	2.0	~	~	ND	2.0	- ~		~	- ~	~	~	1~	~	~	ND	2.0	~	~
Calcium	NA	~ ~		~	23,000	1,000	~	~	43,000		~		~	~	~	~	~	~	~	ND	1,000	~	~
Chromium	100	~ ~	_	~	ND	25	~	~	ND	25	~		~	~	~	~	ž.	~	~	ND	25	~	~

Whitestone Associates, Inc. Page 3 of 4

### GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MW-5 AND TEMPORARY WELLPOINTS)

## River Plaza Shopping Center 124 to 134 Wildey Street

#### Tarrytown, Westchester County, New York

A	CLIENT ID:	MW-5	WB-	1GW	WB-2 C	GW U/F	WB	-3 GW	WI	3-4 GW U/F	FB			TB	FB		TB	FB	U/F		TB
WHITESTONE	LAB ID:	AC42279-001	AC421	69-003	AC428	68-007	AC42	868-008	AC	C42868-010	AC42169-	007	AC42	2169-008	AC42279-00	)3	AC42279-004	AC428	368-013	AC	C42868-014
ASSOCIATES, INC.	COLLECTION DATE:	1/20/2009	1/13/	/2009	2/20/	2009	2/19	9/2009		2/20/2009	1/13/200	9	1/1	2/2009	1/20/2009		1/20/2009	2/20	/2009	2	2/17/2009
NALYTE	TOGS	Result Flg RL	Result F	lg RL	Result Fi	lg RL	Result	Flg RL	Result	Flg RL	Result Flg	RL	Result	Flg RL	Result Flg	RL	Result Flg RL	Result F	ig RL	Result	Flg RI
obalt	NA	~ ~	~	~	ND	10	~	~	ND	10	~	~	?	~	~	~	~ ~	ND	10	~	~
'opper	1,000	~ ~	~	~	ND	25	~	~	ND	25	~	~	~	~	~	~	~ ~	ND	25	~	~
ron	600	~ ~	~	2	ND	150	2	~	ND	150	~	~	~	~	~	~	~ ~	ND	150	~	~
Lead	50	~ ~	~	~	ND	5.0	~	~	ND	5.0	~	~	~	~	~	~	≈ ~	ND	5.0	~	~
Magnesium	35,000	~ ~	~	~	22,000	1,000	~	~	17,000	1,000	~	~	~	~	~	~	~ ~	ND	1,000	~	~
Manganese	600	~ ~	~	~	240	25	~	~	290	25	~	~	~	~	~	~	~ ~	ND	25	~	~
Nickel	200	~ ~	~	~	ND	10	~	~	ND	10	~	~	~	~	~	~	~ ~	ND	10		~
Potassium	NA	~ ~	~	~	13,000	2,500	~	~	5,700	2,500	~	~	~	~	~	~	~ ~	ND	2,500	~	~
Selenium	20	~ ~	~	~	ND	25	~	~	ND	25	~	~	~	~	~	~	~ ~	ND	25	~	~
Silver	100	~ ~	~	~	ND	10	~	~	ND	10	~	~	~	~	~	~	~ ~	ND	10	~	~
Sodium	20,000	~ ~	~	~	120,000	2,500	~	~	34,000	2,500	~	~	~	~	~	~	~ ~	ND	2,500	~	~
Thallium	0.5	~ ~	~	~	ND	5.0	~	~	ND	5.0	~	~	~	~	~	~	~ ~	ND	5.0	-	~
Vanadium	NA	~ ~	~	~	ND	25	~	~	ND	25	~	~	~		~	~	~ ~	ND	25	~	~
Zinc	5,000	~ ~	~	~	ND	25	~	~	ND	25	~	~	~	~	~	~	~ ~	ND	25	~	~
PCBS																		* 155	0.07		
Aroclor (Total)	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0,26	~	~	~	~	~	~	12) ~	ND	0.25	~	~
Aroclor-1016	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	~	~	~ ~	ND	0.25	~	~
Aroclor-1221	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	_~	~	~	~	~	~	~ ~	ND	0.25	~	~
Aroclor-1232	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	~	~	~ ~	ND	0.25	~	~
Aroclor-1242	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	~	~	~ ~	ND	0.25	~	~
Aroclor-1248	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	~	~	~ ~	ND	0.25	~	~
Aroclor-1254	0.9	~ ~	160	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	~	~	~ ~	ND	0.25	-~	
Aroclor-1260	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0,26	~	~	~	~	~	~	~ ~	ND	0.25	-~	~
Aroclor-1262	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	~	~	~ ~	ND ND	0.25	~	~
Aroclor-1268	0.9	~ ~	~	~	ND	0.26	ND	0.26	ND	0.26	~	~	~	~	7	~	~ ~	ND	0.23		~
PESTICIDES			-			1			T	0.011			_		r	-		ND	0.010	T ~	
Aldrin	NA	~ ~	~	~	ND	0.011	ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	1 ~	~
Alpha-BHC	NA	~ ~	~	~	ND	0.011	ND	0.011	ND	0.011	~	~	~	~	2	$\rightarrow$	~ ~	ND	0.010	~	~
beta-BHC	NA	~ ~	~	~	ND	0,011	ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.10	1 ~	~
Chlordane	0.05	~	~	~	ND	0.11	ND	0.11	ND	0.11	~	~	~		185	_		ND	0.010	- ~	~
delta-BHC	NA 0.004	~ ~	~	~	ND	0.011	ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	~	~
Dieldrin	0.004	~ ~	~	~	ND	0.011	ND	0.011	ND ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	~	~
Endosulfan I	NA NA	~ ~	~	~	ND	0.011	ND	0.011	-		-	~	~	~	~	~	~ ~	ND	0.010	~	~
Endosulfan II	NA NA	~ ~	~	~	ND	0,011	ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	<del>-</del>	~
Endosulfan Sulfate	NA NA	~ ~	~	~	ND	0.011	ND	0.011	ND ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010		~
Endrin	NA .	~ ~	~	~	ND	0.011	ND		ND	0.011	~	~	~	~	~~~	~	~ ~	ND	0.010	~	~
Endrin Aldehyde	5	~ ~	~	~	ND ND	0.011	ND ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	-	~
Endrin Ketone	5	~ ~	~	~		0.011	ND ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	~	~
ainma-BHC	NA 0.04	~ ~	~	~	ND ND	0.011	ND ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010		~
Heptachlor	0.04	~ ~	~	~	ND	0.011	ND	0.011	ND	0.011	<del>  ~~</del>	~	-	~	~	~	~ ~	ND	0.010	~	
Heptachlor Epoxide	35	~ ~	~	~	ND ND	0.011	ND ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	~	
Methoxychlor	0.3	~ ~	~	70	ND ND	0.011	ND	0.011	ND	0.011	~	~	~	~	~	~	~ ~	ND	0.010	~	~
p,p'-DDD			<u> ~                                     </u>	~	ND	0.011	ND ND	0.011	ND	0.011	~	~	<del>  ~</del>	~	~	~	~ ~	ND	0.010	~	
p,p'-DDE	0.2	~ ~	~	~	ND ND	0.011	ND	0.011	ND	0.011	~	~	<del>-</del>	~	~	~	~ ~	ND	0.010	~	
p.p'-DDT	0.2	~ ~	~	~	ND	0.011	ND	0.011	ND	0.26	~	~	<u> </u>	~	~	~	~ ~	ND	0.25	~	
Toxaphene OTHER PARAMETERS	0.00	~ ~	~	~	I ND	0.20	עאו	0.20	עאו	0.20		-							0.23		
Cyanide	400	~ ~		~	ND	0.01	ND	0.01	ND	0.01		~		~	~	~	2	ND	0.01		

NOTES:
Shaded and Bold value indicates an exceedence of the NYSDEC TOGS
All results reported in parts per billion (ppb or ug/L)
TOGS - NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standard
Flg - Data Qualifier
RL - Laboratory Reporting Limit
ND - Not Detected Exceeding RL
NA - No Applicable NYSDEC standard
~ - Not analyzed for this compound
R - Rejected
Ul or L - Uknown Bias

UJ or J - Uknown Bias

### GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MONITOR WELLS - FEBRUARY 24, 2009)

### River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York

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<b>A</b>	SAMPLE ID:	MW-1 U/F		MW-2 U/F	MW-3 U/F	DUP-E U	MW-4 U/F	MW-5 U/F	MW-6 U/F	MW-7 U/F	DUP-A U/F
	LAB ID:	AC42940-00	1	AC42940-003	AC42940-005	AC42940-023	AC42940-007	AC42940-009	AC42940-011	AC42940-013	AC42940-015
	COLLECTION DATE:	2/24/2009		2/24/2009	2/24/2009	2/24/2009	2/24/2009	2/24/2009	2/24/2009	2/24/2009	2/24/2009
ASSOCIATES, INC.	DTW (fbgs):	5.79		5.60	5.27	5.27	5.84	5.99	7.08	6.11	6.11
	SAMPLE MATRIX:	Groundwate	r	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
ANALYTE	TOGS	Result Flg	RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL	Result Flg RL
VOLATILE ORGANICS (VOs)											
Total VO TICs	NA	ND		ND	5,4 J	ND	ND	ND	ND	ND	~ ~
1,1,1-Trichloroethane	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND I	ND 1	~ ~
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1.0	ND 1.0	ND 1.0	ND 5.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,1,2-Trichloroethane		ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,1-Dichloroethane	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND I	~ ~
1,1-Dichloroethene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,2,3-Trichloropropane	0.04	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,2,4-Trimethylbenzene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,2-Dichlorobenzene	3	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,2-Dichloroethane	0.6	ND	0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.5	ND 0.5	ND 0.5	ND 0.5	~ ~
1,2-Dichloropropane	1	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,3,5-Trimethylbenzene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,3-Dichlorobenzene	3	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND I	ND 1	~ ~
1,3-Dichloropropane	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
1,4-Dichlorobenzene	3	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	2 2
1,4-Dioxane	NA	ND	50	ND 50	ND 50	ND 250	ND 50	ND 50	ND 50	ND 50	~ ~
2-Butanone	NA	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND I	~ ~
2-Chloroethylvinylether	NA	ND UJ	1.0	ND UJ 1.0	ND UJ 1.0	ND 1.0	ND UJ 1	ND UJ 1	ND UJ 1	ND UJ 1	~ ~
2-Hexanone	50	ND UJ	1.0	ND UJ 1.0	ND UJ 1.0	ND 5.0	ND UJ 1	ND UJ 1	ND UJ 1	ND UJ 1	~ ~
4-Isopropyltoluene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
4-Methyl-2-pentanone	NA	ND UJ	1.0	ND UJ 1.0	ND UJ 1.0	ND 1.0	ND UJ 1	ND UJ 1	ND UJ 1	ND UJ 1	~ ~
Acetone	50	ND	5.0	ND 5.0	ND 5.0	ND 5.0	ND 1	ND 5	ND 5	ND 5	~ ~
Acrolein	5	ND	5.0	ND 5.0	ND 5.0	ND 5.0	ND 1	ND 5	ND 5	ND 5	~ ~
Acrylonitrile	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Benzene	1	ND	0.50	ND 0.50	ND 0.50	ND 0.50	ND 1	ND 0.5	ND 0.5	ND 0.5	~ ~
Bromodichloromethane	50	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Bromoform	50	ND R	1.0	ND R 1.0	ND R 1.0	ND 1.0	ND R 1	ND R 1	ND R 1	ND R 1	~ ~
Bromomethane	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Carbon disulfide	60	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Carbon tetrachloride	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Chlorobenzene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Chloroethane	5	ND UJ	1.0	ND UJ 1.0	ND UJ 1.0	ND 1.0	ND UJ 1	ND UJ 1	ND UJ 1	ND UJ 1	~ ~
Chloroform	7	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Chloromethane	5	ND	1.0	ND 1.0	ND 1.0	ND UJ 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
cis-1,2-Dichloroethene	5	ND	1.0	3.0 1.0	1.7 1.0	2.4 1.0	ND I	ND 1	ND 1	ND 1	~ ~
cis-1,3-Dichloropropene	0.4	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Dibromochloromethane	50	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Dichlorodifluoromethane	5	ND	1.0	ND 1.0	ND 1.0	ND UJ 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Ethylbenzene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Isopropylbenzene	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
m&p-Xylenes	5		2.0	ND 2.0	ND 2.0	ND 1.0	ND 1	ND 2	ND 2	ND 2	~ ~
Methylene chloride	5	ND	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1	ND 1	ND 1	ND 1	~ ~
Methyl-t-butyl ether	10		0.50	ND 0.50	ND 0.50	ND 0.50	ND 1	ND 0.5	ND 0.5	ND 0.5	~ ~

Whitestone Associates, Inc.

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#### GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MONITOR WELLS - FEBRUARY 24, 2009)

#### **River Plaza Shopping Center** 124 to 134 Wildey Street

#### Tarrytown, Westchester County, New York

DUP-A U/F MW-7 U/F SAMPLE ID: MW-2 U/F MW-3 U/F DUP-E U MW-4 U/F MW-5 U/F MW-6 U/F MW-1 U/F LAB ID: AC42940-003 AC42940-005 AC42940-023 AC42940-007 AC42940-009 AC42940-011 AC42940-013 AC42940-015 AC42940-001 COLLECTION DATE: 2/24/2009 2/24/2009 2/24/2009 2/24/2009 2/24/2009 2/24/2009 2/24/2009 2/24/2009 2/24/2009 7.08 5.60 5.27 5.27 5.84 5.99 6.11 6.11 DTW (fbgs): 5.79 SAMPLE MATRIX: Groundwater Groundwater Groundwater Groundwater Groundwater Groundwater Groundwater Groundwater Groundwater Result Flg RL Result Flg RL Flg RL Result Flg RL ANALYTE TOGS Result Flg RL Result 1.0 1.0 ND 1.0 ND ND ND ND n-Butylbenzene ND ND ND 5 1.0 ND ND ND ND 1.0 ND 1.0 n-Propylbenzene 5 ND 1.0 ND 1.0 ND ND ND o-Xylene 5 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND ND ND ND ND ND 1.0 ND ND ND

sec-Butylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	<u> </u>	ND	1	ND	i	ND	1	~	~
Styrene	930	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1	ND	1	ND	1	ND	1	~	~
t-Butyl Alcohol	NA	ND	UJ 5.0	ND	UJ 5.0	ND	UJ 5.0	ND	5.0	ND	UJ 1	ND	UJ 5	ND	UJ 5	ND	UJ 5	~	~
t-Butylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1	ND	1	ND	1	ND	1	~	~
Tetrachloroethene	5	ND	1.0	2.4	1.0	5.3	1.0	6.9	1.0	ND	1	ND	1	ND	111	ND	1	~	~
Toluene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1	ND	1	ND	1	ND	1	~	~
trans-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1	ND	1	ND	1	ND	1	~	~
trans-1,3-Dichloropropene	0.4	ND	UJ 1.0	ND	UJ 1.0	ND	UJ 1.0	ND	1.0	ND	UJ 1	ND	UJ 1	ND	UJ 1	ND	UJ 1	~	~
Trichloroethene	5	ND	1.0	1.2	1.0	1.1	1.0	1.0	1.0	ND	1	ND	1	ND	1	ND	1	~	~
Trichlorofluoromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1	ND	1	ND	1	ND	1	~	~
Vinyl chloride	2	1.4	1.0	ND	1.0	1.5	1.0	1.5	1.0	ND	I	ND	1	ND	1	ND	1	~	~
Xylenes (Total)	5	ND	1	ND	1	ND	I	ND	1	ND	1	ND	1	ND	1	ND	1	~	~
SEMI-VOLATILE ORGANICS (SVOs)																			
Total SVO TICs	NA	95	J	ND		ND		~	~	28	J	ND		ND		4.8	J	~	~
1,2,4-Trichlorobenzene	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
1,2-Diphenylhydrazine	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2,4,5-Trichlorophenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2,4,6-Trichlorophenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2,2	ND	2.2	~	~
2,4-Dichlorophenol	1	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2,4-Dimethylphenol	1	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2,4-Dinitrophenol	1	ND	11	ND	11	ND	11	~	~	ND	11	ND	11	ND	11	ND	11	~	~
2,4-Dinitrotoluene	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2,6-Dinitrotoluene	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2-Chloronaphthalene	10	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2-Chlorophenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2,2	~	~
2-Methylnaphthalene	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2-Methylphenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2,2	~	~
2-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
2-Nitrophenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
3&4-Methylphenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
3,3'-Dichlorobenzidine	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
3-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
4,6-Dinitro-2-methylphenol	NA	ND	11	ND	11	ND	11	~	~	ND	11	ND	11	ND	11	ND	11	~	~
4-Bromophenyl-phenylether	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
4-Chloro-3-methylphenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
4-Chloroaniline	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2,2	~	~
4-Chlorophenyl-phenylether	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
4-Nitroaniline	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
4-Nitrophenol	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Acenaphthene	20	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Acenaphthylene	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Aniline	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~

## GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MONITOR WELLS - FEBRUARY 24, 2009)

## River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York

						μ			ouncy, iven										
<b>A</b>	SAMPLE ID:	MW-	1 U/F	M۱	W-2 U/F	MV	/-3 U/F	D	OUP-E U	M	IW-4 U/F		W-5 U/F		W-6 U/F		W-7 U/F		P-A U/F
■ WHITESTONE	LAB ID:	AC429	40-001	AC4	2940-003	AC42	2940-005	AC	42940-023	AC	42940-007	AC	42940-009	AC4	2940-011		42940-013	_	2940-015
	COLLECTION DATE:	2/24/	2009	2/2	24/2009	2/2	4/2009	2,	/24/2009	2	/24/2009	2.	/24/2009	2/:	24/2009	2.	/24/2009	2/2	24/2009
ASSOCIATES, INC.	DTW (fbgs):	5.7	'9		5.60	. 5	.27	V	5.27		5.84		5.99		7.08		6.11	(	6.11
7 LOCO CU (1 LO) II (C.	SAMPLE MATRIX:	Groun	dwater	Gro	undwater	Grou	ındwater	Gro	oundwater	Gr	oundwater	Gro	oundwater	Gro	undwater	Gro	oundwater	Gro	undwater
ANALYTE	TOGS		lg RL		Flg RL		Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL
Anthracene	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Benzidine	5	ND	11	ND	11	ND	11	2	~	ND	11	ND	11	ND	11	ND	11	~	2
Benzo[a]anthracene	0.002	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Benzo[a]pyrene	NA	ND	2.2	ND	2.2	ND	2.2	?	~	ND	2,2	ND	2.2	ND	2.2	ND	2.2	?	2
Benzo[b]fluoranthene	0.002	ND	2.2	ND	2.2	ND	2.2	2	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	?	2
Benzo[g,h,i]perylene	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	2	~
Benzo[k]fluoranthene	0,002	ND	2.2	ND	2.2	ND	2.2	?	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Benzoic acid	NA	ND	11	ND	11	ND	11	~	~	ND	11	ND	11	ND	11	ND	11	~	~
bis(2-Chloroethoxy)methane	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
bis(2-Chloroethyl)ether	1	ND	2.2	ND	2.2	ND	2,2	?	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	?	~
bis(2-Chloroisopropyl)ether	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
bis(2-Ethylhexyl)phthalate	5	ND	2.2	ND	2.2	ND	2.2	?	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	2	~
Butylbenzylphthalate	50	ND	2.2	ND	2,2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	2	~
Carbazole	NA	ND	2.2	ND	2,2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	?	~
Chrysene	0.002	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Dibenzo[a,h]anthracene	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Dibenzofuran	NA	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Diethylphthalate	50	ND	2.2	ND	2.2	ND	2.2	?	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Dimethylphthalate	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Di-n-butylphthalate	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Di-n-octylphthalate	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Fluoranthene	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Fluorene	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Hexachlorobenzene	0.04	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Hexachlorobutadiene	0.5	ND	2.2	ND	2.2	ND	2,2	?	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Hexachlorocyclopentadiene	5	ND	11	ND	11	ND	11	?	~	ND	11	ND	11	ND	11	ND	11	~	~
Hexachloroethane	5	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	2	~
Indeno[1,2,3-cd]pyrene	0.002	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Isophorone	50	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Naphthalene	10	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
Nitrobenzene	0.4	ND	2.2	ND	2.2	ND	2.2	~	~	ND	2.2	ND	2.2	ND	2.2	ND	2.2	~	~
N-Nitrosodimethylamine	NA	ND	2.2	ND	2.2	ND ND	2.2	2	~	ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	~ ~	~
N-Nitroso-di-n-propylamine	NA 50	ND	2.2	ND	2.2	ND ND	2,2	2	~	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	~	~
N-Nitrosodiphenylamine	50	ND	2.2	ND	2.2	ND ND	2.2	~	~	ND ND	2.2	ND		ND ND	11	NĐ	11	~	~
Pentachlorophenol	1	ND	11	ND ND	11	ND ND	11	~	~	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	~	~
Phenanthrene	50	ND	2.2	ND ND	2.2	ND	2.2	~	~	ND ND	2.2	ND ND	2.2	ND ND	2.2	ND ND	2.2	~	~
Phenol		ND	2.2	ND	2.2	ND	2.2	~	~	IND	۷.۷	ND	L.L	עאו	۷,۷	שא	4.4		.~
METALS - UNFILTERED	1.4	ND	0.20	ND	0.20	ND	0.20			ND	0.2	ND	0.2	ND	0.2	0.29	0.2	~	
Mercury	1.4	ND	0.20	ND 540		ND ND		~	~	ND ND	100	620	100	270	100	9,500	100	~	~
Aluminum	2,000	ND ND	100	540 ND	100	ND ND	7.5	2	~	ND ND	7.5	ND	7.5	ND	7.5	ND	7.5	~	~
Antimony	6	ND ND	7.5	ND ND	7.5 20	ND ND	20	~ ~	~	ND	20	ND ND	20	ND ND	20	ND	20	~	~
Arsenic	50	130	20	210		130	25	2 ~	~ ~	140	25	220	25	130	25	230	25	~	~
Barium	2,000	ND	25 4.0	ND	25 4.0	ND	4.0	~ ~	~	ND	4	ND ND	4	ND	4	ND	4	~	~
Beryllium	3	ND ND	2.0	ND ND	2.0	ND ND	2.0	~	~	ND ND	2	ND	2	ND ND	2	ND	2	~	~
Cadmium	10	ND	2.0	ND	2.0	MD	2.0	~	~	ND		MD		עאו	ha	IND			

Whitestone Associates, Inc.

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## TABLE 4 GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MONITOR WELLS - FEBRUARY 24, 2009)

### River Plaza Shopping Center 124 to 134 Wildey Street

## Tarrytown, Westchester County, New York

	T													1. S. SE	OV CAUE		AND A LIVE	DI	ID 4 11/F
	SAMPLE ID:		-1 U/F		W-2 U/F	-	V-3 U/F		DUP-E U		W-4 U/F		1W-5 U/F		IW-6 U/F		1W-7 U/F		JP-A U/F
<b>WHITESTONE</b>	LAB ID:		940-001		42940-003		2940-005		242940-023		42940-007		242940-009		42940-011		242940-013		42940-015
A CCC CLATER N.C.	COLLECTION DATE:	2/24	1/2009	2/	/24/2009	2/2	4/2009	2	2/24/2009	2,	24/2009	2	/24/2009		/24/2009	2	2/24/2009		24/2009
ASSOCIATES, INC.	DTW (fbgs):	5.	79		5.60	5	.27		5.27		5.84		5.99		7.08		6.11		6.11
	SAMPLE MATRIX:	Groun	ndwater	Gro	oundwater	Grou	ındwater	Gr	oundwater	Gro	oundwater	Gr	oundwater	Gr	oundwater	Gı	oundwater	Gro	oundwater
ANALYTE	TOGS	Result I	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL
Calcium	NA	120,000	1,000	98,000	1,000	120,000	1,000	?	~	120,000	1,000	99,000	1,000	120,000	1,000	79,000	1,000	~	~
Chromium	100	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	ND	25	~	~
Cobalt	NA	ND	10	ND	10	ND	10	~	~	ND	10	ND	10	ND	10	ND	10	~	~
Copper	1,000	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	34	25	~	~
Iron	600	2,600	150	1,200	150	770	150	~	~	4,500	150	32,000	150	8,400	150	19,000	150	~	~
Lead	50	ND	5.0	14	5.0	ND	5.0	~	~	ND	5	13	5	ND	5	150	5	~	~
Magnesium	35,000	36,000	1,000	33,000	1,000	35,000	1,000	~	~	34,000	1,000	30,000	1,000	34,000	1,000	24,000	1,000	~	~
Manganese	600	560	25	210	25	480	25	~	~	480	25	2,500	25	1,300	25	1,200	25	~	~
Nickel	200	ND	10	ND	10	ND	10	~	~	ND	10	ND	10	ND	10	15	10	~	~ _
Potassium	NA	7,500	2500	12,000	2500	7,700	2,500	~	~	7,600	2,500	13,000	2,500	18,000	2,500	6,500	2,500	~	~
Selenium	20	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	ND	25	~	~
Silver	100	ND	10	ND	10	ND	10	~	~	ND	10	ND	10	ND	10	ND	10	~	~
Sodium	20,000	260,000	2,500	230,000	2,500	170,000	2,500	~	~	180,000	2,500	150,000	2,500	150,000	2,500	44,000	2,500	~	~
Thallium	0.5	ND	5.0	ND	5.0	ND	5.0	~	~	ND	5	ND	5	ND	5	ND	5	~	~
Vanadium	NA	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	ND	25	~	~
Zinc	5,000	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	150	25	~	~
METALS - FILTERED																			
Mercury	1.4	ND	0.20	ND	0.20	ND	0.2	~	~	ND	0.2	ND	0.2	ND	0.2	ND	0.2	~	~
Aluminum	2,000	ND	100	ND	100	ND	100	~	~	ND	100	ND	100	ND	100	ND	100	~	~
Antimony	6	ND	7.5	ND	7.5	ND	7.5	~	~	ND	7.5	ND	7.5	ND	7.5	ND	7.5	~	~
Arsenic	50	ND	20	ND	20	ND	20	~	2	ND	20	ND	20	ND	20	ND	20	~	2
Barium	2,000	110	25	200	25	120	25	~	~	120	25	140	25	91	25	66	25	~	~
Beryllium	3	ND	4.0	ND	4.0	ND	4	~	~	ND	4	ND	4	ND	4	ND	4	~	~
Cadmium	10	ND	2.0	ND	2.0	ND	2	~	~	ND	2	ND	2	ND	2	ND	2	~	~
Calcium	NA	120,000	1,000	100,000	1,000	120,000	1,000	~	~	120,000	1,000	98,000	1,000	120,000	1,000	75,000	1,000	~	~
Chromium	100	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	ND	25	~	~
Cobalt	NA	ND	10	ND	10	ND	10	~	~	ND	10	ND	10	ND	10	ND	10	~	~
Copper	1,000	ND	25	ND	25	ND	25	~	~	ND	25	ND	25	ND	25	ND	25	~	~
Iron	600	ND	150	ND	150	ND	150	~	~	ND	150	5,000	150	ND	150	320	150	~	~
Lead	50	ND	5.0	ND	5.0	ND	5	~	~	ND	5	ND	5	ND 24.000	5	ND 20,000	5	~	~
Magnesium	35,000	36,000	1,000	33,000	1000	35,000	1,000	~	~	33,000	1,000	30,000	1,000	34,000	1,000	20,000	1,000	~	~
Manganese	600	550	25	170	25	460	25	~	~	490	25	2,400	25	1,300	25	880 ND	25	~	~
Nickel Potogoji m	200 NA	ND 7.500	2.500	ND	10	ND 7.800	10	2	~	ND 7.500	2 500	ND	2 500	ND	2 500	ND 4,800	2,500	~	~
Potassium	NA 20	7,500	2,500	12,000	2500	7,800	2,500	~	~	7,500	2,500	13,000 ND	2,500 25	18,000 ND	2,500 25	4,800 ND	2,300	~	~
Selenium	20 100	ND	25	ND	25	ND ND	25	~	~	ND ND	25	ND ND	10	ND ND	10	ND ND	10	~ ~	~
Silver		ND 200 000	10	ND	10		10	~	~		10					40,000	2,500		
Sodium Thallium	20,000	260,000	2,500	230,000	<b>2500</b> 5.0	170,000 ND	2500	~	~	170,000 ND	<b>2,500</b> 5	150,000 ND	<b>2,500</b> 5	150,000 ND	<b>2,500</b> 5	ND	<b>2,500</b> 5	~	~ ~
Vanadium	0.5 NA	ND ND	5.0 25	ND ND	25	ND ND	5	~ ~	~	ND ND		ND ND	25	ND ND	25	ND ND	25	~	~
Zinc	5,000	ND		ND ND	25	ND ND	25 25		~	ND ND	25 25	ND ND	25	ND ND	25	ND	25	~	~
PCBs	3,000	עע	25	עאו	23	עא	23	~		עא	23	עא		MD	23	עאו	23	<u></u>	.~
Aroclor (Total)	0.9	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1016	0.9	ND	0.27	ND ND	0.27	ND ND	0.27	~	~ ~	ND ND	0.25	ND ND	0.25	ND ND	0.25	ND	0.25	~	~
Aroclor-1016 Aroclor-1221	0.9	ND	0.27	ND ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1221 Aroclor-1232	0.9	ND	0.27	ND ND	0.27	ND	0.27	~	~	ND ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
/ XIOCIUI-1434	0.9	עוצו	0.27	עא	0.27	עע	0.27	~	~	מא	0.43	ND	0.23	ND	0.23	IND	0.23		.~

Whitestone Associates, Inc.

### GROUNDWATER SAMPLING AND ANALYSES DATA SUMMARY (MONITOR WELLS - FEBRUARY 24, 2009)

### River Plaza Shopping Center 124 to 134 Wildey Street

### Tarrytown, Westchester County, New York

												-							
<b>A</b>	SAMPLE ID:	M	W-1 U/F	M	W-2 U/F	M	IW-3 U/F	E	DUP-E U	N	1W-4 U/F	M	W-5 U/F	N	1W-6 U/F	N	иW-7 U/F		OUP-A U/F
	LAB ID:	AC4	42940-001	AC4	42940-003	AC	42940-005	AC	242940-023	AC	C42940-007	AC	42940-009	AC	242940-011	AC	C42940-013	A	C42940-015
	COLLECTION DATE:	2/:	24/2009	2/	24/2009	2.	/24/2009	2	/24/2009	2	2/24/2009	2	/24/2009	2	/24/2009	1	2/24/2009		2/24/2009
ASSOCIATES, INC.	DTW (fbgs):		5.79		5.60		5.27		5.27		5.84		5.99		7.08		6.11		6.11
7 1000 00 (120) 11 (0)	SAMPLE MATRIX:	Gro	oundwater	Gro	oundwater	Gr	oundwater	Gr	oundwater	Gı	roundwater		oundwater		oundwater	G	roundwater	G	roundwater
ANALYTE	TOGS	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL	Result	Flg RL						
Aroclor-1242	0.9	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1248	0.9	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1254	0.9	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1260	0.9	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1262	0.9	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
Aroclor-1268	0.9	ND	0.27	ND	0.27	ND	0.27	~		ND	0.25	ND	0.25	ND	0.25	ND	0.25	~	~
PESTICIDES	·																		
Aldrin	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Alpha-BHC	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
beta-BHC	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	0.19	J 0.01	ND	J 0.011
Chlordane	0.05	ND	0.11	ND	0.11	ND	0.11	~	~	ND	0.1	ND	0.1	ND	0.1	ND	0.1	ND	0.11
delta-BHC	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Dieldrin	0.004	ND	0.011	ND	0.011	ND	0.011	7	~	ND	0.01	ND	0.01	ND	0.01	ND	J 0.01	0.024	J/D/R 0.011
Endosulfan I	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Endosulfan II	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	J 0.01	0.10	J 0.011
Endosulfan Sulfate	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Endrin	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Endrin Aldehyde	5	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Endrin Ketone	5	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
gamma-BHC	NA	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Heptachlor	0.04	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Heptachlor Epoxide	0.03	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Methoxychlor	35	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	J 0.01	0.044	J 0.011
p,p'-DDD	0.3	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	J 0.01	0.021	J 0.011
p,p'-DDE	0.2	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
p,p'-DDT	0.2	ND	0.011	ND	0.011	ND	0.011	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	ND	0.011
Toxaphene	0.06	ND	0.27	ND	0.27	ND	0.27	~	~	ND	0.25	ND	0.25	ND	0.25	ND	0.25	ND	0.28
OTHER PARAMETERS																			
Cyanide	400	ND	0.01	ND	0.01	ND	0.01	~	~	ND	0.01	ND	0.01	ND	0.01	ND	0.01	~	~

#### NOTES:

Shaded and Bold value indicates an exceedence of the NYSDEC TOGS

All results reported in parts per billion (ppb or ug/L)

TOGS - NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standard

Flg - Data Qualifier

RL - Laboratory Reporting Limit

ND - Not Detected Exceeding RL

NA - No Applicable NYSDEC standard

J - Detected at an estimated concentration

~ - Not analyzed for this compound

D - Pesticide percentage difference is greater than 40 percent between columns due to coelution. Lower concentration used.

R - Rejected

UJ or J - Uknown Bias

APPENDIX M
Previous Investigation Data
Tables by Others

#### Volatile Organic Compounds Soil Sample Results

		So	il Sampi	e Results					
Gompound	Cleanup, Standarder (ppm),	SB-1A (ppm)	SB-1B (ppm)	SB-2A (ppm)	SB-2B (ppm)	SB-3A (ppm)	SB-3B (ppin)	SB-4A (ppm)	SH-4B (ppm)
Chloromethane	NS	ND	ND	ND	ND.	ND	ND	ND	ND
Vinyl Chloride	0.2	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.4	ND	ND	- ND -	ND	ND	ND	ND	ND
Methylene Chloride	0.1	ND	ND	ND	ND.	ND	ND	0.136 B	ND
Carbon Disulfide	2.7	ND	ND	. ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (trans)	0.3	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis)	NS	ND.	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.3	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.1	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	0.7	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	NS	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	ND_	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	6.0	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	1.0	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	N/A	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.4	ND	ND	0.145	1.829	ND	ND	0.136	ND
Chlorobenzene	1.7	ND	ND	ND	ND	ND	ND	- ND	ND
Ethylbenzene	5.5	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1.2	ND	ND	ND	ND	ND	ND	ND	ND
TICs	NS	3.3B	3.9B	2.8B	3.81B	2.7B	2.94B	6.5B	5.8E

#### TABLE 1 SUMMARY OF ANALYTICAL SOIL RESULTS - AUGUST 2003 PROPOSED WALGREEN STORE # 07294 134 WILDEY STREET, TARRYTOWN, N.Y.

- Indiana Company	B-1	B-2	B-3	B-4	TAGM
Semple ID.	03080418-01	03080418-02	03080418-03	03080418-04	Recommended
ab Sample Number	3-4'	6-0'	5-6'	5-6'	Soil Cleanup
Sample Depth ((t)*	8/12/2003	8/12/2003	8/12/2003 ·	8/12/2003	Objective.
Date Collected	The state of the s	Soll	Soll	Soll	
Medla	Soff	3011	GOII		
Semi-Volatile Organic Compounds			110	N.D.	5D
Acenaphthena	N.D	N.D.	N.D.	N.D.	50
Anthracene	N.D	N.D		N.D.	224 or MDL
Benzola) anthracena	N'D	N.D	0.69		0.061 or MDL
Benzo(a) pyrane	N.D	N.D	0.78	N.D.	0.081 or MOL
Benzo(ti) fluoranthene	N.D	0.53 J	0.81	0.46	5D
Benzo (g.h.f) penilene	N.D	N.D	0.39	N.D.	0.B1 or MDL
Benzo(k) fluoranthene	N,D	N,D	0.48	N.D.	0.61 OF WILL
Chrysene.	D,N	N,D	0.69	N.D.	
Dibenx(e h) anthracene	N.D	N.D	Q.N	N.D.	0,0143 or MDL
	N.D	О.И		0.63	50
Fuoranthene Fluorene	N.D	N,D	N.D	N.D.	50
Idena (1,2,3-cm) pyrene	N,D	N.D	N.D -	N.D.	3.2
Neolhelene	N.D	N.D	Q.D	N.D.	13
Phenanthrene	N,D	N.D	0,49	0.44	50
The state of the s	N.D	N.D	1	0.61	60
Pyrene	- Here in Plant				
Volable Organic Compounds	ND	0.0078	N.D	N,D	0,7
Tetrachloroethene	Marie Control of the		WY.		

<sup>&</sup>quot;Sample depth is in feet below ground surface All concentrations reported in ing/kg (parts per million)

Bold value indicates on exceedance of the TAGM Recommended Sell Cleanup Objective

NO-INDIPEDENT J. Estimated value batween MBL and PQL TAGM=Technical Administrative Guidance Memo #4046



## Table I - USEPA 8260 \ Latile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical Parameters	Soil Borehole #01 (Sampling Depth in Feet)	NYSDEG TAGM Limits	Analytical Parameters	Soil Borehole #01 (Sampling Depth in Feet)	NYSDEC TAGM Limits
A STORY OF BA	SI	Soil		Š1	Soil
	(4-8')			(4-8*)	
11-1-	<0.0056ppm	0.002ppm	Chlorobenzene	<0.0056ppm	0.017ppm
1,1 Dichloroethane	<0.0056ppm	0.004ppm	Chloradibromomethane	<0:0056ppm	N/A
1.1 Dichloroethene	<0.0056pism	N/A	Chlorodifluorumethane	<0.0056ppm	N/A
1,1-Dichloropropene		N/A	Chlorocthane	<0.0056ppm	0.019ppm
1,2 Dibromoethane	<0.0056рргп	0.079ppm	Citloroform	<0.0056ppm	0.003ppm
1,2 Dichlorobenzene (y)	<0.0056ppm	0.001 ppm	Chloromethanc	<0.0056ppm	N/A
1,2 Dichlordethane	<0.0056ppm	N/A	Dibremochlorograne	<0.0056ppm	N/A
1.2 Dichloropropane	<0.0056ppm		Dibronomethane	<0.0056ppm	N/A
1,3 Dichlorobenzene (v)	<0.0056ppm	0.0155ppm	Dichlordiffuonediane	<0.0056ppm	N/A
1,3-Dichloropropane	<0:005Gppm	0.003ppm	Ethyl Benzene	<0.0056ppm	0.05Sppm
1,4 Dichlorubenzene (v.)	<0.0056ppm	0:085ppm		<0.0056ppni	0.060ppm
111 Trichloroethane	<0.005Gepin	0.0076ppm	Preon 113  Hexachlorobutadiene	<0.0056ppm	N/A
1112Tetrachloroethane	<0.0056ppm	N/A		<0.0056ppm	0.10ppm*
112 Trichloroethane	<0.005Gppm	MV	Isopropylbenzene	<0.01 lppm	0.012ppm
1122Tetrachloroethane	<0.0056ppm	0.006ppm	m + p. Xylene	<0.056ppm	N/A
123-Trichlorobenzene	<0.0056ppm	NΛ	Methyl Ethyl Ketone	<0.0056ppm	0.001ppm
123-Trichloropropane	<0.0056ppm	0,0034ppm	Methylene Chiloride	<0.056ppm	N/A
124-Trichlombenzene (v)	<0.005Gpcm	0.034ppm	Methylisobutylketone	<0.0056ppm	0.10ppm*
124-Trimathylbenzene	<0.0056ppm	0.10ppm*	n-Butylbenzene	<0.0056ppm	0_10pm*
1245 Tetramethylbenz	<0.0056ppm	0.1 <b>0ppm*</b>	n-Propylbonzone	<0.0056ppm	0.130ppm
135-Trimethylbenzene	<0.0056ppin	N/A	Napříthalene(v)	<0.0056ppm <	0.012ppm
2.2-Dichloropropanc	<0.0056ppin	N/A	a Xylene		N/A
2-Chlorotolucue	<0.0056ppm	N/A	p Diethylbenzene	<0.0056ppm	N/A
4-Chlorotoluene	<0.0056ppm	N/A	p-Ethyltolucne	<0.0055ppm	0.10ggm*
Acetone	<0.056ppm	0.0011ppm	p-Isopropyltolucne	<0.0056ppm	- Landerson - Landson
Benzene	<0.0056anm	0.0005ppm	sec-Butylbenzene	<0.0056ppm	0.10ppm*
Bromobenzene	<0,0056pprn.	N/A	Styrene	<0.005 <b>6pg</b> m	
Bromodenzene	<0,0056ppm	N/A	1-1,2-Dichloroethene	<0.0056ppm	N/A
Bromodichloromethane	<0.0056ppm	N/A	t-1,3Dichloropropene	<0.0056pam	N/A
	<0.0056ppm	N/A	ter.ButylMethylEther (MTBE)	<0.0056ppm	1.0ppm*
Bromoform Bromomethane	<0.005Gppm	N/A.	tert-Butylbenzene	<0.0056ppm	0.1ppm
e-1.2-Dichloroethene	<0.0056ppm	N/A	Tetrachloroethene	0.018ppm	0.014ppm
c-1,2-Dichlorograpung	<0.0056ppm	N/A	Toluenc	<0,0056ppm	0.015ppm
Carbon Tetrachloride	<0.0056ppm	0,006ppm	Trichloroethylene	<0.0056ppm	N/A
Vinyl Chloride	<0.0056ppm	0.0012ppm	Trichlarofluomethane	<0.0056ppm	N/A

#### NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis...

Limit not available N/A:

Parts per Million ppm:

micrograms per kilogram (parts per billion) ug/L: micrograms per Liter (parts per billion) tg/Kg.

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



## Table I - USEPA 8260 \ Jatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical Parameters	Soil Borehole #02 (Sampling Depth in Feet)	NYSDEC TAGNI	Analytical Parameters	Soil Borehole#02 (Sampling Depth in Reet)	NYSDEC TAGM Limits
	63	Limits	201-24-5	S2	Soil
	S2	2011		(5-8")	and the same
	(5-8')	0.002ppni	Chlorobenzene	<0.0056ppm	0.017ppm
1,1 Dishloroctione	<0:005брркп	0.003ppm	Chlorodibromomethane	<0.0056ppm	N/A
1.1 Dichlorouthene	. <0.0056ppm	N/A	Chlorodifluoromethane	<0.005Gapm	N/A
1,1-Dichloropropene	<0.005Gppm	NA	Chlorocthane	<0,0056pem	0.019ppm
1,2 Dibromoethane	<0.0056ppm	0.079nnm	Chloroform	<0.0056ppm	0.003ppm
1,2 Dichlurobenzene (v)	<0.005.6ppm		Chloronethano	<0.0056ppm	N/A
1,2 Dichloroethane	<0.0056dpm	0.001npm	Dibromochloropropane	<0.0056ppm	N/A
1,2 Dichloropropane	<0.0056ppm	N/A	Dibromomethane	<0.0056ppm	N/A
1,3 Dichlorobenzene (V)	<0.0056apm	0.0155ppm		<0:0056ppm	N/A
1.3-Dichloropropone	<0.0056ppm	0.003pfm	Dichlardifluomethane	<0.0056epm	0.055ppm
1.4 Dichlorobenzene (v)	<0.0056ppm	0.085ppm	§ Ethel Benzene	<0.0056ppm	0.050ppna
111 Trichloroethane	<0.0056ppm	0.0076ppm	Freen 1)3	<0.0056ppm	N/A
1112Tetrachloroethane	<0.0056ppm	N/A	Hexachlorobutzdiene.	<0.0050ppm	0.10ppm*
112 Trichloroetnane	<0.0056apm	N/A	Isopropylbenzene	<0.011ppm	0.012ppm
1122Tetrachloroethane	<0:0056ppm	0.006ppm	m + p Xylens	<0.055ppm	N/A
123-Trichlombenzene	<0.0056pbm	N/A	Methyl Ethyl Ketone	<0.0056pgm	0,001ppm
123-Trichloropropene	<0.0056ppm	0.0034ppm	Methylene Chloride	<0.056ppm	N/A
124-Trichlorobenzene (v)	<0.0056ppm	0.034ppm	Methylisobutylketone	<0.0056ppm	0.10mm*
124-Trimethylbenzene	<0.0056ppm	0.10ppm*	n-Burylbenzene	<0.0056ppm	0.10ppm*
1245 Tetramethylbenz	<11.0056ppm	0.10ppm*	n-Propylbenzene	<0.0050pm	0.130ppm
135-Trimeth-lbenzene	<0.0056ppm	N/A	Nanhthalene(v)	<0.0056ppm	0,012ppm
2.2-Dichlorupropano	<0.0056ppm	N/A	o Xylene	<0.0056ppm	N/A
2-Chlorotoluene	<0.0056ppm	N/A	p Dietliylbenzene		N/A
4-Chlorotoluene	<0.0056apm	NA	p-Ethyltolucne	<0.0056ppm	0.10ppm*
Acetone	<0.056ppm	0.0011ppm	p-isopropynomene	<0.0056ppm	0.10ppin*
Benzene	<0.0056ppm	0.0006ppm	sec-Butylbenzene	<0.0056ppm	N/A
Bromobenzene	<0.0056ppm	N/A	Styrene	<0.0056ppm	N/A
Bromochloromethane	<0.0056ppm	N/A	t-1.2-Dichloroethene	<0.0056ppm	N/A
Bromodichioromethane	<0.0056ppm	N/A	t-1,3Dichloropropene	<0.0056ppm	The second second
Bromoform	<0.0056ppm	N/A	(cr.BurylMethylEther (MTBE)	<0.0056ppm	1.Gpgm*
Bromomethane	<0.0056ppm	N/A	ten-Butylbenzene	<0.0056ppm	0.1ppm*
e-1.2-Dichloroethene	<0.0056ppm	N/A	Tetrachloroethene	0.082ppm	0.014ppm
c-1.3Dichloropropene	<0.0056ppm	N/A	Toluene	<0.0056ppin	0.015ppm
Carbon Tetrachloride	<0.0056ppm	mcq300.0	Trichloroethylene	<0.0056ppm	N/A
Vinyl Chloride	<0.0056ppm	0.0012ppm	Trichlorofluomethane	<0.0056ppm	N/A

#### NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Mento #1 "TCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis.

N/A:

Limit not available Paris per Million

ppm: imprograms per kilogram (paris per billion) ug/L: micrograms per Liter (paris per billion)

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



# Table I - USEPA 8260 \ statile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical Parameters	Soil-Borehole #02 (Sampling Depth In Feet)	NYSDEC TAGM	Analytical Parameters	Soil Borehole #02 (Sampling Depth in Feet)	NYSDEC TAGM Limits
		Limits		S2A	Soil
	S2A	Soil		(12')	
	(12')	10.7	City 1	<0.0058ppm	0.017ppm
.1 Dichloroctione	<0.0058ppm	0.002 <del>ppm</del>	Chlerobenzene	<0.0058ppm	N/A
1 Dichloroethene	<0.0058ppm	0.004ppm	Chlorodibromomethans	<0.0058pam	N/A
.1-Dichloropropeno	<0.0053ppm	N/A	Chlorodifluoromethans	<0.0058nmn	0.019ppm
2 Dibromouthane	<0.0058ppm	N/A	Chloroethane	<0.0058ppm	0.003ppm
.2 Dichlorobenzene (v)	<0:0058ppm	0.079ppm	Chloroform	<0.0058ppm	N/A
.2 Dichloroethane	<0.0058ppm	0.001 ppm	Chloromethane	<0.0058pgm	N/A
2 Dichloropropane	<0.0058mm	N/A	Dihromochloropropane	<0.0058ppm	N/A
.3 Dichlorobenzene (v)	<0.0058ppm	0.0155ppm	Dibromomethane	<0.0058pmi	N/A
.3-Dichloropropane	<0.005%ppm	0.003apm.	Dichlordifluomethane	<0.0058ppm	0.055ppm
4 Dichlorobenzene (v)	<0.0058mm	0.085ppm	Ethyl Benzene	<0.0058ppm	0.060ppm
	<0.0058ppm	0.0075ppm	Freon 113		N/A
11 Trichloroethane	<0.0058apm	N/A	Hexachlorobutadiene	<0.0058ppm <0.0058ppm	0.10ppm*
112Tetrachioroethane	<0.0058ppm	N/A	Isopropylbenzene		0.012ppm
12 Trichloroethane	<0.0058ppm	0.006ppm	m+p Xylene	<0.012ppm	N/A
122Tetrachloroethane	<0.0058ppm	"N/A	Methyl Ethyl Kelone	<0.058ppm	0.001ppm
123-Trichlerobenzene	<0.0058pnm	0.0034ppm	Methylene Chloride	<0.0058ppm	N/A
123-Trichleropropane	<0.0058ppm	0.0340000	Methylisobutylketone	<0.058ppm	0.1Cppm
124-Trichlombenzene (v)	<0.0058ppm	0.10ppm*	n-Butylbenzenc	<0.0058ppm	The second name of the second na
124-Trimuthylbenzene	<0.0058ppm	0.10ppm*	n-Propylbenzenc	<0.0058ppm	0.10ppm*
1245 Tetramethylbenz	<0.0058pm	N/A	Naphthalene(v)	0.015ppm	0.130ppm
135-Trimelly-lbenzene	<0.0058ppm	N/A	o Xylent	<0.0058ppm	0.012ppm
2,2-Dichloropropane	<0.005Spp(n	N/A	p Diethylbenzene	<0.0058ppm	N/A
2-Chlorotoluene		N/A	p-Ethyltoluene	<0.0058apm	N/A
4-Chlorotoluene	<0.0058ppm <0.058ppm	0,0011ppm	p-isopropyitoluene	~0.0058ppm	0.1 <b>0</b> ppm
Acelone		0.0006ppm	sec-Burylbenzene	<0.0058ppm	0.10ppm*
Benzene	<0.0058ppm <0.0058ppm	N/A	Sharene	<0.0058ppm	N/A
Bromobenzene		N/A	1-1.2-Dichloroethene	<0.0058ppm	N/A
Bromochluromethane	<0.0058ppm	N/A	t-1.3Dichlorogropene	<0.0058ppm	N/A
Bromodichloromethane	<0.0058ppm	N/A	ter.ButylMethylEther (MTBE)	<0.0058npm	1.0ppm*
Bromolorn	<0.0058mm	N/A	ien-Butylbenzene	-:0.0058ppm	0.1ppm*
Bromomethane	<0.0058ppm	N/A	Tetrachioroethene	0.028ppm	0.014ppr
c-1,2-Dichloroethene	<0.0058ppm	N/A	Toluene	<0.0058ppm	0.015ppr
c-1,3Dichloropropene	<0.0058ppin	0.006ppm	Trichlomethylene	<0.0058ppm	N/A
Carbon Tetrachloride Vinyl Chloride	<0.0058ppm <0.0058pnm	0.000pmi 0.0012ppm	Trichlorofluomethane	<0.0058ppm	N/A

#### NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis.

N/A: Limit not available

Parts per Million

ug/Kg: mierograms per kilogram (purts per billion) ug/L: mierograms per Liter (parts per billion)

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



## Table I - USEPA 8260 Votatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Añālytical Parameters	Soil Borehole #02 (Sampling Depth is Feet)	NYSDEC TAGM Limits	Analytical Parameters	Soil Borehole #02 (Sampling Depth in Feet)	NYSDEC- TAGM Limits
		Soil		S2B	Soil
	S2B	Son		(12-141)	
The state of the s	(12-14')	2 222	Chlorobenzene	<0.0059nmm	0.017ppm.
, Dichloraethane	<0.0059ppm	0.002ppm .	Chlorodibromomethane	<0.0959ppm	N/A
,1 Dichloroethene	<0.0029ppm	0.004ppm	Chlorodifluoromethane	<0.0059ppm	N/A
.1-Dichloropropene	<0,0059ppm	N/A		<0.6059ppm	0.019ppm
.2 Dibromoethane	<0.0059ppm	N/A	Chloroethane	<0.0059mpm	0.003ppm
2 Dichlorobenzene (v)	<0.0059ppm	0.079ppm	Chlaraform	<0.0059ppm	N/A
1.2 Dichloroethane	<0.0059ppm	0.001ppm	Chloremethane	<0.0059pm	N/A
1.2 Dichloropropane	<0.0059aum	N/A	Dibronsehloropropine	<0.0059ppm	N/A
1.3 Dichlorobenzene (v)	<0.0059ppm	0.0155ppm	Dibromomethane	<0.0059pm	NA
1.3-Dichloropropane	<0.0059ppm	0.003ppm	Dichlordifluomethans	<0.0659ppm	0.055ppm
1.4 Dichlorobenzene (V.)	<0.0059ppm	0.085ppm	Ethyl Benzenc	<0.0059pmin	0,050ppm
111 Trichloroethane	<0.0059ppm	0.007Gppm	Propin 1)3	<0.0059ppm	N/A
1112Temphloroethane	<0.0059ppm	'N/A	Hexachlorobutadiene.		0.10ppm
112 Trichlorochane	<0.0059ppm	N/A	'Isopropylbenzene	<0.0059ppm	0.012ppm
1122Tetrachloroethane	<0.0059ppm	0.006ppm	m+p Xylene	<0.012ppm	N/A
123-Trichloropenzene	<0.0059ppm	N/A	Methyl Ethyl Ketone	<0.059ppm	1 0.001 pam
	<0.0059ppm	0.0034ppm	Methylone Chloride	<0.0059ppm	N/A
123-Trichloropropane	<0.0059ppm	0.034ppm	Methylisobutylketone	<0.059ppm	_
124-Trichlorobenzene (v)	<0.0059ppm	0.10ppm*	n-Butylbenzene	<0.0059ppm	0.10ppm*
124-Trimethylbenzene	<0.0059cpm	0,10mm*	n-Propvibenzene	<0.0059ppin	0.10ppm*
1245 Tetramethylbenk	<0.0059pm	N/A	Naphthalene(v)	<0.0059pan	0.130ppm
135-Trimethylbenzene	<0.0059ppm	NA	a Xylene	<0.0059ppm	0,012ppm
2,2-Dichloropropane	<0.0059ppm	N/A	p Diethylbenzene	<0.0059ppm	N/A
2-Chlorotolucne	<0.0059ppm	N/A	p-Ethyltoluene	<0.0059ppn	N/A
4-Chlorotoluene	<0.059ppm	0.0011ppm	p-Isopropyltolucne -	<0.0059ppm	0.10ppm
Acetone	<0.039pmm	0.000Gppm	suc-Butylbenzene	<0.0059mm	0.10ppm*
Benzene	<0.0059patri	NA	Styrene	<0.0059ppm	N/A
Bromobenzene	1 <0.0059pmi	N/A	1-1.2-Dichloroethene	<0.0059ppm	N/A
Bromochloromethane	<0,0059mmi	N/A	t-1.3Dtchlorogropene	<0.0059ppm	N/A
Bromodichiloromethane	<0.0059ppmi	NA	ter, Butyl Methyl Ether (MTBE)	<0.0059ppni	1.0ppm*
Bremoform		N/A	tert-Bucylbenzene	<0.0059ppm	0.lppm*
Bromomethane	<0.0059ppm	N/A	Tetrachloroethene	0.012ppm.	0.014ррп
c-1.2-Dichloroethene	<0.0059ppm	I N/A	Tolucne	<0.0059ppna	0,015ppn
c-1,3Dichlorepropene	<0.0059ppm	0.006ppm	Trichlaroethylene	<0.0059cpm	NVA
Carbon Tetrachloride	<0.0059ppm	0.0012ppm	Trichlorolluomethane	<0.0059ppm	N/A
Vinyl Chloride	0.018ppm	0.0017hbiit	11 temoretraemano		

#### NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Menus #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis.

Limit not available N/A: Parts per Million

ug/Kgi micrograms per kilogram (parts per billion) ug/h: micrograms per Liter (parts per billion)

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



# Table I - USEPA 8260 \ statile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analÿncal Parameters	Soil Borehole #03 (Sampling Depth in Feet)	NYSDEC TAGM	Analytical-Parameters	Soil Borehole #03 (Sampling Depth in Feet)	TAGM Limits
		Limits	CONT.	S3	Soil
	S3	Soil		[4-7]	
	(4-7')			<0.0057ppm	0.017ppm
.1 Dichloruethane	<0.0057ppm	0.002ppm	Chlorobenzene	<0,0057ppm	N/A
.1 Dichloroethene	<0.0057pprn	0.004ppm	Chlorodibromorachane	<0.0057ppm	N/A
A-Dichloropropene	<0.0057ppm	N/A	Chlorodifluoromethane	<0.0057ppm	0.019ppm
2 Dibromoethane	<0.0057ppm	N/A	Chloroethane	<0.0057npm	0,003ppm
2 Dichlorobenzene (v)	<0.0057ppm	0.079ppm	Chloroform	<0.0057mpm	N/A
1.2 Dichloroetlane	<0.0057ppm	0.001ppm	Chloromethane	<0:0057ppm	N/A
.2 Dichlocopropane	<0.0057ppm	N/A	Dibromochloropropune.	<0.0057ppm	N/A
.3 Dichlorobenzene (v)	<0.0057ppm	0.0155ppm	Dibramomethane	<0.0057ppm	N/A
.3-Dichloropropung	<0.0057ppm	0.003ppm	Dichlordifluomethanc	<0.0057ppm	0 055ppm
1 4 Dichlorobenzene (V)	<0.0057ppm	0.085ppm	Ethyl Benzene	<0:0057ppm	0,060ppm
111 Trichlorocthane	<0.0057ppm	0.0075 <del>ppm</del>	Freon 113	<0.0057ppiid <0.0057ppm	N/A
1112Tetrachloroethane	<0.0057ppm	N/A	Hexachlerobuladiene	<0.0057ppm	0.10ppm
112 Trichloroethane	<0.0057ppm	N/A	Isopropythenzene	<0.011ppm	0.012ppm
1122Temphloroethane	<0.0057ppm	0.006ppm	m + p Xylene	<0.057ppm	N/A
123-Trichlorobenzene	<0.0057ppm	N/A	Methyl Ethyl Ketone	<0.0057ppm	0,001pam
	<0,0057ppm	0.0034ppm	Methylene Chloride	<0.057ppm	N/A
123-Trichloropropane 124-Trichlorobenzene (V)	<0.0057ppm	0.034ppm	Methylisoburylketone	<0.0057ppm	0.10npm*
	<0.0057ppm	0.10pam*	n-Butylbenzene		0.10ppm*
124-Trimethylbenzene	<0.0057ppm	0.10spm*	n-Propylbenzene	<0,0057ppin	0.130ppm
1245 Tetramethylbenz	<0.0057pam	N/A	Naphthalene(v)	<0.0057ppm	0.012ppm
135-Trimethylbenzene	<0.0057ppm	N/A	o Xylene	<0.0057ppm	N/A
2,2-Dichloropropane	<0.0057pm	N/A	p Diethylbenzene	1 <0.0057ppm	N/A
2-Chlorotoluene	<0.0057ppm	N/A	p-Ethyltoluene	<0.0057ppm	1 0.10ppm*
4-Chlorotoluene	<0.057ppm	0.0011ppm	p-Isopropyltoluene	<0.0057ppm	
Acetone	<0.037ppm	0,0006ppm	sec-Butylbenzene	<0.0057ppm	0.10ppm*
Benzene	<0.0057ppm	NIA	Styrene	<0.0057ppm	N/A
Bromobenzene	<0.0057ppm	NVA	t-1.2-Dichloroethene	<0.0057ppm	N/A_
Bromochlommethane	<0.0057ppm	N/A	t-1.3Dichloropropene	<0.0057ppni	N/A
Brumgdichloromethane	<0.0057ppm	N/A.	ter.BurylMethylEther (MTBE)	<0.0057ppm	1.0ppm
Bromeform	<0.0057ppm	N/A	tert-Butylbenzene	<0.0057ppm	0.1ppm*
Bromomethane	<0.0057ppm	N/A	Tetrachloracthene	0.03ppn	0.014ppr
c-1.2-Dichloroethene		N/A	Tolirene	<0.0057ppim	0.015ррг
c-1,3Dichloropropene	<0.0057ppm	0.006ppm	Trichlorouthylene	<0.0057ppm	N/A
Carbon Tetrachloride Vinyl Chloride	<0.0057ppm <0.0057ppm	0.0012ppm	Trichlorofluomethane	<0.0057ppm	N/A

NOTES:

Concentrations above MDL are highlighted in bold BLACK

Cencentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

Values reported on a dry weight basis.

Limit not available

Parts per Million ug/Kg: micrograms per kilogram (parts per billion) ug/Li, micrograms per Liter (parts per billion)

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

<sup>\*</sup> Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.



# Table I - USEPA 8260 volatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Análytical Parameters	Soil-Borchole #03 (Sampling Depth in Feet)	NYSDEC TAGM L/m/ts	Analytical Parameters	Soil Borehole #03 (Sappling Depth in Feet)	NYSDEC TAGM Limits
TA CONTRACTOR OF THE PARTY OF T				S3A	Soll
	\$3A	Soil	į.	(9-11')	
	(9-11')		Chlorobenzene	<0.0053ppm	0.017ppm
J Dichloroethane	<0.0063ppm	0.002ppm		<0.0063ppm	N/A
.I Dichloroethene	<0.0063ppm	0.004ppm	Chlorodifluoromethane	<0.0063ppm	N/A
.1-Dichloropropene	<0.0063ppm	N/A		<0.0063ppm	0.019ppm
2 Dibrumoethane	<0.0063ppm	NA	Chlorgethane	<0.0063ppm	0.003cpm
2 Dichlorobenzene (v)	<0.0063ppm	0.079ppm	Chloroform	<0.0063ppm	N/A
2 Dichloroethane	<0.0063ppm	0.001ppm	Chloromethane	<0.0063ppm	N/A
.2 Dichloropropane	<0.0063ppm	N/A	Dibromochloropropane	<0.0063ppm	N/A
3 Dichlorobenzene (v)	<0.0063ppm	0.0155ppm	Dibromomethane	<0.0063ppm	N/A
.3-Dichloropropane	<0.0063ppm	0.003ppm	Dichlordifluomethane	<0.0063bpttl	0.055ppm
1,4 Dichlorobenzene (v)	<0.0063mm	0.085ppm	Ethyl Henzene	<0.0063pcm	0.060ppm
	<0.0063ppm	0.0076ppm	Freon 113		N/A
111 Trichloroethane	<0.0063ppm.	N/A	Hexachlorobutadiene	<0.0063ppm	0.10ppm*
1112Tetrachloroethane	<0.0063ppm	N/A	Isopropylbenzene	<0.0063ppm	0.012ppm
112 Trichloroethane	<0.0063ppm	0,006ppm	m + p Xylene	<0.013ppm	N/A
1122Tetrachlorocihane	<0.0063mm	N'A	Methyl Ethyl Ketone	<0.063ppm	1 0,001 ppm
123-Trichlombenzene	<0.0063ppg	0.0034ppm	Melhylene Chloride	<0.0063 pm	N/A
123-Trichloropropane	<0.0063 pm	0.0340001	Methylisobutylketone	<0.063ppin	1
124-Trichlombenzene (V)		0.10ppm	n-Butylbenzene	<0.0063ppm	0.10ppm*
124-Trimethylhenzena	<0.0063ppm	0.10ppm*	n-Pronulbenzene	<0:0053ppm	0.10ppm
1245 Temmethylbenz	<0.0063ppm	N/A	Naphthalene(v)	<0.0063ppm	0.130ppm
135-Trimethylbenzene	<0.0063ppm	N/A	o Xylene	<0.0063ppm	0.012ppm
2,2-Dichloropropane	<0,0063ppm	N/A	b Diethylbenzene	<0,0063mm	N/A
2-Chlorotoluene	<0.0063ppm	N/A =	p-Ethykoluchu	<0.0063ppm	N/A
4-Chlorotoluene	<0.0063ppm	0.0011ppm	p-lsopropyltoluene	<0.0063ppm	0,10ppm*
Acetane	<0.063ppm		sec-Burylbenzene	<0.0063ppm	0.10ppm*
Benzete	<0,6063ppm	0.0006ppm		<0.0063ppm	N/A
Bromobenzene	<0.0063ppm	NVA	Styrene 1-1,2-Dichloroethene	<0.0063ppm	N/A
Bromochioromethane	<0.0063ppm	N/A	/ L-1,2-Dichloropropene	<0.0063ppm	N/A
Bromodichloromethane	<0.0063ppm	N/A	ter.BulylMethylEther (MTBE)	<0.0063ppm	1.0ppm*
Bromoferm	<0.0063ppm	N/A		<0.0063ppmi	0.lppm*
Bromomethane	<0.0063ppm	N/A	tert-Butylbenzene	<0.0063ppm	0.014 при
c-1.2-Dichloroethene	0.011ppai	NIA	Tetrachloroethene	<0.0063ppm	0.015ppm
c-1.3Dichloropropene	<0.0063ppm	N/A	Toluene.	<0.0063ppm	N/A
Carbon Tetrachloride	<0.0063ppm	0.006ppm	Trichlorocthylens	<0.0063ppm	NA
Vinyl Chloride	0.024ppm	0.0012ppm	Trichlorofluornethane		

NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soft or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported in a dry weight basis. Limit not available

N/A: Parts per Million

ng/Kg: micrograms per kilogram (parts per hillion) ug/L: micrograms per Liter (parts per billion)

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



# Table I - USEPA 8260 Y platile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical Parameters	Soil Borehole #03 (Sampling Depth in Feet)	NYSDEC TAGM Limits	Analytical Parameters	Soil Borehole #03 (Sampling Depth in Feet)	NYSDEC TAGM Limits 2
				S3B	Soil
	S3B	Soil		(12-16')	<u> </u>
	(12-163)		OIL NAMES	<0.0083ppin	0.017.ppm
1 Dichlorocthane	<0.0083ppm	0.002pcm	Chiorobenzene	<0.0083ppm	N/A
.1 Dichloroethene	<0.0083ppm	0.004ppm	Chlorodibromomethanu	<0.0083ppin	N/A
.l-Dichloropropene	<0:0083ppm	NIA	Chlorodifluoromethanc	<0.0083ppm	0.019ppm
2 Dibromoethane	<0.0083ppm	NA	Chloroethane	<0.0083bpm	0.003ppm
.2 Dichlorobenzene (v)	<0.0083ppm	0.079ppm	Chlaroform	<0.0083ppm	N/A
.2 Dichloroethane	<0.0083ppm	0.001ppm	Chloromethane	<0.0083pcm	N/A
2 Dichlorupropane	<0.00§3ppm	N/A	Dibromochlorogropene	<0.0083ppm	N/A
1.3 Dichlorobenzene (v)	<0.0083ppm	0.0155ppm	Dibromomethane	<0.0083ppm	N/A
1.3-Dichloropropane	<0.0083mm	0.003ppm	Dichlordifluomethane	<0.0083ppm	0.055ppm
1.4 Dichlorobenzene (v)	<0.0083ppm	0.085ppm	Ethyl Benzenc	<0.0005pm	0.060ppm
1.4 Dichlorgathane	<0.0083ppm	0.0076ppm	Freon.113	<0.0043pp	N/A
1112Tetrachloroethane	<0.0083ppm	N/A	Hexachlorobutadions	<0.0083ppm	0.10ppin*
	<0,0083ppmi	N/A	Isopropylbenzene	<0.017ppni	0:012ppm
112 Trichloroethane	<0.0083mm	0.60бррт	m+p Xylene	0.1ppm	NA
1122 Tetrachlorpethane	<0.0083ppm	N/A.	Methyl Ethyl Ketone	<0.0083mmi	U.001ppm
123-Trichlorobenzene	<0.0083ppm	0.0034ppm	Methylene Chloride		N/A
123-Trichluropropane	<0.0083mm	0.034ppm	Methylisobutylketone	<0.0083pm	0,10ppm*
124 Trichlorobenzene (v)	<0.0083ppm	0.10ppm*	n-Butylbenzene	<0.0083pm	0.10ppm*
124-Trimethylbenzene	<0.0083ppm	0.10ppm*	n-Propylhenzene	<0.0083ppm	0.130ppm
1245 Tetramethylbonz	<0.0083ppm	N/A	Naphthalene(v)	meq:800.0>	0.130ppm
135-Trimethylbenzene	<0.0083mm	N/A	O Xylenc	<0.0083ppm	N/A
2.2-Dichloropropane	<0.0083ppm	N/A	n Diethylbenzene	<0.0083ppm	
2-Chloratoluene	<0.0083pgm.	N/A	n-Ethyltoluene	<0.0083prim	N/A
4-Chlorotoluene	0.43npm	0.0011ppm	p-isopropylioluens	<0.083ppm	0.10ppm*
Accione	<0,0083ppm	0,000 Sppin	sec-Burylbenzene	<0.0083ppm	0.10npm*
Benzene	<0.0083ppm	N/A.	Sivrene	<0.0083ppn	N/A
Brumohenzene	<0.0083ppm	N/A	1-1,2-Dichleroethene	<0,0083ppm	N/A
Bromochloromethane		N/A	I-1 3Dichloropropene	<0.0083ppm	N/A
Bromodichloromethane	<0.0083ppm	N/A	ler.BulylMethylEther (MTBE)	<0.0083ppm	1.0ppm*
Bromoform	<0.0083ppn	N/A	teri-Butylbenzene	<0.0083ppm	0.1ppm*
Bromomethane	<0.0083ppm	N/A	1. Tetrachloroethene	<0.0083ppm	0.014ppn
c-1,2-Dichloroethene	<0.0830pm	N/A	Toluene	<0.0083ppm	0.015ppn
c-1,3Dichlaropropenc	<0.0083ppm	0.006ppm	Trichloroethylene	<0.0083ppm	N/A
Carbon Tetrachloride	<0.0083apm	0.0012mm	Trichlorofluouxthane	<0.0083ppm	N/A
Vinyl Chloride	<0.0083ppm	0.0002000	- I Helitan da hi di tanca mara		

#### NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis.

Limit not available Parts per Million

ug/Kg: micrograms per kilogram (pans per billion) ug/L: micrograms per Liter (pans per billion)

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



# Table I - USEPA 8260 \ ulatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical ( Parameters	Soil Borehole #04 (Sampling Depth in Feet)	NYSDEC TAGM	Analytical Parameters	Soil Borchole #04 (Sampling Depth in Feet)	NYSDEC TAGNI Limits
	to be a figure of the state of	Limits		S4	Soil
	S4	Soil	A	(4-3')	
	(4-8')			<0.0064ppm	0.017ppm
1 Dichloroethane	<0.0064ppm	0.002ppm	Chlorobenzene	<0.0064ppm	N/A
.1 Dichloroothene	<0.0064ppm	0.004ppm	Chlorodibromomethane	<0.0064ppm	N/A
1-Dichloropropene	<0.0064ppm	NA	Chlorodifluoromethane	<0.0064ppm	0.019ppm
2 Dibromocihane	<0.0064ppm	N/A	Chloroethane	<0.0064ppm	maq200.0
2 Dichlorohenzene (V)	<0.0064ppm	0.079ppm	Chloroform	<0.0064ppm	N/A
.2 Dichloroethanc	<0,0064ppm	0.001 ppm	Chioromethane	<0.0064ppm	N/A
2 Dichloropropane	<0.0064pmm	N/A	Dibromochloropropane	<0,0064ppm	N/A
.3 Dichlorobenzene (v)	<0.0064ppm	0.0155ppm	Dibromomethane	<0,0004ppiii <0,0004ppiii <0,0004ppiii	N/A
3-Dichlorogropane	<0.0064ppm	0.003ppm	Dichlordifluamethane	<0.0064ppm	0.055mmm
1.4 Dichlorobenzene (v)	<0.0064ppm	0.085ppm	Ethyl Benzene		0.060ppm
1.4 Dienioropenzene (v)	<0.0064ppm	0.0076ppm	Freon 113	<0.0064ppm	N/A
Lundrich water-miller	<0.0064ppm	N/A	Hexachlorobutadiene	<0.004ppm	0.10ppm*
1112Tetrachloroethane	<0.0064ppm	N/A	Isopropylbenzene	<0.0064ppm <0.013ppm	0.012ppm
112 Trichlorocthane	<0,0064ppm	0,006ppm	m + p Xylene		N/A
1122Totrachloroethane	<0.006-lppm	N/A	Methyl Ethyl Kelone	<0.064ppm	0.001 mpm
123-Trichlorobenzene	<0.0064ppm	0.00340000	Methylene Chloride	<0.0064spm	N/A
123-Trichloropropane	<0.0064pm	0.034ppm	Methylisobutylketone	<0,064ppm	0.10ppm
124-Trichlorobenzene (v)	<0.0064pm	0.10ppin*	n-Butylbenzene	<0.0064ppm	
124-Trimethylhenzene	<0.0064ppm	0,10ppm*	n-Propylbenzenc	<0,0064ppm	0.10ppm*
1245 Tetramethylbenz	<0.0064ppm	N/A	Naphthalene(v)	<0.0064ppm	0.130ppm
135-Trimethylbonzene	<0.0064ppm	N/A	o Xviene	<0,0064ppm	0.012ppm
2,2-Dichloropropane	<0.0064pem	N/A	n Diethylbenzene	<0.0064gpm	N/A
2-Chlorotuluene		N/A	p-Ethyltoluene	<0.0064ppm	N/A
4-Chlorotoluene	<0.0064ppm	0.0011ppm	p-Isopropyitoluene	<0.0064ppm	0.10ppm*
Accione	<0.064ppm	0.00061973	sec-Butylbenzene	<0.0064ppm	0.10onm*
Benzene	<0,0064ppm	N/A	Styrenc	<0.0064ppm	N/A
Bromobenzene	<0.0064ppm	N/A	1-1.2-Dichloroethene	<0.0064ppm	N/A
Bromochloromethane	<0.0064ppm	N/A	1-1,3Dichloropropene	<0,0064ppm	N/A
Bromodichloromethane	<0.0064ppm	N/A	ter.BulylMethylEther (MTBE)	<0,0064ppn1	1.0ppm*
Bromoform	<0.0064ppm	N/A	tert-Butylbenzene	<0.0064ppm	0.1ppm*
Bromomethane	<0.0064ppm	N/A N/A	Tetrachloroethene	0.42ppm	0.014րըս
c-1,2-Dichloroethene	<0.006-lapm	N/A N/A	Toluene	<0.0064рртп	Q.015opm
c-1,3Dichloropropene	<0:0064ppm	0.005ppm	Trichloroethylene	<0.0064ppm	N/A
Carbon Terrachloride	<0.0064ppm	0.00129pm	Trichlorofluomethane	<0.006appm	N/A
Vinyl Chloride	<0.0064ppm	0.00129pm	THEMOTOTHORICANIA		

#### NOTES:

Concentrations above MDL are highlighted in bold BLACK

Concentrations exceeding the NYSDEC TAGM 4046-Guidence Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis. Limit not available

N/A: Parts per Million ppin:

micrograms per kilogram (parts per billion) ug/L: niierograms per Liter (parts per billion) ug/Kg:

Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



# Table I - USEPA 8260 Yolatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Análytical Parameters	Soil Burehole #04 (Sampling Depth in Feet)	NYSDEC TAGM Limits	Analytical Parameters	Soil:Borehole #04 (Sampling Depth in Feet)	TAGM Limits
	544	Soil		S4A	Soil
	S4A	3011		(8-12')	
	(8-12')	0.002ppm	Chierobenzene	<0.0066ppm	0.017ppm
, Dichloroethane	<0.0065ppni	0.002ppm	Chloredibromomethane	<0.0066ppm	N/A
,1 Dichloroethene	<0.0066ppm	N/A	C'hlorodifluoromethane	<0.0066ppm	N'A
,1-Dichloropropene	<0.0066ppm	N/A	Chloroethane	<0.006ppm	0.019ppm
2 Dibromoethane	<0.0066ppm	0.079ppm	Chloroform	<0.0066pmm	0.003ppm
2 Dichlorobenzene (V)	<0.0066ppm		Chloromethane	<0.0066ppm	N/A
2 Dichloroethane.	<0.0066 <b>rpm</b>	0.001ppm N/A	Dibromochloropropane	<0.0066ppm	N/A
1.2 Dichloropropané	<0.0065ppm		Dibromomethane	<0.006Gppm	N/A
3 Dichlorobenzene (v)	<0.00ббррп	0.0155ppm	Dichlurdifluomethane	<0,0066upm	N/A
1.3-Dichlorogropane	<0.0066ppm	0.003ppm	Ethyl Benzene	<0.0066ppm	0.055pgm
1,4 Dichlorobenzene (v)	<0.0066ppm	0.085ppm	Freen 113	<0,0066pgrr	0.060 np.m
III Trichlorocthane	<0.006óppm	0.0076ppm	Hexachlorobutadiene	<0.0066ppm	N/A
1112Tetrachlorocthane	<0.0066ppm	N/A	Isopropylbenzene	<0.0066ppm	0.10ppm#
112 Trichloroethane	<0.006 <b>6pp</b> m	N/A.	m + n Xylene	<0.013pgin	0.012ppm
1122Tetrachloroethane	<0.0065ppm	0.006ppm	Methyl Ethyl Ketone	<0.066ppm	N/A
123-Trichlombenzene	<0.0066ppm	NVA	Methylene Chloride	<0.0065pgm	0.001ppm
123-Trichlorepropage	<0.0066ppm	0.0034ppm	Methylisobutylketone	<0.060pem	N/A
124-Trichlorobenzene (v)	<0.0066ppm	0.034ppm		<0.0066ppm	0.10ppm*
124-Trimethylbenzene	<0.0066ppm	0.10mm*	n-Burylherizene	<0.0066ppm	0.10ppm*
1245 Tetramethylbenz	<0.0065ppm	0.10spm*	n-Propylbenzene	<1),0066ppm	0.130ppm
135-Trimethylbenzene	<0.0066ppm	N/A	Naphthalene(v)	<0,0066ppm	0.012ppm
2,2-Dichlorupropane	<0.0066ppm	N/A	o Xylene	<0.0065ppm	NA
2-Chlorotoluene	<0.006appm	N/A	p Diethylbenzene	<0.0066pm	N/A
4-Chlorotoluene	<0.0066ppm	N/A	p-Ethyltoluene	<0.006Gppm	0.10ppm*
Acctone	0.17ppm	0.0011ppm	p-Isopropylloluene	<0.006Gppm	0.10ppm*
Benzene	<0.0066ppm	0.0006ppm	sec-Butylbenzenc	<0.0066ppm	N/A
Bromobenzene	<0.0065phin	N/A	Statene	<0.0066ppm	N/A
Bromachloromethanc	<0.0056pptri	N/A	Jel.2, Dichloroethene	<0.0066ppm	NA
Bromodichloromethane	<0.0066ppm	N/A	1.13Dichloropropens	<0.0066ppm	1.0ppm*
Bromoform	<0.0000mm	N/A.	ter.ButylMethylEther (MTBE)	<0.0066ppm	0.1com*
Bromomethane	<0.0066ppm	N/A	tert-Butylbenzene	<0.0065ppm	0.014ppm
c-1.2-Dichloroethene	<0.0066mm	N'A	Tetrachloroethene	<0.0060ppm	0.015ppn
c-1.3Dichloropropene	<0.0066ppm	N/A	Toluene	<0.0066ppm	N/A
Carbon Tetrachloride	<0.0066ppm	0.006ppm	Trichloroethylene	<0.006Gppn)	N/A
Vinyl Chloride	<0.0066ppm	0.0012ppin	Trichlorofluomethane	- Cordanathing	

NOTES:

Values reported on a dry weight basis. Limit not available

N/A: Parts per Million

ppins nderograms per kflogram (parts per billion) ug/L: micrograms per Liter (parts per billion) ug'Kg

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046 Guidance Values for soil or groundwater are Highlighted in RED.

\*\*Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.



# Table 1 - USEPA 8260 Votatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical Parameters	Soil Borehole #05 (Sampling Depth in Feet)	NYSDEC TAGM	Analytical Parameters	Soll Borehole #05' (Sampling Depth in Feet)	NYSDEC TÄGM Limits
L'III HIRECCE	国际经验经验经验	Limits		S5 i	Soil
	S5	Soil		(5-8')	
	(5-8')			<0.0059ppm	0.017ppm
.1 Dichloroethane	<0.0050ppm	0.002ppm	Chforobenzene	<0.0059apm	N/A
.1 Dichloroethene	<0.0059ppm	0.004ppm	Chlorodibromomethane	<0,0059ppm	N/A
,1-Dichloropropene	<0.0059ppm	N/A	Chlorodifluoromethane	<0.0059ppm	0.019ppm
,2 Dibromoethane	<0.0059ppm	N/A	Chloroethane	<0.0059ppm	0.003ppm
1,2 Dichlorobenzene (v)	<0.0059ppm	0.079ppm	Chloroform	<0.0059ppm	N/A
	<0.0059pcm	0.001ppm	Chloromethane		N/A
1,2 Dichloroethane	<0.0059ppm	N/A	Dibromochlorograpane	<0.0059ppm	N/A
1.2 Dichloropropane	<0.0059ppm	0.0155poin	Dibromomethane	<0.0059ppm	N/A
1,3 Unchlorobenzene (v)	<0.0059mm	0.003apm	Dichlordiftuornethane	<0.0059ppm	0.05Sppm
1.3-Dichloropropone	<0.0059ppm	0.085ppm	Ethyl Benzene	<0.0059ppm	0.060ppm
1.4 Dichlorobenzene (v)	<0.0059ppm	0.0076ppm	Freori 113	<0.0059ppm	N/A
111 Trichloroethanc	<0.0059ppm	N/A	Hexachlorubutadiene	<0.0059ppm	0.10ppm*
1112Tetrachlorosthane	<0.0059ppm	N/A	Isoprogyfbenzene	<0.0059mm	0.102pm
112 Trichloroethane	<0.0059min	0.006ppm	m+p Xylene	<0.012spm	N/A
1122Tetrachioroctbane	<0.0059ppm	NVA	Methyl Ethyl Ketone	<0.059ppm	0.001 ppm
123-Trichlorobenzenc	The state of the s	0.0034ppm	Methylene Chloride	<0.0059ppn	N/A
123-Trichloropropane	<0.0059ppm	0.034ppm	Methylisobutylketone	<0.059ppm	
124-Trichlorobenzene (v)	<0.0059ppm	0.10ppn1*	n-Bulyibenzene	<0.0059ppm	0.10ppm*
124-Trimethylbenzene	<0.0059ppm	0.10ppm*	n-Pronylbenzene	<0.0059ppm	0.10ppm*
1245 Tetramethylbesz	<0.0059ppm	N'A	Naphthalene(v)	<0.0059ppm	0.130ppm
135-Trimethythenzene	<0.0059ppm	N/A	o Xylene	≤0.0059ppm	0.012ppm
2.2-Dichluroprorunc	<0.0059ppm	N/A	p Diethylbenzene	<0.0059ppm	N/A
2-Chlorotoluenc	<0.0059ppm	N/A	p-Ethyliolucne	<0.0059ppm	N/A
4-Chlorotoluene	<0.0059ppm		p-Isopropyltoluene	<0.0059ppin	0.10ppn1*
Accione	<0.059ppm	0.0011ppm	sec-Builbenzene	<0.0059ppm	0,10ppm*
Benzene	<0.0059ppm	0.0006ppm	Streene	<0.0059ppm	N/A
Bromobenzene	<0.0059ppm	N/A	▶] 2-Dichlorcethene	<0.0059ppm	NVA
Bramachloromethane	<0.0059±pm	N/A	1-1.3Dichloroptopene	<0,0059npm	N/A
Bramodichloromethune	<0.0059ppm	N/A	ter Brity Methyl Ether (MTBB)	<0.0059pm	1.00000
Bromoform	<0.0059ppm	N/A	tert-Buildbunzene	<0.0059ppm	0.1ppm*
Bromomethane	<0.0039ppm	N/A	Tetrachluroethene	<0.0059ppm	0.014ppir
c-1,2-Dichleroethene	<0.0059ppm	N/A	Tolestie	<0.0059ppm	0.015ppn
c-1 3 Dichlurepropenc	<0.00\$9ppm	N/A	Trichlosoethy lone	<0.0059ppm	NA
Carbon Tetrachionde	<0,0059ppm	0.006ppm	Trichlorofluomethane	<0.0059ppm	N/A
Vinyl Chloride	<0.00 <b>59ppm</b>	0.0012ppm	1 TERIOIOHUGHICHISTE		

NOTES:

Concentrations above MDL are highlighted in bold BLACK

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection Values reported on a dry weight basis.

N/A:

Limit not available Parts per Million

micrograms per kilogram (parts per billion) ug/L: micrograms per Liter (parts per billion) ppm; ug/Kg.

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



# Table I - USEPA 8260 Volatile Organic Compounds SOIL SAMPLE ANALYTICAL DATA

Analytical Parameters	Soil Borehole #05 (Sampling Depth in Feet)	NYSDEC**** TAGM. Limits	Analytical Parameters	Soil Borchole #05 (Sampling Depth in Feet)	NYSDEC TAGM Limits
		The second secon		S5A	Soil
	S5A	Soil		(8*9')	
	(8-9')			<0,006 ppat	0.017fpm
.1 Dichloroethane	<0.0051ppm	0.002ppm	Chloribenzeae	<0.0001 ppm	N/A
.1 Dichloroethene	<0.0061ppm	0.004ppm	Chlorodibromomuthane	<0.0061ppm	N/A
1-Dichloropropere	<0.0061ppm	N/A	Chlorodifluoromethane	<0.0061ppm	0.019ppiti
2 Dibrumocthane	<0.0061ppm	N/A	Chloroethane	<0.0061ppm	0.003ppm
2 Dichlurobenzene (v)	<0.0061ppm	0.079pm	Chloroform		N/A
2 Dichloroethane	<0.0061ppm	0,001ppm	Chloromethane	<0.0061ppm	N/A
2 Dichlorogropane	<0.0061ppm	N/A	Dibromochloropropane	<0.0061-ppm	I N/A
3 Dichlorobenzene (v)	<0.0061 mm	0.0155ppm	Dibromomethane	<0.0061ppm	N/A
3-Dichloropropane	<0.0061 ppm	0.003.pam	Dichlordifluomethane	<0.0061 ppm	0.055pm
A Dichlorobenzene (v)	<0.006lpgm	0.085ppm	Ethyl Benzene	<0.0061ppm	
111 Trichloroethane	<0.0061ppm	0.007Cppsn	Freen 113	<0.0061ppm	0.060ppni N/A
1112Tetrachloroethane	<0.0061 petn	NIA	Hexachiorobutadione	<0.00G1ppni	0.10ppm*
112 Trichloroethane	<0.0061ppm	N/A	Isopropylbenzene	<0.0061ppm	0.012ppm
1122 Tetrachlorocthane	<0.0061ppm	0.006ppm	m+p Xylenc	<0.012ppm	N/A
123-Trichlorobeazere	<0.0061ppm	N/A	Methyl Ethyl Ketone	<0.061ppm	0,001ppm
	<0.0061ppm	0.0034ppm	Methylene Chloride	<0.0001pprn	N/A
123-Trichloropropane	<0.0001ppm	0.034ppm	Methylisobutylkotone	<0.061ppm	1
124-Trichlorobenzene (V)	<0.0001pm	0,10ppm <sup>4</sup>	n-Butylbenzene	<0.0001ppm	0.10ppm
124-Trimethylbenzene	<0.0001pam	0.10ppm*	n-Pronvibenzene	<0.0061ppm	0.10ppm
1245 Tetramethylbenz	<0.0061ppm	N/A	Naphthalene(v)	<0.0061ppm	0.130ррг
135-Trimethylbenzene	<0.0061mm	N/A	o Xviene	<0.0061ppm	0.012ppn
2,2-Dichloropropane		N/A	n Diethylbenzene	<0.0061 ppm	N/A
2-Chlurotoluene	<0.0061ppm	N/A	p-Ethyltolucite	<0.0061ppm	N/A
4-Chlorotoluene	<0.0061ppn1 <0.061ppm	0.0011ppm	n-Isopropyttoluene	<0.0061ppm	0.10ppm
Acctone		0.00015ptm	sec-Butylbenzene	<0.0061ppm	0.10ppin
Benzene	<0.0061ppm	N/A	Storene	meg 1000.0>	N/A
Bromobenzene	<0.0061ppm	N/A	t-1,2-Dichlorocthene	<0.0061ppm	N/A
Bromochloromethane	mqq1000.0>	N/A	(-1.3Dichlorogropene	<0.0061ppm	N/A
Bramodichloromethane		N/A	ter.ButylMelliylEther (MTBE)	<0.0061ppm	1,0ppm
Bromoform	<0.0061ppm	N/A	ten-Butylbenzene	<0,0061pcm	0.1ppm
Bromomethane	<0.0061ppm	N/A	Tetrachloroethene	<0.0061ppm	0.014pp
c-1,2-Dichloroethene	<0.0061ppm	N/A	Toluene	<0.0061ppm	0.015pp
c-1,3Dichloropropene	<0:0061ppm	0:006ppm	Trichlorocityiene	<0.0061ppm	N/A
Carbon Tetrachloride Vinyl Chloride	<0.0061ppm <0.0061ppm	0.0012ppn	Trichlorofluomethane	<0.0061 ppm	N/A

#### NOTES:

< Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soft or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis.

Limit not available N/A: ppm Parts per Million

micrograms per kilogram (parts per billion) ug/L: micrograms per Liter (parts per billion)



CNS Job #:

E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

SI

Analytical Method # 8270B Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphthalenc	<0.34	0.130
Acenaphthene	<0.34	0.9
Flourene	<0.34	3,5
Phenanthrene	<0.34	2.20
Anthracene	< 0.34	7.00
Fluoranthene	<0.34	19.0
Рутепе	<0.34	6,65
Benzo(a)anthracene	<0.34	0.03
Chrysene	< 0.34	0.004
Benzo(b) fluoranthene	< 0.34	0,011
Benzo(k)fluoranthene	< 0.34	0.011
Benzo(a)pyrene	< 0.34	0.11.0
Indeno (1,2,3-cd)pyrene	<0.34	0.032
Dibenzo(a,h)anthracene	<0.34	1650.0
Benzo(g,h,l)perylene	<0.34	8.0
2-Methylnophthalene		0.364
Acenaphthylene		0.41

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and insummentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\*\*Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC NFARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis. Limit not available N/A:



CNS Job #:

E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

S2B

Analytical Method # 8270B Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppin)
Naphilalene	< 0.35	0.130
Acenaphthene	<0.35	0.9
Flourene	<0.35	3.5
Phenanthrene	0.36	2.20
Anthracene	0.44	7.00
Fluoranthene	0.71	19.0
Pyrene	1.0	6.65
Benzo(a)anthracene	0.58	0.03
Chrysene	0.76	0.004
Benzo(b)fluoranthene	0.94	0.011
Benzo(k)fluoranthene	0.94	0.011
Benzo(a)pyrene	1.1	0.110
Indeno (1,2,3-cd)pyrene	0.47	0.032
Dibenzo(a,h)anthracene	< 0.35	1650.0
Benzo(g,h,l)perylene	0.48	8.0
2-Methylnaphthalene		0.364
Acenaphthylene		0.41

Values reported un a dry weight basis.

Limit not available Parts per Million

mg/Kg: milligrams per kilogram (parts per million)

ug/L: micrograms per liter (ppb)

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.



E23262 CNS Job #: River Plaza - 134 Wildey Street, Tarrytown, NY Site Address: S3 Sample ID #:

Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphthalene	<0.34	0.130
Acenaphthene	<0.34	0.9
Flourenc	<0.34	3.5
Phenanthrene	<0.34	2.20
Anthracene	< 0.34	7.00
Fluoranthene	0.57	19.0
Pyrene	0.9	6.65
Benzo(a)anthracene	0.43	0.03
Chrysene	0.51	0,004
Benzo(b)fluoranthene	0.56	0.011
Benzo(k)fluoranthene	0.56	0.011
Венго(а)ругене	0.57	0.110
Indeno (1.2,3-cd) pyrene	<0.34	0.032
Dibenzo(a,h)zmhracene	< 0.34	1650,0
Benzo(g,h,l)perylene	<0.34	8.0
2-Methylnaphthalene		0.364
Acchaphthylene		0.41

<sup>&</sup>lt; Minimum Detection Limit

Minimum Detection Limit (MDL) for Method of analysis and instrumentation.
 Concentrations above MDL are highlighted in bold BLACK.
 Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.
 Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis.

N/A:



CNS Job #:

E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

S3A

Analytical Method # 8270B Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphthalene	<0.38	0.130
Acenaphthene	< 0.38	0.9
Flourene	<0.38	3.5
Phenanthrene	<0.38	2.20
Anthracene	<0.38	7.00
Fluoranthene	0.66	19.0
Рутере	0.95	6,65
Benzo(a)anthracene	0.58	0.03
Chrysene	0.68	0.004
Benzo(b)fluoranthene	0.7	0.011
Benzo(k)fluoranthene	0.7	0.011
Benzo(2)pyrene	0.78	0.110
Indeno (1,2,3-cd)pyrene	<0.38	0.032
Dibenzo(a li)anthracene	<0.38	1650.0
Benzo(g,h,f)perylene	0.39	.8.0
2-Methylnaphthalene		0.364
Accnaphthylene		0.41

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\*\*Compounds not found in NYSDEC TAGM 4046, teferred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection Values reported on a dry weight basis.
N/A: Limit not available



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

S3B

Analytical Method # 8270B Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphthalene	<0.5	0.130
Acenaphthene	<0.5	0.9
Flourene	<0.5	3.5
Phenanthrene	<0.5	2,20
Anthracene	<0.5	7.00
Fluoranthene	<0.5	19.0
Pyrene	<0.5	6.65
Benzo(a)anthracene	<0.5	0.03
Chrysenc	<0.5	0.004
Benzo(b)fluoranthene	<0,5	0.011
Benzo(k)fluoranthene	<0.5	0.011
Benzo(a)pyrene	<0.5	0.110
Indeno (1,2,3-cd)pyrene	<0.5	0.032
Dibenzo(a,h)anthracene	<0.5	1650.0
Benzo(g,h,I)perylene	<0.5	8.0
2-Methylnaphthalene		0.364
Acenaphthylene		0.41

<sup>&</sup>lt; Minimum Detection Limit

Minimum Detection Limit (MDL) for Method of analysis and instrumentation.
 Concentrations above MDL are highlighted in bold-BLACK.
 Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.
 Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP-Alternative Guidance Values" for groundwater protection Values reported on a dry weight basis.

N/A:



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

\$4

Analytical Method # 8270B Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphthalene	<0.38	0.130
Acenaphthene	< 0.38	0.9
Flourene	<0.38	3.5
Phenanthrene	0.76	2.20
Anthracene	<0.38	7.00
Fluoranthene	1.5	19.0
Pyrene	1.7	6.65
Benzo(a)anthracene	0.94	0.03
Chrysene	0.83	0.004
Benzo(b)fluoranthene	0.71	0.011
Benzo(k)fluoranthene	0.71	0.011
Benzo(a)pyrene	0.77	0.110
Indeno (1,2,3-cd)pyrene	<0.38	0.032
Diber20(a,h)andracene	<0.38	1650.0
Benzo(g,h,l)perylene	<0.38	8.0
2-Methylnaphthalene		0.364
Accaphthylene		0.41

ppm:

Parts per Million

mg/Kg: milligrams per kilogram (parts per million)

ug/L. micrograms per liter (ppb)

<sup>&</sup>lt; Minimum Detection Limit

Relow Minimum Detection Limit (MDL) for Method of analysis and instrumentation.
Concentrations above MDL are highlighted in bold BLACK.
Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.
\*Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis.

N/A: Limit not available



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #;

S4A

Analytical Method # 8270B Parameter	Result (mg/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphthalene	<0.39	0.130
Acenaphthene	<0.39	0.9
Flourene	<0.39	3.5
Phenanthrene	<0.39	2.20
Anthracene	<0.39	7.00
Fluoranthene	<0.39	19.0
Pyrene	<0.39	6.65
Benzo(a)anthracene	<0.39	0.03
Chrysene	<0.39	0.004
Benzo(b)fluoranthene	<0.39	0.011
Benzo(k) fluoranthene	< 0.39	0.011
Benzo(a)pyrene	<0.39	0.110
Indeno (1,2,3-cd)pyrene	<0.39	0.032
Dibenzo(a,h)anthracene	< 0.39	1650.0
Benzo(g,h,I)perylene	<0.39	8.0
2-Methylnaphthalene		0.364
Aceuaphthylene		0.41

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis.
N/A: Limit not available.

Parts per Million



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

\$5

Parameter	Result (ing/Kg)	NYS TAGM 4046 Allowable Soil Concentration (ppm)
Naphihalene	<0.35	0.130
Acenaphthene	< 0.35	0.9
Flourene	< 0.35	3.5
Phenanthrene	< 0.35	2,20
Anthracene	<0.35	7.00
Fluoranthene	0.45	19.0
Pyrene	0.59	6.65
Benzo(a)unthracene	0.36	0.03
Chrysene	0.38	0.004
Benzo(b)fluorauthene	0.41	0.011
Benzo(k)fluoranthene	0.41	0.011
Benzo(a)pyrene	0.44	0.110
Indeno (1,2,3-cd)pyrene	< 0.35	0.032
Dibenzo(a,h)anthracene	< 0.35	1650.0
Benzo(g,h,I)perylene	< 0.35	8.0
2-Methylnaphthalene		0.364
Acenaphthylene		0.41

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis.

Limit not available N/A: Parts per Million

### TABLE 1

### UNDERGROUND STORAGE TANK POST EXCAVATION SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (1)	NW-I	SW-1	EW-1	WW-I	B-1
	10,000 *	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	700	ND	ND	ND	ND	ND
1,1-Trichloroethane	400	ND	ND	ND	ND	ND
1,2,2-Tetrachloroethane	1,300	ND	ND	ND	ИD	ND
1,2-Trichloro-1,2,2-trifluoroethane	10,000 *	ND .	ND	ND	ИD	ND
1,2-Trichloroethane	300	ND	ND	ND	ND	ND
I-Dichloroethane	300	ND	ND	ND	ND	ND
1-Dichloroethene	10,000 *	ND	ND	ND	ND	ND
,1-Dichloropropene	8,300	ND	ND	ND	ND -	ND
2.3-Trichlorobenzene	10,000 *	ND	ND	ND	ND	ND
,2,3-Trichloropropane		ND DN	ND	ND	ND	6.4
,2,4.5-Tetramethylbenzene	10,000 **	ND	ND	ND	ND	ND
,2,4-Trichlorobenzene	8,300	ND	ND	ND	ND	ND
2.4-Trimethylbenzene	10,000	ND	ND	ND	ND	ИD
,2-Dibromo-3-chloropropane	10,000 =	ND	ND	ND	ND	ND
,2-Dibromoethane	10,000 *	Charles and the Control of the Contr	ND	ND	ND	ND
,2-Dichlorobenzene	1,100	ND	ND	ND	ND	ND
2-Dichloroethane	20 or MDL	ND	ND	ND	ND	ND
,2-Dichloro ropane	10,000 *	ND		ND	ND	7.8
1.3.5-Trimethylbenzene	3,300	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1,000	ND	ND	ND	ND	ND
1.3-Dichloropropane	10,000 *	ND	ND	ND	ND	ND
1.4-Dichlorobenzene	1,800	ИD	ND	-	ND	ND
2,2-Dichloropropane	10,000 *	ND	ND	ND	ND	ND
2-Butanone (MEK)	200	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	10,000 *	ND	ИD	ND	ND	ND
2-Chlorotoluene	10,000 *	ND	ND	ND		ND
2-Hexanone	10,000	ND	ND	ND	ND	ND
4-Chlorotoluene	10,000 *	ND	ND	ND	ND	ND
n-Isopropyltoluene	10,000	ND.	ND	ND	ND	ND
4-Methyl-2-pentanone	1,000	ND	ND	ND	ND	ND
Acetone	100	ND	ND -	ND	ND	-
Acrolcin	10,000 *	ND	ND	ND	ND	ND
Acrylonitrile	10,000 *	ND	ND	ND	ND	ND
Benzene	60	.ND	ND	ИD	ND	ND
	10,000 *	ND	ND	ND	ND	NE
Bromobenzene	10,000 *	ND	ND	ND	ND	NE
Bromochloromethane	10,000 *	ND	ND	ND	ND	NE
Bromodichloromethane	10,000	ND	ND	ND	ND	NE
Bromoform	10,000	ND	ND	ND	ND	NI NI
Bromomethane	2,700	ND	ND	ND	ND	IK
Carbon disulfide	800	ND	ND	ND '	ND	NI
Carbon Tetrachloride Chlorobenzene	1.100	ND	ND	ND	ND	NE

### TABLE I (con't)

### UNDERGROUND STORAGE TANK POST EXCAVATION SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (1)	NW-I	SW-1	EW-I	WW-1	B-1
19	200	ND	ИD	ND	ND	ND
Chlorodibromomethane	200	ND	ND	ND	ND	ND
Chloroethane	400	ND	ND	ND	ND	ND
Chloroform	10,000 *	ND	ND	ND	ND	ND
Chloromethane	200	ND '	ND.	ND	ND	ND
is-1,2-Dichloroethene	10.000 *	ND	ND	ND	ND	ND
is-1,2-Dichloropropene	200	ND	ИD	ND	ND	ND
Dibromochloromethane	=10,000 *	ND	ND	ND	ND	ND
Dibromomethane	10,000 *	ND	ND	ND	ND	ND
Dichlorodifluoromethane	10,000 *	ND	ND	ND	. ND	ND
Diisopropyl other	10,000 *	ND	ND	ND	ND	ND
Elhanol	10,000 *	ND	ND	ND	ND	ND
Ethyl acetate	5,500	ND	ND	ND	ND	ŅD
Ethyl benzene	10,000 *	ND.	ND	ND	ND	ND
Freon-114	10,000 *	ND	ND	ND	ND	ND
Hexachlorobutadiene	10,000 *	ND	ND	ND	ND	ND
Isopropyl acetate	2,300	ND	ND	ND	ND	ND
Isapropylbenzene		ND	ND	ND	ND	ND
m + p Xylene	1,200	ND	ND	ND	ND	ND
Methyl tertiary butyl ether	1,200	ND	ND	ND	ND	ND
Methylene Chloride	50 or MDL	ND	ND	ND	ND	29
Naphthalene	13,000	ND	ND	ND	ND	ND
n-Butyl acetate	10,000 *	The second second	ND	ND	ND	ND
n-Butylbenzene	10,000 *	ND	ND	ND	ND	ND
n-Propyly acetate	10,000 *	ND	ND	ND	ND	ND
n-Propylbenzene	3,700	ND	-	ND	ND	ND
o Xylene	1,200	ND	ND	ND	ND	19
p-Diethylbenzene	10,000 *	ND	ND	ND	ND	11
p-Ethyltoluene	10,000	ND	ND	ND	ND	ND
sec-Butylbenzene	10,000 *	ND	ND	ND	ND	ND
Styrene	10,000 *	ND	ND	ND	ND	ND
t-Butyl alcohol	10,000 *	ND	ND	ND	ND	ND
tert-Butylbonzene	10,000 *	ND	ND	ND	38	ND
Tetrachloroethene	1,300	ND	ND		ND	ND
Toluene	1,500	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	200	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10,000 *	ND	ND	ND	ND	ND
Trichlorgethene	500	ND	ND	ND		מא
Trichlorofluoromethane	10.000 *	ND	ND	ND	ND	ND
Vinyl acetate	10,000 *	ND	ND	ND	ND	ND
Vinvl chloride	200	ND	ND	ND	T ND	טויו ד

1 - NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 12/0 MD - Not Detected

Bolded text denotes RSCO Exceedance

\* - For those compounds were no specific RSCO has been promulgated. The RSCO of 10,000 ug/kg for total VOCs is used. All units are ug/kg.

### TABLE 2

## UNDERGROUND STORAGE TANK POST EXCAVATION SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8270 (STARS LIST)

Compound	NYSDEC(1)	NW-I	SW-1	EW-I	WW-1	B-1
Acenaphthene	50,000	ND	ND	30 J 1	ДИ	ND
Anthracene	50,000	150	60	350	75	100
Benzo(a)anthracene	224 or MDL	600	270	1,800	290	370
Benzo(a)pyrene	61 or MDL	860	370	1,600	400	530
Benzo(h)fluoranthene	61 or MDL	900	480	1,700	420	.480
	50,000	760	280	870	330	380
Benzo(g,h,i)perylene Benzo(k)fluoranthene	610 or MDL	410	210	770	380	310
	400	750	300	1,900	330	440
Chrysene Dibenzo(a,h)anthracene	14.3 or MDL	190	61	320	91	120
Fluoranthene	50,000	760	470	2,600	420	590
Fluorene	50,000	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	3,200	630	250	900	280	320
Naphthalene	13,000	ND	ND	ND	ND	29
Phenanthrene	50,000	200	170	800	140	270
Pyrene	50,000	810	470	2,700	450	620

#### Notes:

1 - NYSDEC Recommended Soil Cleanup Standards - TAGM 4046

Total SVOCs not to exceed 50,000 ug/kg.

ND - Not Detected

NS - Not specified

Bold Text denotes RSCO exceedances.

All units are ug/kg.

### TABLE 3

### SOIL BORINGS AND MONITORING WELL INSTALLATION SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (1)	MW-1 (10'-12')	MW-2 (10'-12')	MW-3 (8'-10')	MW-4 (4'-6')	MW-4 (10'-12'
.1.1,2-Tetrachloroethanc	10,000 *	ND	ND	ND	ND	ND
.1.1-Trichloroethane	700	ND	ND	ND	ND	ND
1,2,2-Tetrachloroethane	400	ND	ND	ND	ND	ND
1,2-Trichloro-1,2,2-trifluoroethune	1.300	ND	ND	ND	ND	ИĎ
1,2-Trichloroethane	10,000 *	ND.	ND	ND	ND	ND
1-Dichloroethane	300	ND.	, ND	ND	ND	ND
	300	ND	ND	ND	MD	ИД
,1-Dichloroethene	10,000 *	ND	ND	ND	ND	ND
.1-Dichloropropenc	8,300	NĎ	ND	ND	ND	ND
2.3-Trichlorobenzeno	10,000 *	ND	ND	ND	ND	ND.
.2,3-Trichloropropane	10,000 *	ND	ND	dИ	ND	ND.
2.4,5-Tetramethylbenzene	8,300	ND	ND	MD	ND	ND
,2.4-Trichlorobenzene	10,000	ND	ND	ND	ND	ND
,2,4-Trimethylbenzene	10,000 *	ND	ND	ND	ND	ND
,2-Dibronn-3-chloropropane	10,000 *	ND	ND	ND	ND	ND
.2-Dibromoethane	1,100	ND.	ND	ND	ND	ND
,2-Dichlorobenzene	20 or MDL	ND	ND	ND	מא	ND
,2-Dichlaroethane	10,000 *	MD	ND	ND	ND	ND
.2-Dichloropropane	The second secon	ND	ND	ND	ND -	ND
,3.5-Trimethylhenzene	3,300	ND	ND	ND	ND	ND
,3-Dichlorobenzene	1,000	ND	ND	ND	ND	ND
1,3-Dichloropropane	10,000 *		ND	ND	ND	ND
1.4-Dichlorobenzene	1,800	ND	ND	ND	ND	ND
2,2-Dichloropropane	10,000 *	ND	ND	ND	ND	ND
2-Butanone (MEK)	200	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	10,000	ND	ND	ND	ND	ND
2-Chlorotoluene	10,000 *	ND		ND	ND	ND
2-Hexanone	10,000 *	ND	ND	ND	ND	ND
4-Chlorotoluene	10,000 *	ND	ND	ND	ND	ND
p-Isopropyltoluene	10,000	ND	ND	ND	ND	ND
il-Methyl-2-pentanone	1,000	ND	ND		ND	ND
Acctone	100	ND	ND	ND	ND	ND
Acrolein	10,000 *	ND	ND	ND	ND	ND
Acrylonitrile	10,000 *	ND	ND		ND	ND
Benzene	60	ND	ND	ND	ND	ND
Bromobenzene	10,000 *	ND	ND	ND	-	ND
Bromochloromethane	* 000,01	ND	ND	ND	ND	ND
Bromodichloromethane	10,000 ~	ND	ND	ND	ND	ND
Bromeform	10,000 *	ND	ND	ND	ND	
Bromomethane	10,000 *	ND	ND	ND	ИD	ND
Carbon disulfide	2,700	ND	ND	ND	ND	OM NO
Carbon Tetrachloride	800	ND	ND	ND	ND	ND
Chlorobenzene	1,100	ИD	ND	ND	ДИ	ND

#### TABLE 3 (con't)

### SOIL BORINGS AND MONITORING WELL INSTALLATION SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (1)	MW-1 (10'-12')	MW-2 (10'-12')	MW-3 (8'-10')	MW-4 (4'-6')	MW-4 (10'-12
Chlorodibromomethane	200	ND	ND	ND	ND	MD
Chloroethane	200	ND	ND	ND	ND	ND
Chloroform	400	ND	ND	ND	ND	ND
hloromethane	10,000 *	ND	ND	ND	ND	ND
is-1,2-Dichlorouthene	200	ND	ND	ND	ND	ND
is-1,2-Dichloropropene	10,000 *	ND	ND	ND	ND	ND
Dibromochloromethane	200	ND	ND	ND	ND	ND
Dibromomethane	10,000 *	ND	ND	ND	ND	ND
Dichlorodifluoromethane	10,000 -	ND	ND.	ND	ND	, ND
Disopropyl ether	10,000 **	ND	ND.	ND	ND	ND
And the party Contract of the	10,000 *	DU	ND	ИО	ND	ND
Ethanol Ethyl acetale	10,000 *	ND.	ND	ND	ИД	ND
Ediyl benzene	5,500	ОИ	ND	"ND	ND	ND
reon-114	10,000 *	ND	ND	ND	ND	ND
-teon-114 -lexachlorobutadiene	10,000 *	ND	ND	ND	ND	ND
sopropyl acetate	10,000 *	ND	ND	ND	NĎ	ND
	2,300	ND	ND	ND	ND	ND
supropylbenzeno	1200		ND ,	ND	ND	ND
m + p Xylene	1,200	ND	ND	ND	ND	ND
Methyl tertinry butyl other	50 or MDL	ND	ND	ND	ND	ND
Methylene Chloride	13,000	ND	ND	ND	ND	ND
Naphthalene	10,000 *	ND	ND	ND	ND	ND:
n-Butyl acetate	10,000 *	ND	ND	ND	ND	ND
n-Butylbenzene	10,000 *	ND	ND	ND	ND	ND
n-Propyly acetate	3,700	ND	ND	ND	ND	ND
n-Propythenzene	1,200	ND	ND	ND	ND	ND
o Xylene	10,000 *	ND	ND	ND	ND	ND
p-Dlethylbenzene	10,000 *	ND	ND	ND	ND	ИD
p-Ethyltoluene	10,000	ND	ND	ND	ИД	ИĎ
sec-Butylbenzene	10,000 *	ND	ND	ND	ND	ND
Styrene	10,000 *	ND	ND	ND	ND	ДŊ
t-Butyl alcohol	10,000 *	ND	ND	ND	ND.	ND
tert-Butylbenzene		ND	11	ND	ND	ND
Terrachloroethene	1,300	ND	ND	ND	ND	ND
Toluene	1,500	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	200		ND	ND	ND	ND
trans-1,3-Dichloropropene	10,000 *	ND	ND	ND	MD	ND
Frichloroethene	500	ND	ND	ND	ND	ND
Trichlorofluoromethane	10,000 *	ND		ND	ND	ND
Vinyl acetate Vinyl chloride	10,000 *	ND	ND ND	ND	ND	ND

#### Notes:

1 - NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 12/00. ND - Not Detected

Bulded text denotes RSCO Exceedance

\* - For those compounds were no specific RSCO has been promulgated. The RSCO of 10,000 ug/kg for total VOCs is used. All units are ug/kg.

### TABLE 4

### SOIL BORINGS AND MONITORING WELL INSTALLATION SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8270 (STARS LIST)

Сотроила	NYSDEC (1)	MW-1 (10'-12')	MW-2 (10'-12')	MW-3 (8'-10')	MW-4 (4'-6')	MW-4 (10'-12')
Acenaphthene	50,000	ND	ND	83	ND	ND
Anthracene	50,000	ND	ND	390	530	ND
Benzo(a)anthracene	224 or MDL	ND	98	420	2,900	ND
Benzo(a)pyrene	61 or MDL	ND	120	270	2,600	ND
Benzo(b)fluoranthene	61 or MDL	ND	140	260	2,600	ND
Benzo(g,h,i)perylene	50,000	ND	81	120	1,800	ND
Benzo(k)fluoranthene	610 or MDL	ND	58	160	980	ND
	400	ND	ND	400	3,200	ND
Chrysene Dibenzo(a,h)anthracene	14.3 or MDL	ND	ND	ND	500	ND
	50,000	ND	ND	1,100	5,400	120
Fluoranthene	50,000	ND	ND	110	מא	ND
Fluorene	3,200	ND	79	110	1,700	41
Indeno(1,2,3-cd)pyrene	13,000	ND	ND	ND	ND	ND
Naphthalene	50,000	ND	ND	1,300	1,100	ND
Phenanthrene Pyrene	50,000	ND.	110	880	4,000	92

#### Notes:

1 - NYSDEC Recommended Soil Cleanup Standards - TAGM 4046

Total SVOCs not to exceed 50,000 ug/kg.

ND - Not Detected

NS - Not specified

Bold Text denotes RSCO exceedances.

All units are ug/kg.

Aualytical Parameters 5	Son Poratole #Bit	NVSnve -	Analysical Parameters	SoldBoreigns 4191 (Sampling Depth in Feet)	NVSDEC
	Sampling Depining Co.e.)	10 incention		Committing a share in reserv	2 Objectives
	S1	Soil	R ALL STATE OF THE	S1	Soil
		(ppm)		(9")	(ppm)
	(9')	0.2	Carbon disulfide	<0.05 ppm	2.7
1 Dichloroethane	<0.05 pm	0.2	Chlorobenzene	<0.05 ppm	1.7
1 Dichloroethene	<0.05 ppm	N/A	Chlorodibromomethane	<0.05 ppm	N/A
1 Dichloropropene	<0.05 ppm	0.76	Chloroethane	<0.05 ppm	1.9
,1,1 Trichloroethane	<0.05 ppm	0.76 N/A	Chloroform	<0.05 ppm	0.30
,1,1,2 Tetrachloroethane	<0.05 ppm			. <0.5 ppm	N/A
,1,2 Trichloroethane	<0.05 ppm	N/A	Cis-1.2 Dichloroethene	<0.05 ppm	N/A
,1,2,2 Tetrachloroethane	<0.05 ppm	0.6		<0.05 ppm	N/A
,2 Dibromo-3-Chloropropane	<0.05 ppm	N/A	Cis-1,3 Dichloropropene	<0.05 ppm	N/A
,2 Dibromoethane	<0.05 ppm	N/A	Dibromomethane	<0.05 ppm	N/A
2 Dichlorobenzene	<0.05 ppm	7.9	Dichlorodifluoromethane	<0.05 ppm	N/A
2 Dichloroethane	<0.05 ppm	0.1	Ethyl methacrylate		5.5
1.2 Dichloropropane	<0.05 ppm	N/A	Ethylbenzene	<0.05 ppm	N/A
1.2.3 Trichlorobenzene	<0.5 ppm	N/A	Hexachlorobutadiene	<0.5 pp.m	N/A
1,2,3 Trichloropropane	<0.05 ppm	0.34	Iodomethane	<0.5 ppm	N/A
1,2,4 Trichlorobenzene	<0.5 ppm	3.4	Isopropyl Ether	<0.05 ppm	N/A N/A
1.2.4 Trimethylbenzene	<0.05 ppm	N/A	Isopropyl Benzene	<0.05 ppm	1.2
1.3 Dichlorobenzene	<0.05 ppm	1.55	M,P-Xylene	<0.1 ppm	N/A
1.3 Dichloropropade	<0.05 ppm	0.3	Methacrylonitrile	<0.05 ppm	
1.3.5 Trimethylbenzene	<0.05 ppm	NA	Methyl methacrylate	<0,05 ppm	N/A
1,4 Dichlorobenzene	<0.05 ppm	8.5	Methyl t-Butyl Ether (MTBE)	<0.05 ppm	N/A
2.2 Dichloropropane	<0.05 ppm	N/A	Methylene Chloride	<0.05 ppm	0.1
the state of the s	<0.05 ppm	0.3	N-Burylbenzene	<0.05 ppm	N/A
2-Butanone 2-Chloroethyl Vinyl Ether	<0.05 ppm	N/A	N-Propylbenzene	<0.05 ppm	N/A
	<0.05 ppm	N/A	Nanhthalene	<0.5 ppm	N/A
2-Chlorotoluene	<0.05 ppm	N/A	O-Xylene	<0.05 ppm	1.2
2-Hexanone	<0.05 ppm	N/A	P-Isopropyltoluene	<0.05 ppm	N/A
4-Chlorotoluene	<0.05 ppm	1.0	Sec-Butylbenzene	<0.05 ppm	N/A
4-Methyl-2-Pentanone	The state of the s	0.11	Styrene	<0.05 ppm	N/A
Acetone	0.276 ppm <0.05 ppm	N/A	Tert-Burylbenzene	<0.05 ppm	N/A
Acetonitrile	<0.05 ppm	N/A	Tetrachloroethene	<0.05 ppm	1.4
Acrolein	<0.05 ppm	N/A	Toluene	<0.05 ppm	1.5
Acrylonitrile	<0.05 ppm	0.06	Trans-1,2 Dichloroethene	<0.05 ppm	0.3
Benzene	<0.05 ppm	N/A	Trans-1,3 Dichloropropene	<0.05 ppm	N/A
Bromobenzene	<0.05 ppm	N/A	Trichloroethene	<0.05 ppm	0.70
Bromochloromethane	<0.05 ppm	N/A	Trichlorofluoromethane	<0.05 ppm	N/A
Bromodichloromethane	<0.05 ppm	N/A	Vinyl Chloride	<0.05 ppm	0.12
Bromoform	<0.5 ppm	N/A	Vinyl Acetate	<0.05 ppm	N/A
Bromomethane Carbon Tetrachloride	<0.05 ppm	0.6			

NOTES:

Concentrations above MDL are highlighted in bold BLACK.
Concentrations exceeding the NYSDEC TAGM #4046 Soil Cleanup Objectives to protect Groundwater Quality, for soil and the NYSDEC TAGM #4046 Groundwater Standards/Criteria, for groundwater are highlighted in RED.

N/A: ppm:

Limit not available Parts per Million

ppb:

Parts per Billion

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

### SOIL & GROUNDWATTERSAMPLE ANALYTICAL DATA

Amilyical Romaniaco	SonliBbrehole#BBl	Analytical Paramiders	Soil forcing 110 (Sampling Depth in Real)	Spil Gleanin	
Church All Market and Control of the	Sampling Deputitio (See )	Spilettenin		元 伊克斯斯斯斯特马里克斯斯特特	-Objectives
	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Soil	CONTRACT TO THE CONTRACT OF TH	S2	2011
1	S2	1		(97)	(ppm)
	(9')	(ppm)	Carbon disulfide	<0.05 ppm	2.7
i Dichloroethane	<0.05 ppm	0.2	The second secon	<0.05 ppm	1.7
Dichloroethene	<0.05 ppm	0.4	Chlorobenzene	<0.05 ppm	N/A
1 Dichloropropene	<0.05 ppm	N/A	Chlorodibromomethane	<0.05 ppm	1.9
1,1 Trichloroethane	<0.05 ppm	0.76	Chloroethane	<0.05 ppm	0.30
1,1,2 Tetrachloroethane	<0.05 ppm	N/A	Chloroform	<0.5 ppm	N/A
1,2 Trichloroethane	<0.05 ppm	N/A	Chloromethane	<0.05 <b>pp</b> m	N/A
1,2,2 Tetrachloroethane	<0.05 ppm	0,6	Cis-1,2 Dichloroethene	<0.05 ppm	N/A
,2 Dibromo-3-Chloropropane	<0.05 ppm	N/A	Cis-1,3 Dichloropropene	<0.05 ppm	N/A
,2 Dibromoethane	<0.05 ppm	N/A	Dibromomethane	<0.05 ppm	N/A
2 Dichlorobenzene	<0.05 ppm	7.9	Dichlorodifluoromethane	<0.05 ppm	N/A
	<0.05 ppm	0.1	Ethyl methacrylate	<0.05 ppm	5.5
,2 Dichloroethane	<0.05 ppm	N/A	Ethylbenzene	<0.5 ppm	N/A
,2 Dichloropropane	<0.5 ppm	N/A	Hexachlorobutadiene	<0.5 ppm	N/A
,2,3 Trichlorobenzene	<0.05 ppm	0.34	Iodomethane	<0.05 ppm	NA
,2,3 Trichloropropane	<0.5 ppm	3.4	Isopropyl Ether	<0.05 ppm	N/A
,2,4 Trichlorobenzene	<0.05 ppm	N/A	Isopropyi Benzene		1.2
1,2,4 Trimethylbenzene	<0.05 ppm	1.55	M,P-Xylene	<0.1 ppm	N/A
1,3 Dîchlorobenzene	<0.05 ppm	0.3	Methacrylonitrile	<0.05 ppm	N/A
1,3 Dichloropropane	<0.05 ppm	N/A	Methyl methacrylate	<0.05 ppm	N/A
1,3,5 Trimethylbenzene		8.5	Methyl t-Butyl Ether (MTBE)	<0.05 ppm	0.1
1,4 Dichlorobenzene	<0.05 ppm <0.05 ppm	N/A	Methylene Chloride	<0.05 ppm	N/A
2,2 Dichloropropane		0.3	N-Burylbenzene	<0.05 ppm	N/A
2-Butanone	<0.05 ppm	N/A	N-Propylbenzene	<0.05 ppm	N/A N/A
2-Chloroethyl Vinyl Ether	<0.05 ppm	N/A	Naphthalene	<0.5 ppm	
2-Chlorotoluene	<0.05 ppm	N/A	O-Xylene	<0.05 ppm	1.2
2-Hexanone	<0.05 ppm	N/A	P-Isopropyltoluene	<0.05 ppm	N/A N/A
4-Chlorotoluene	<0.05 ppm	1.0	Sec-Buivlbenzene	<0.05 ppm	
4-Methyl-2-Pentanone	<0.05 ppm	0.11	Styrene	<0.05 ppm	N/A
Acetone	<0.25 ppm	N/A	Tert-Butylbenzene	<0.05 ppm	N/A
Acetonitrile	<0.05 ppm	N/A	Tetrachloroethene	<0.05 ppm	1.4
Acrolein	<0.05 ppm	N/A	Toluene	<0.05 ppm	1.5
Acrylonitrile	<0.05 ppm	0.06	Trans-1,2 Dichloroethene	<0.05 ppm	0.3
Benzene	<0.05 ppm	N/A	Trans-1,3 Dichloropropene	<0.05 ppm	N/A
Bromobenzene	<0.05 ppm	N/A	Trichloroethene	<0.05 ppm	0.70
Bromochloromethane	<0.05 ppm	N/A	Trichlorofluoromethane	<0.05 ppm	N/A
Bromodichloromethane	<0.05 ppm	N/A	Virvi Chloride	<0.05 ppm	0.12 N/A
Bromoform	<0.05 ppm	N/A	Vinyl Acetate	<0.05 ppm	N/A
Bromomethane Carbon Tetrachloride	<0.5 ppm <0.05 ppm	0.6	194		

NOTES:

< Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM #4046 Soil Cleanup Objectives to protect Groundwater Quality, for soil and the NYSDEC TAGM #4046 Groundwater Standards/Criteria, for groundwater are highlighted in RED.

Limit not available N/A:

Parts per Million ppm:

ppb:

Parts per Billion

NOTES:

ppm = parts per million or milligrams per kilogram (mg/kg)
ND = not detected
NS = no standard
N/A = not available, per NYSDEC
TIC's = Tentatively Identified Compounds (total concentration)
B = present in laboratory reagent blank
\* = As per TAGM #4046, Total VOCs < 10 ppm
bold = concentration exceeds cleanup standard

The following results were received on the ground water samples analyzed. Cleanup standards utilized for comparison with the ground water results for the subject property were obtained from the NYSDEC - Division TAGM - HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels, dated January 24, 1994, under the column, "Ground Water Standards/Criteria".

### Volatile Organic Compounds Ground Water

Ground Water								
Compound	(ppb)	SB-26W (ppb)	SB-IGW (ppb)	EDED BLASIC				
Chloromethane	NS	ND	ND	ND				
Vinyl Chloride	2	ND	ND	ND				
Chloroethane	50	ND	ND	ND				
Bromomethane	NS	ND	ND	ND				
Acetone	50	ND	ND	ND				
1,1-Dichloroethene	5	ND	ND	ND				
Methylene Chloride	5	ND	ND	ND				
Carbon Disulfide	50	ND	ND	ND				
1,2-Dichloroethene (trans)	5	ND	ND	ND				
1,2-Dichloroethene_(cis)	NS	2	2	ND				
1,1-Dichloroethane	5	ND	ND	ND				
2-Butanone	50	ND	ND	ND				
Chloroform	7	ND	ND	ND				
1,2-Dichloroethane	5	ND	ND	ND				
	5	ND	ND	ND				
1,1,1-Trichloroethane	0.7	ND	ND	ND				
Benzene Carbon Tetrachloride	5	ND	ND	ND				
	NS	ND	ND	ND				
1,2-Dichloropropane  Bromodichloromethane	NS	ND	ND	ND				
	5	2	2	ND				
Trichloroethene	NS	ND	ND	ND				
cis-1,3-Dichloropropene	NS	ND	ND	ND				
2-Hexanone	NS	ND	ND	ND				
trans-1,3-Dichloropropene	5	ND	ND	ND				
1,1,2-Trichloroethane	] 3	110						

Compound	Gleanup Standard* (ppb)	自然器器和主义对	SB-4GW	FIELD BLANK (pph)
		(ppb)	(bbp) 3-1 3-1	No. of the last of
Toluene	5	ND	ND	ND
4-Methyl-2-Pentanone	50	ND	ND	ND
Dibromochloromethane	N/A	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND
Tetrachloroethene	5	8	43	ND
Chlorobenzene	5	ND	ND	ND
Ethylbenzene	5	ND	ND	ND
Bromoform	NS	ND	ND	ND
Styrene	NS	ND	ND	ND
Total Xylenes	5	ND	ND	ND
TIC's	NS	10B	10B	10B

NOTES:

ppm = parts per million or milligrams per kilogram (mg/kg)
ND = not detected
NS = no standard

NS = no standard N/A = not available, per NYSDEC

TIC's = Tentatively Identified Compounds (total concentration)

B = present in laboratory reagent blank

\* = As per TAGM #4046, Total VOCs < 10 ppm bold = concentration exceeds cleanup standard

#### 4.0 DISCUSSION

#### SOILS

Soil samples collected revealed non-detectable concentrations of VOC's except for methylene chloride, tetrachloroethene, and tentatively identified compounds (TIC's).

Methylene chloride, detected in soil sample SB-4A at a concentration of 0.136 ppm (above the NYSDEC cleanup standard of 0.1 ppm), is a common laboratory contaminant; and therefore, is not expected to be a concern.

Tetrachloroethenewas detected at a concentration of 1.829 ppm (above the NYSDEC cleanup standard of 1.4 ppm) in soil sample SB-2B. Tetrachloroethene was detected at concentrations below the NYSDEC cleanup standard in soil samples SB-2A and SB-4A.

TIC's were detected in soil samples SB-1A, SB-1B, SB-2A, SB-2B, SB-3A, SB-3B, SB-4A, SB-4B, and in the field blank. There is no NYSDEC cleanup standard for TIC's; therefore, the presence of these compounds in the soil is not expected to be a concern.

#### TABLE 2

### SUMMARY OF ANALYTICAL GROUNDWATER RESULTS - AUGUST 2003 PROPOSED WALGREEN STORE # 07294 134 WILDEY STREET, TARRYTOWN, NY

Danielo ID	GW-1	GW-2	GW-3	Trip Blank	TOGS
Sample ID. Lab Sample Number	03080418-05	03080418-06	03080418-07	03080418-08	Groundwater
Date Collected	8/12/2003	8/12/2003	8/12/2003	8/12/2003	Standards
Media	Water	Water	Water	Water	
Volatile Organic Compounds			- 11 m		F.
Tetrachloroethene	5	ND	ND	ND	5
Vinyl Chloride	NO	13	ND	ND I	2

\*-Sample depth is in feet below ground surface All concentrations reported in ug/l (parts per billion)

ND=Non-detect

TOGS= Technical and Operational Guidance Senes-Ambient Water Quality Standards and Gudance Values Bold Value indicates an exceedance of the TOGS GW Quality Standard



Analytical Farameters	Soil Borehole #02 (Sampling Depth in Feet)	NYSDEC TAGM Limits	Analytical Parameters	Soil Borehole:#02 (Sampling Depth in Feet)	NYSDEC: TAGM ►Limits
	GW1 (Groundwater 13')	Water		GW1 (Groundwater 13')	Water
1,1 Dichloroethane	<10 un/L	5anb	Chlorobenzene	<10 mg/L	Suph
1.1 Dichloroethene	<10 ug/L	Sppb:	Chlorodibromomethane	<10 ng/L	N/A
1,1-Dichloropropene	<10 ug/L	NΛ	Chlorodifluoromethane	<10 ug/L	N/A
2 Dibromoethane	<10.ug/L	NA .	Chloroethane	<10 ug/L	50ppb
,2 Dichlorobenzene (v)	<10 ug/L	4.7ppb	Chloroform	<10 us/L	7ppb
2 Dichloroethans	<10 ug/L	Sepb	Chloromethane.	<10 ug/L	N/A
2 Dichloropropane	<10 ug/L	N/A	Dibromochloropropane		N/A
1.3 Dichlorobenzene (v)	<10 ug/L	Sppb	Dibromomethane	<10 ug/L	N/A
.3-Dichloropropane	<10 u#/I_	5ppb	Dichlordifluomethane	<10 ug/L	N/A
(4 Dichlorobenzene (v)	<10 ug/L	Sppb	Ethyl Benzene	<10 ug/L	Sopb
111 Trichlorocthane	<10 us/L	Soph	Freen (13	<10 ug/L	5ppb
1112Tetrachloruethane	<10 usiL	N/A	Hexachlorobuladiene	<10 ug/L	N/A
112 Trichloroethanc	<10 ue/L	N/A	Isopropylbenzene	<10 ug/L	N/A
1122Tetrachloroethane	<10 upA.	Sppb	m+p Xylene	<20 ug/L	Sppb
123-Trichlorobenzene	<10 ug/L	N/A	Methyl Ethyl Ketone	<100 ug/L	N/A
123-Trichloropropane	<10 ug/L	5թթե	Methylene Chloride	<10 ug/L	5npb
124-Trichlorobenzene (v)	<10 uviL	5ppb	Meihylisobutylketene	<100 cg/L	N/A
124-Trimethylbenzene	<10 uz/L	N/A	n-Butylbenzene	<10 ug/L	N/A
1245 Tetramethylbenz	<10 ug/L	N/A	n-Propyibenzene	<10 ug/L	N/A
135-Trimethylbenzene	<10 ug/L	N/A	Naphthalene(v)	<10 ug/L	10ppb
2.2-Dichleropropane	<10 us/L	N/A	o Xylene	<10 ug/L	5ppb
2-Chlorotoluene	<10 ueft_	N/A	p Dlethylberizene	<10 um/1.	N/A
4-Chlorotoluene	<10 upil.	N/A	p-Ethyitoluene	\210 ug/L	N/A
Accione	<100 up/L	50ppb	p-Isopropyltoluene	<10 us/L	N/A
Benzene	<)0 uz/L	0.7ppb	sec-Burylbenzene	<10 ug/L	N/A
Bromobenzene	<10 up/L	N/A	Styrene	<10 ug/L	N/A
Brumochloromethane	<10 ur/L	N/A	1-1,2-Dichlorcethene	<10 ug/L	N/A
Bromodichkoromethane	<10 up/L	I N/A	t-1,3Dichlorogropene	<10 ug/L	N/A
Bromoform	<10 ug/L	N/A	ter.ButylMethylEther (MTBE)	13ug/L	NIA
Bronomethane	<10 ug/L	N/A	tert-Butylbengene	<10 ug/L	N/A
c-12-Dichloroethene	<10 ue/L	N/A	Tetrachlomethene	<10 u#L	5apb
c-1,3Dichloropropens	<10.ug/L	T N/A	Toluene	<10 กฦ[	Sppb
Carbon Tetrachloride	<10 ug/L	5ppb	Trichloroethylene	<10 ug/L	5ppb
Vinyl Chloride	<10 un/L	2pph	Trichlorofluomethane	<10 ug/L	N/A

NOTES:

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Quidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo \$1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis. Limit not available N/A:

Parts per Million

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



Analyfical Parameters	Soil Borchole #03' (Sampling Depth in Feet)	MYSDEC.* TAGM Elmiu	Analytical Parameters	Soil Boreliole #03 (Sampling Depth in Feet)	NYSDEC TAGM Limits
	GW2 (Groundwater 8-10')	Water		GW2 (Groundwater 8-10°)	Water
1.1 Dichloroethane	<10 ug/L	Spob	Chlorohenzene	<10 us/L	5ppb
1.1 Dichloroethene	<10 ug/L	Spob	Chlorodibromomethane	<10 ug/L	N/A
1.1-Dichloropmene	<10 u /L	N/A	Chlorodi Nuorumethane	<10 up L	N/A
1.2 Dibromgethane	Leu 01>	N/A	Chlorocthane	<10 us/L	50ppb
1,2 Dichtorobenzene (v)	<10 ug/L	4.7opb	Chloroform	<10 ug/L	7pp5
1.2 Dichloroethane	<10 um/L	Soph	Chloromethane	≤10 ug/1.	N/A
1,2 Dichloroprogene	<10 up/L	N/A	Dibromochloroproprie	<10 ug/L	NVA
1,3 Dichlorobenzene (v)	<10 ug/L	Spph	Dibromomethane	<10 up/1.	N/A
1.3-Dichloropropage	Teu 01>	5npo	Dichlordifluornethane	<10 ug/L	NA
1.4 Dichkorobenzene (v)	<10 ug/L	Sppb	Ethyl Benzene	<10 ug/1,	5ppb
111 Trichloroethane	<10 ug/L	Sppb	Freen 113	<10 up/L	Sppa
1112Tetrachloroethane	<10 ag/L	N/A	1(exachlorobutadiene	<10 Use/L	N/A
112 Trichloroethane	<10 ug/L	N/A	Isopronylbenzene	<10 vg/L	N/A
1122 Tetrachioroethane	<10 ug/L		ní + o Xylone	<20.ug/L	Spnb
123-Trichlorobenzene	<10 ug/L	N/A	Methyl Ethyl Ketone	<100 ug/L	N/A
123-Trichloropropane	<10 ug/L	5pph	Methylene Chloride	<10 ug/L	Spab
	<10 us/L	5ppb	Methylisoburylketone	<100 ug/L	N/A
124-Trichlorobenzene (v.) 124-Trimethylbenzene	<10 ug/L	N/A	n-But/Ibenzene	<10 ug/L	N/A
1245 Tetramethylbenz	<10 ug/L	N/A	n-Prooyibenzene	<10 ug/L	N/A
135-Trimethylbenzene	<10 ug/L	N/A	Naphthalenc(v)	<10 ug/L	10mpb
2,2-Dichloropropane	<10 up/L	N/A	o Xylene	<10 ug/L	Sppb
2-Chlorotoluene	<10 ug/L	N/A.	p Dicihylbenzene	<10 ve/L	N/A
4-Chlorotoluene	<10 up/L	N/A	p-Ethylioluene	1 <10 ug/L	I N/A
Acetone	<100 us/L	50ppb	p-Isopropylioluene	<10 ug/L	N/A
Benzenc	<10 ug/L	0.7ppb	sec-Butylbenzene	<10 up/L	N/A
Bromobenzene	<10 ug/L	NA	Strane	<10 uc/L	N/A
Bromochloromethane	<10 mg/L	N/A	t-1.2-Dichloroethane	<10 uc/L	NA
Bromodichloromethane	<10 ug/2	N/A	I -1.3Dichlorogropene	<10 ug/L	N/A
Bromoform	<10 ug/L	N/A	ier.But-MethylEther (MTBE)	<10 ug/L	N/A
Brumomethane	<10 ug/L	N/A	tert-Burylbenzene	<10 ug/L	N/A
c-1.2-Dichloroethene	<10 upL	N/A	Tetrachloroethene	<10 ug/L	Sppb
c-1.3Dichloropropene	10 ug/L	N/A	Toluene	<10 ug/L	5ppb
Carbon Tetrachlonde	<10 ug/L	Sppb	Trichloroethylene	<10 uu/L	Sppb
Vinyl Chluride	<10 ug/L	2000	Trichlorofluomethanc	<10 ug/L	N/A

#### NOTES:

Values reported on a dry weight basis.

N/A Limit not available Parts per Million ppm

<sup>&</sup>lt; Below Minimum Desection Limit (MUL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in boid BLACK.

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

<sup>\*</sup> Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.



Analytical Parameters	Soil Bor <b>eh</b> ole #04 (Sampling Depth Id Feet)	NYSDEC TAGM Limits	Analytical Parameters	Soil Borehole #04 (Sampling Depth in Feet)	NYSDEC TAGM Llinits
	GW3 (Groundwater 8-10')	Water		GW3 (Groundwater 8-10')	Water
1.1 Dichloroethane	<10 ug/L	5'ppb	Chlurabenzene	<10 ug/L	5ppb
1.1 Dichloroethene	<10 ug/L	5ppb	Chlorodibromomethane	<10 ug/L	N/A
1.1-Dichlaropropens	<10 up/L	NΛ	Chlorodifluorpmethane	<10 ug/L	N/A
1.2 Dibromoethane	<10 ug/L	NA	Chloroethane	<10 ug/L	50ppb
1.2 Dichlorobenzenc (*)	<10 ug/L	4.7opb	Chloraform	<10.ug/L	7 <del>ppb</del> .
1.2 Dichloroethane	<10 up/L	- 5ppb	Chloromethane	<10 ug/L	N/A
1,2 Dichloropropane	<10 ug/L	N/A	Dibromochloropropane	<10 ug/L	N/A
13 Dichlorobenzene (v)	<10 ug/L	5ppb	Dibromomethane	<10 up/L	NA
1,3-Dichloropropane	<10 ug/L	Sppb	Dichlosoifiuomethane	<10 ug/L	N/A
1.4 Dichlorobenzene (v)	<10 ug/L	Spigh	Fibyl Benzene	<10 ug/L	Sppb
111 Trichloroethanc	<10 ug/L	Sppb	Preon 113	<[0 ug/L	5ppb
1112Tetrachloroethane	<10 ug/L	N/A	Hexachlorobutadiene	<10 ug/L	N/A
112 Trichloroethane	<10 us/L	N/A	Isopropyloenzene	<10 ug/L	N/A
1122Tetrachloroculanc	<10 um/L	5ppb	m + a Xykmc	<20 ug/L	Sppb
123-Trichlorobenzene	<10 um/L	N/A.	Methyl Ednyl Ketone	<100 ut/L	N/A
123-Trichloropropane	<10 up/L	5ppb	Methylene Chloride	<10 ug/L	5ppb
124-Trichlorobenzene (v)	<10 ug/L	Sppb	Methylisobutylketone	<100 ug/L	N/A
124-Trimethylbenzene	<10 up/1.	N/A	n-Butylbenzene	<10 ug/1.	N/A
1245 Tetramethylbenz	<10 ug/L	N/A	n-Propylbenzene	<10 ug/L	N/A
13S-Trimethylbenzene	<10 um/L	N/A	Nachthalene(v)	<10 ug/L	1000
2.2-Dichloropropane	<10 og/L	N/A	o Xylene	<10 mg/L	5ppb
2-Chlorotoluene	<10 up/L	N/A	p Diethylbenzene	<10 ug/L	N/A
4-Chiprotoluene	<10 up/L	N/A	p-Ethyltoluene	<10 ug/L	N/A
Acutone	<100 ug/L	50ppb -	p-Isopropyltoluene	<10 ug/L	N/A
Benzene	<10 vg/t.	0.7apb	sec-Butylbenzene	<10 ug/l,	N/A
Bromobenzene	<10 ug/L	N/A	Styrene	<10 ug/L	N/A
Bromochloromethane	<10 ut/L	N/A	t-1.2-Dichloroethene	<10 ug/L	NA
Bromodichloromethane	<10 ug/L	N/A	1-1,3Dichloropropene	<10 ug/L	N/A
Bromoform	<10 uw/L	N/A	ter.ButvlMethylEther (MTBE)	<10 ug/L	N/A
Bromomethane	<10 ug/L	N/A	tert-Bulylbenzene	<10 ug/L	N/A
c-1,2-Dichlorocthene	<10 ug/L	N/A	Tetrachloroethene	<10 ug/L	5ppb
c-1,3Dichloropropene	<10 up/L	N/A	Teluene	<10 ug/L	dade
Carbon Tetrachloride	<10 u2/L	לקום ל	Trichloroethylene	<10 ug/L	5ppb
Vinyl Chloride	<10 ug/L	2рръ	Trichlorofluomethane	<10 up/1.	N/A

NOTES:

Concentrations above MDL are highlighted in bold BLACK

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for spil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, refered to NYSDEC STARS Memo #1 "FCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis.

Limit not available N/A: ppn: Parts per Million

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.



Analytical Parameters	Soil Borehole #05 (Sumpling Depth In Feet)	NYSDEC TAGM - Dimits	GeYnalytical Parameters	Soil Borehole #05 (Sampling Depth in Feet)	NYSDEC TAGM Limits
	GW4	Water		GW4	Water
	(Groundwater 8-9')			(Groundwater 8-9')	
1,1 Dichleroethane	<10 ug/L	Sopo	Chlorobenzene	<10 up/L	5ppb
L.I Dichloroethene	<10 ug/L	5apb	Chlorodibromamethane	<10 ug/L	N/A
1,1-Dichlorogropens	<10 ug/L	N/A	Chlorodifluoromethane	<10 ug/L	N/A
1,2 Dibromoethana	<10 ug/L	N/A	Chloroethane	<10 ug/L	50ррь
1,2 Dichlorobenzene (v)	0 ug/L</td <td>4.7ppb</td> <td>Chloroform</td> <td>&lt;10 up/L</td> <td>7,000</td>	4.7ppb	Chloroform	<10 up/L	7,000
1.2 Dichlarocthane	<10 up/L	5ppb	Chloromethane	0 uµ/L</td <td>N/A</td>	N/A
1,2 Dichleroprogane	<10 ug/L	N/A	Dibromochloropropage	اليون 10>	N/A
1,3 Dichlorobenzene (v)	<10 ug/L	Sppb	Dibromomethane	<10 ug/L	N/A
1.3-Dichloropropone	<10 ug/L	5ppb	Dichlordifluomethane	<10 up/L	N/A
1.4 Dichlorobenzene (v)	<10 ug/L	Sppl	Ethyl Benzene	<10 pg/L	5ppb
111 Trichloroethane	<10 up/L	Sopb	Freon 113	<10 up/L	5pob
1112Tetrachloroethane	<10 w#L	N/A	Hexechlorobutadiene	<10 uz/L	N/A
112 Trichloroethane	<10 ug/L	N/A	Isopropylbenzene	<10.mg/L	N/V
1122Tetrachloroethane	<10 ug/L	5pph	m + n Xylene	₹20 uwL	5ppb
123-Trichlorobenzene	<10 ug/L	N/A	Methyl Ethyl Ketone	<100 June L	N/A
123-Trichlorearopane	<10 ug/L	Spob	Methylene Chloride	<10 op/L	Sppb
124-Trichlorobenzene (v)	<10 ug/L	למקל	Methylisoburylketone	<100 mg/L	N/A.
124-Trimethylbenzene	<10 ug/l.	N/A	n-Butylbenzene	<10 ug/L	NVA
1245 Tetramethylbenz	<10 up/L	N/A	n-Propyfbenzere	<10 ug/L	N/A
135-Trimethylbenzene	<10 ug/L	N/A	Naphthalene(v)	<io l<="" td="" vg=""><td>10ppib</td></io>	10ppib
2.2-Dichlorogrogane	<10 ug/L	N/A	o Xylene	<10 up/L	5 թթ և
2-Chlorotoluene	<10 ust.	N/A	p Diethylbenzene	<10 ug/L	N/A
4-Chiloratolaene	/\forall u01>	N/A	p-Ethyltolucne	<10 ug/l.	N/A
Acctone	<100 uztl.	Supple	p-Isopropyholuene	<10 ug/L	N/A
Benzene	<10 ug/L	0.7ppb	sec-Butylbenzene	<10 ug/L	N/A
Bromobenzene	<10 up/L	N/A	Styrene	<10 ug/L	N/A
Bromochloromethane	<10 ug/L	N/A	r-1.2-Dichloroethene	<10 uz/L	N/A
Bromodichleromethane	<10 ug/L	N/A	1-1.3Dichloropropene	<10.pg/L	N/A
Brumoform	<10 uz/L	N/A	ter.BurylMethylEther (MTBE)	<10 ug/l <sub>2</sub> :	N/A
Bromomethane	<10 ug/L	N/A	terr-Butylbenzene	<10 ug/L	N/A
c-1,2-Dichlorocthene	<10 me/L	N/A	Tetrachlorocthene	<10 up/L	5upb
c-1,3Dichloropropene	<10 ug/1.	NIA	Toluene	<10 ug/L	Sppb
Carbon Tetrachloride	<10 ug/l.	Soph	Trichlorocthylene	<10 ug/L	5ppb
Vinyl Chloride	<10 ug/l.	2000	Trichlorofluomethane	<10 ug/L	N/A

#### NOTES:

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TACIM 4046, refered to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection.

Values reported on a dry weight basis. Limit not available N/A:

ppm: Parts per Million

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation. Concentrations above MDL are highlighted in bold IRLACK.

### TABLE 1

### GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (1)	MV	V-1	MIN		MY		MW-4	
		10/7/2004	3/22/04	10/7/2004	3/22/04	10/7/2004	3/22/04	10/7/2004	3/22/0-
.1.1.2-Tetrachloroethane	5	ND	ND	ND.	ND	ND	ND	ND	ND
A.1-Trichloroethane	5	ND	ND	ND	ND	ND	ND.	ND:	ND
.1.2.2-Tetrachloroediane	5	ND	ND	ND	_ DD	ND .	ND	ND	ND
1.2-Trichloro-1.2.2-trifluornethane	NS	ИD	ND	ND	ND	ND	ND	ND	ND
.1.2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND
.1-Dichloroethane	5	ND	ND	ND	ND.	ND	ND	ND	ND
A Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
.1-Dichloro ropene	5	ND	ND	ND	ND	ND	, ND	ND	ИD
2.3-Trichlorohenzene	5	ND	ND	ND	ND	ND	ND	ND.	ND
2.3-Trichloropropane	0.04	• ND	ND	ДИ	ND	ND	ND	ND	ND
.2.4.5-Tetramethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND
2.4-Trichlorobenzene	.5	NĐ	ND	ND	ND	ND	ND	ND	ND
.2.4-Trimethylbenzene	5	ND	ND	ЦN	ND	ИD	ND	UN	ND
.2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5	ND.	ND	NĎ	ND	ND	ÜŅ	ND	ND
1.2-Dichlorobenzene	3	ND	ND	ND	_ND	ND .	ND	ND	ND
1,2-Dichloroetbane	0,6	ND	ND	ND	ND	ND .	ND	ND	ND
L2-Dichloropropage		ND	ND	ND.	ND	ND	ИD	ND	ИD
.3.5-Trimedivibenzene	5	αй	ND	ND	ND	ND	ND	ND	ND
.3-Dichlorohenzene	3	ND	ND	ND	ND	ND	ND	NID	ND
.3-Dichloropropine	5	QN	ND	ND	ND	ND	ND	ND	ND
1.4-Dichlorobenzene	1 3	ND	ND	ND	ND	ND	ND	ND	ND
2.2-Dichloropropane	5	ND	ND -	ND.	ИD	ND.	ND	ND	ND
	50 2	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	NS	ND	ND	ND	ND	ND	ND	מא	ND
2-Chloroethyl vinyl ether	5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotolucue	50 *	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	5	ND	ND	ND	ND	ND	ND	ND	ND
L-Chlorotolnene	-	ND	ND	ND	ND.	CIN	ND	ND	ND
p-Isopropyholuene	5	ND	ND	ND	ND	ND	ND	ND.	ND
l-Methyl-2-pentanone	NS		ND	ND	ND	ND	ND	ND	ND
Acetone	50 *	ND	ND	ND	ND	ND	ND	ND	ND
Aerolein	5	ND	ND	ND	ND	ND	ND	ND.	.ND
Acrylonitrile	5	ND		ND	ND	ND	ND	ND	ND
Benzene		ND	ND	ND	ND	ND	ND	ND	ND
Bromohenzene	5	ND.	CIN	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	-	ND.	ND ND	ND	ND	ND
Bromodichloromethane	50 *	ND	ND	, ND		ND	ND.	ND	ND
Bromoform	50 %	ND	ND	ND	ND	ND	ND	ND	ND
Bromoniethaue	5	ND	ND	ND	ND	ND.	ND GM	ND	ND
Carbon disulfide	NS	ND	ND	ND	ND		ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ן אט	1 20	

#### TABLE 1 (con't)

### GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (I)	MV	<b>/-</b> [	MY			MW-3 MW-4		
<u> </u>		10/7/2004	3/22/04	10/7/2004	3/22/04	10/7/2004	3/22/04	10/7/2004	3/22/04
hlorodifluoromethane	5	ND	ND .	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ИD	ND	טא	ND	ND	ND	ND
Hiloroform	7	ND	ND	ND	ND	ND	ND	ND	ND
Moromethane	.5	ИD	ND	ND	ND.	ND	ND.	ND	ND
is-1,2-Dichloroethene	5	4:8	ND	7.9	4.7	9	ND	ND	ND
is-1,2-Dichloropropene	0.4	ND	ND	מא	ND	ND	ND	ND.	ND
Dibromochloromethane	50 *	ND	ND	ŊĎ	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	, dN	ND	ND.	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND -	ND	CIM
Disapropyl other	NS	ND	DИ	ND	מא	ND	ND	ND	ND
Ethanol	NS	ND	ИD	ND	ND	ND	ND	ND	ND
ithyl acetate	NS	CIN	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	. ND	ND	, ND.	CIPA	ИD	ИD
reon-114	NS	ИD	ND	ND	ND	ДИ	ND	ND	ND
lexachtorobutadiene	0.5	ND	ND	ND	ND	CIN	ND	ND 1	ПN
sopropyl acetate	NS	ND	ND	ND	ND	ND	, ND	ИD	ND
sonronylbettzene	-5	ND	ND	ND.	.ND	ND	ND	ND	ND
n + p Xylene	5	ďИ	ИD	ND	ДИ	ND	ND .	ND	ND.
Mediyl terriary buryl ether	10	ND	ND	ND	ND	ND	ND	ND	ND
Medrylene Chloride	5	14.8	ND	15 B	ND	14 B	ND	15 B	ND
Vaphthalene	10 €	ND	ND	ЙĎ	ND	ND	ND	ND	ИĎ
i-Butyl acetate	NS	ND	ND	ND	ND	ND.	ND.	ND	ND
1-Butylbenzene		ND	ND	ND	ND	מא	ND	,ND	ND
Propyl acetate	NS	ND	ND	ND	UИ	ND	ND	ND	ND
t-Propylhenzene	5	ND	CIN	DΩ	ND	ND	CIN	ND	CIN
Xylene	5	ND	др	. ND	.ND	ND	ND.	ND	ND
-Diedrylbenzene	NS.	ND	ND	ND	ND	ND	ND	ND	ND
Ediykolucne	NS	СИ	ND	- ND	ND	ND	ND.	ND	ΝD
ee-Burylbenzene	5	ND	ND	ЙĎ	ND	ИD	ND	ND	ND
Styrene	5	ND	ND	ND.	CIN	ND	ND	ND -	ND
-Butyl alcohol	NS	ND	ND	ND	ND	ND	ND \	ND	ND
ert-Burchenzene	3	ND	ND	ND	ND	NĐ	ND:	ND	ND
Cetrachloroethene	5	ND	ND	1,7	1.8,0	6.8	5A	NĎ	ND
'oluene	5	ND	ND	ND	ND	ND.	ND	ND	ND
rans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
rans-1,3-Dichloropropene	0.4	ND	ND	ND	NĎ	ND	ND.	NĐ	ND
richloroethene	5	ND	ND	1.5	ND -	2,6	ND	ND	ND
richlorofluoromethane	5	ND	ND.	ND	- ND -	ND	ND	ND	ND
/invl acetate	NS	ND	ND.	ND	ND	ND	ND	ND	ND
/inyl acetate /inyl chloride	7	5.6	5.1	3	7.8	12	11	ND	ND

### Notes:

1 - NYSDEC Class GA Drinking Water Standards and Guidance Values, TOGS 1.1.1. June 1998

\* - Guidance Value

ND - Not Detected

NS - Not specified

Bold text denotes exceedance of standard or guidance value,



Analytical Parameters	l Parameters Monitoring Well #1		Analytical Parameters	Monitoring Well #1	NYSDEC Groundwater Criteria
	MW-1	Groundwater (ppb)		MW-1	Groundwater (ppb)
1.1 Dichloroethane	<li>ppb</li>	5.0	Carbon disulfide	<  ppb	50.0
1.1 Dichloroethene	<1 ppb	5.0	Chlorobenzene	dqq l>	5.0
1.1 Dichloropropene	<1 ppb	N/A	Chlorodibromomethane	<i ppb<="" td=""><td>N/A</td></i>	N/A
1.1.1 Trichloroethane	<1 ppb	5.0	Chloroethane	<1 ppb	50.0
1,1,1,2 Tetrachloroethane	<1 ppb	N/A	Chloroform	1.77 ppb	7.0
1.1.2 Trichloroethane	<l pob<="" td=""><td>N/A</td><td>Chloromethane</td><td><l td="" tipb<=""><td>N/A</td></l></td></l>	N/A	Chloromethane	<l td="" tipb<=""><td>N/A</td></l>	N/A
1.1.2.2 Tetrachloroethane	<  ppb	5.0	Cis-12 Dichloroethene	3.19 ppb	5.0
1.2 Dibromo-3-Chloropropane	<5 opb	N/A	Cis-13 Dichloropropene	<1 ppb	N/A
1.2 Dibromoethane	<1 ppb	N/A	Dibromomethane	<i ppb<="" td=""><td>N/A</td></i>	N/A
1.2 Dichlorobenzene	<1 ppb	4.7	Dichlorodifluoromethane	<1 ppb	N/A
1.2 Dichloroethane	<1 ppb	5.0	Ethyl methacrylate	<1 ppb	N/A
1,2 Dichloropropane	<li>spb</li>	N/A	Ethylbenzene	<1 ppb	5.0
1.2.3 Trichlorobenzene	<10.ppb	N/A	Hexachlorobutadiene	<10 ppb	N/A
1,2,3 Trichloropropane	c5 pph	5.0.	Iodomethane	<5.ppb	N/A
1.2.4 Trichlorobenzene	<10 ppb	5.0	Isomopyl Ether	<1 ppb	N/A
1.2.4 Trimethylbenzene	<1 ppb	5.0	Isopropyl Benzene	<1 ppb	5.0
1.3 Dichlorobenzene	<1 ppb	5.0	M.P-Xvlenc	<2 ppb	5.0
	<1 ppb	5.0	Methacrylonitrile	<li>dqt l&gt;</li>	N/A
1.3 Dichloropropane	<1 ppb	5.0	Methyl methacrylate	<1 ppb	N/A
1,3,5 Trimethylbenzene	<1 ppb	5.0	Medivi (-Butvi Ether (MTBE)	<1 ppb	10.0
I.4 Dichlorobenzene	<1 ppb	N/A	Methylene Chloride	<i ppb<="" td=""><td>5.0</td></i>	5.0
2.2 Dichloropropane	<2 ppb	50.0	N-Butylbenzene	<i apb<="" td=""><td>5,0</td></i>	5,0
2-Butanone 2-Chloroethyl Vinyl Ether	<1 ppb	N/A	N-Propylbenzene	<1 opb	5.0
	<1 ppb	N/A	Naphthalene	<10 ppb	10.0
2-Chlorotoluene	<1 ppb	N/A	O-Xylene	<1 ppb	5.0
2-Hexanone 4-Chlorotoluene	<1 ppb	N/A	P-Isocropyitoluene	<1 ppb	5.0
4-Methyl-2-Pentanone	<5 ppb	50.0	Sec-Butylbenzene	<l ppb<="" td=""><td>5.0</td></l>	5.0
Acetone Acetone	<5 ppb	50,0	Sevrene	<। प्रमुख	N/A
Acetonic	<1 ppb	N/A	Ten-Burylbenzene	<li>ded 1&gt;</li>	5.0
Acroleia	<5 ppb	N/A	Tetrachloroethene	<1 ppb	5.0
Acrylonitrile	ded  >	N/A	Toluene	<1 ppb	5.0
Benzene	<1 ppb	0.7	Trans-1,2 Dichloroethene	<1 ppb	5.0
Bromobenzene	<1 ppb	N/A	Trans-1,3 Dichlorepropens	<1 ppb	N/A
Broinochloromethane	<5 ppb	N/A	Trichloroethene	<1 ppb	5.0
Bromodichloromethane	<1 ppb	N/A	Trichlorofluoromethane	<i ppb<="" td=""><td>N/A</td></i>	N/A
Bromoform	<1 ppb	N/A	Vim l Chloride	4.48 pp5	2.0
Bromomethan2	<1 ppb	N/A	Vinyl Acetate	<i ppb<="" td=""><td>N/A</td></i>	N/A
Carbon Tetrachloride	<1 pab	5.0			

NOTES:

< Below Musimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC Groundwater Criteria Standards for groundwater, are highlighted in RFi).

N/At

Limit not available

ppb:

Parts per Billion



Analytical Parameters	Monitoring Well #2	NYSDEC Groundwater Criteria	Analytical Parameters	Monitoring Well #2	NYSDEC Groundwater Criteria Groundwater (ppb)	
	MW-2	Groundwater		MW-2		
1.1 Dichloroethane	<1 ppb	5.0	Carbon disulfide	<i ppb<="" td=""><td>50.0</td></i>	50.0	
L. Dichloroethene	<  ppb -	5.0	Chlorobenzene	<1 ppb	5,0	
.1 Dichloropropene	<1 ppb	N/A	Chlorodibromomethane	<1 ppb	N/A	
1.1.1 Trichloroethane	<1 ppb	5.0	Chloroethane	<li><l pph<="" td=""><td>50.0</td></l></li>	50.0	
1,1,1,2 Tetrachloroethane	<1 ppb	N/A	Chloroform	1.44 ppb	7.0	
1.1,2 Trichloroethane	<1 ppb	N/A	Chloromethane	<1 ppb.	N/A	
1.1.2.2 Tetrachloroethane	<1 ppb	5.0	Cis-1.2 Dichloroethene	3.03 ppb	5.0	
1.2 Dibronio-3-Clidoromonana	<5 ppb	N/A	Cis-1.3 Dichloropropenc	<1 ppb	N/A	
1,2 Dibromoethane	<1 ppb	N/A	Dibromomethane	<1 ppb	N/A	
1.2 Dibromoemme	<li>que </li>	4.7	Dichlorodifluoromethane	<li>qui ppti</li>	NVA	
1,2 Dichloroethane	<1 ppb	3.0	Ethyl methacrylate	<1 ppb	N/A	
	<1 ppb	N/A	Ethylbenzene	<li><l li="" ppb<=""></l></li>	5.0	
1,2 Dichlompropane	<10 ppb	N/A	Hexachlorobutadiene	<10 ppb	N/A	
1.2.3 Trichlorobenzene	ර ppb	5.0	Indomethuse	<5 ppb	N/A	
1,2,3 Trichloropropine	<10 ppb	5.0	Isopropyl Ether	<1 ppb	N/A	
1,2,4 Trichlorobenzene	<1 ppb	5.0	Isopropyl Benzene	<1 ppb	5.0	
1,2,4 Trimethylbenzene	<1 ppb	5,0	M.P-Xylene	<2 ppb	5.0	
1.3 Dichlorobenzene	<1 ppb	5.0	Methacrylonitrile	dgq l>	N/A	
1,3 Dichloropropane	<1 pp0	5.0	Methyl methacrylate	ppb</td <td>N/A</td>	N/A	
1,3,5 Trimethylbenzene	<1 pp0	5.0	Methyl (-Buryl Ether (MTBE)	<1 ppb	10.0	
1,4 Dichlorobenzene	<1 ppb	N/A	Methylene Chloride	<1 ppb	5.0	
2,2 Dichloropropane	<1 ppb	50.0	N-Buylbenzene	<1 ppb	5.0	
2-Butanone	<1 ppb	N/A	N-Propylbenzene	<1 ppb	5.0	
2-Chloroethyl Vinyl Ether	<1 ppb	N/A	Naphumlene	<10 ppb	10.0	
2-Chlorotoluene	< l ppb	N/A	O-Xylene	<1 ppb	5.0	
2-Hexanone	<1 ppb	N/A	P-Isopropyltoluene	<li><l ppb<="" td=""><td>5.0</td></l></li>	5.0	
4-Chlorotoluene	<5 ppb <5 ppb	50,0	Sec-Butylbenzene	<1 ppb	5.0	
4-Methyl-2-Pentanone	<\$ ppb	50.0	Styrene	<li><l ppb<="" td=""><td>N/A</td></l></li>	N/A	
Acetone	<1 ppb	N/A	Tert-Butylbenzene	<1 ppb	5.0	
Acetonitrile	<5 ppb	N/A	Tetrachloroethene	1.99 ppb	5.0	
Acrolein	<1 ppb	N/A	Toluene	<1 ppb	5.0	
Acrylonitrile	<1 ppb	0.7	Trans-1,2 Dichloroethene	<li>&lt;1 ppb</li>	5.0	
Berizene Bromobenzene	<1 ppb	N/A	Trans-1.3 Dichloropropene	<i ppb<="" td=""><td>N/A</td></i>	N/A	
Bromochloromethane	<5 ppb	N/A	Trichloroethene	1.17 ppb	5.0	
Bromodichloromethane	<1 ppb	N/A	Trichlorofluoromethane	ppb</td <td>N/A</td>	N/A	
Bronxoform	<1 ppb	N/A	Vinyl Chloride	3.03 ppb	2.0	
Bromomethane	<1 ppb	N/A	Vinvi Acetate	<1 ppb	N/A	
Carbon Tetrachloride	<1 ppb	5,0	ordinal description of the second sec			

NOTES:

< Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC Groundwater Criteria Standards for groundwater, are highlighted in RED.

N/A: Limit not available

Parts per Billion ppb:



Analytical Parameters	Monitoring Well #3	NYSDEC Groundwater Criteria	Analytical Parameters	Monitoring Well #3	NYSDEC Groundwater Criteria	
	MW-3	Groundwater (ppb)		MW-3	Groundwater	
1.1 Dichloroethane	<1 phb	5.0	Carbon disulfide	<1 ppb	50.0	
1.1 Dichloroethene	<li>sub</li>	5.0	Chlorobenzene	<1 ppb	5.0	
1,1 Dichlorepropene	_ <1 ppb	N/A	Chlorodibromomethane	<1 ppb	N/A	
1,1,1 Trichloroethane	<1 ppb	5.0	Chloroetinne.	<1 ppb	50.0	
1,1,1,2 Tetrachloroethane	<1 ppb	N/A	Chloroform	<li><l ppb<="" td=""><td>7.0</td></l></li>	7.0	
1,1,2 Trichloroethane	<1 ppb	N/A	Chloromethane .	<1 ppb	N/A	
1.1.2.2 Terrachloroethane	<l pph<="" td=""><td>5.0</td><td>Cls-1.2 Dightorrethene</td><td>7.09 ppb</td><td>5.0</td></l>	5.0	Cls-1.2 Dightorrethene	7.09 ppb	5.0	
1.2 Dibronio-3-Chloropropane	مُعْوَمُ دِي	N/A	Cis-1.3 Dichloropropene	<1 ppb	N/A	
1.2 Dibromoethane	<1 ppb	N/A	Dibromomethane	<1 ppb	N/A	
1.2 Dichlorobenzenc	<1 ppb	4.7	Dichlorodifluoromethane	<1 ppb	N/A	
1.2 Dichloroethane	<1 ppb	5.0	Ethyl methacrylate	<1 ppb	N/A	
1.2 Dichloropropage	<l ppb<="" td=""><td>N/A</td><td>Ethylbenzene</td><td>&lt;1 ppb</td><td>5.0</td></l>	N/A	Ethylbenzene	<1 ppb	5.0	
1.2.3 Trichlorobenzeno	<10 ppb	N/A	Hexachlorobutadiene	<10 pmb	N/A	
1,2,3 Trichloropropane	⊘ pr.b	5.0	Iodomethane	<5 ppb	N/A	
1,2,4 Trichlorobenzene	<10 ppb	5.0	Isopropyl Ether	<i npb<="" td=""><td>N/A</td></i>	N/A	
1.2.4 Trimethylbenzene	ppb</td <td>5,0</td> <td>Isopropyl Benzene</td> <td>&lt;1 ppb</td> <td>5.0</td>	5,0	Isopropyl Benzene	<1 ppb	5.0	
1,3 Dichlorobenzene	<1 ppb	5.0	M.P-Xviene	<2 ppb	5.0	
1,3 Dichloropropane	<1 ppb	5.0	Methacolonitrile	<1 ppb	N/A	
1.3.5 Trimethylbenzene	<1 ppb	5.0	Methyl methaerylate	<1 ppb	N/A	
1.4 Dichlorobenzene	<1. ppb	5.0	Methyl (-Butyl Ether (MTBE)	<1 ppb	10.0	
2,2 Dichloropropane	<1 ppb	N/A	Methylene Chloride	<1 ppb	5.0	
2-Butanone	<5 ppb	50.0	N-Butvibenzene	dag l>	5,0	
2-Chloroethyl Vinyl Ether	<1 ppb.	N/A	N-Progylbenzene	<1 ppb	5.0	
2-Chlorotoluene	<1 ppb	N/A	Nanhihalene	<10 apb	10,0	
2-Hexanone	<1 ppb	N/A	O-Xylene	<li><l ppb<="" td=""><td>5.0</td></l></li>	5.0	
4-Chlorotoluene	<1 ppb	N/A	P-Isopropyltoluene	<li><l ppb<="" td=""><td>5.0</td></l></li>	5.0	
4-Methyl-2-Pentanone	<b>مور</b> کې	50.0	Sec-Butylbenzene	<1 ppb	5.0	
Aceione	<ol> <li>opb</li> </ol>	50.0	Styrene	<1 ppb	N/A	
Acetonitrile	<1 ppb	NA	Tert-Butylbenzene	<1 ppb	5.0	
Acrolein	<5 <b>pp</b> b	N/A	Tetrachloroethene	14.4 ppb	5.0	
Acrylonitrile	<1 pgb	N/A	Toluene	<1 ppb	5.0	
Benzene	<1 ppb	0.7	Trans-1.2 Dichloroethene	<1 ppb	5.0	
Bromobenzene	<1 ppb	N/A	Trans-1.3 Dichloropropene	<1 ppb	N/A	
Bromochloromethane	جة ppb	N/A	Trichloroethene	4.31 ppb	5.0	
Bromodichloromethane	<1 ppb	N/A	Trichlorofluoromethane	<1 ppb	N/A	
Bromoform	<li>ppb</li>	N/A	Vinyl Chloride	10.5 ppb	2.0	
Broinomethane	<l pph<="" td=""><td>, N/A</td><td>Vinyl Acetate</td><td>&lt;1 ppb</td><td>N/A</td></l>	, N/A	Vinyl Acetate	<1 ppb	N/A	
Carbon Tetrachloride	<1 ppb	5.0			THE RESERVE OF THE SHARE	

NOTES:

< Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC Groundwater Criteria Standards for groundwater, are highlighted in R4.D.

N/A: Limit not available

Parts per Billion ppb:



Analytical Parameters	Monitoring Well #4	NYSDEC Groundwater Criteria	Analytical Parameters	Monitoring Well #4	NYSDEC Groundwater Criterio
W 40 7 3 1	MW-4	Groundwater (ppb)	Co. Comm. on Allin.	MW-4	Groundwater (ppb)
1.1 Dichloroethane	<1 ppb	5.0	Carbon disulfide	<li><l ppb<="" td=""><td>50.0</td></l></li>	50.0
1.1 Dichloroethene	<1 pmb	5.0	Chlorobenzene	<1 ppb	5.0
1.1 Dichloropropene	<1 ppb	N/A	Chlorodibromomethane	<  ppb	N/A
1.1.1 Trichloroethure	<li>≤l ppb</li>	5.0	Chioroethane	<1 ppb	50.0
1.1.1.2 Tetrachiloroethane	<1 ppb	N/A	Chloroform	<1 ppb	7.0
1,1,2 Trichloroethane	<1 ppb	N/A	Chloromethane	<li><l ppò<="" td=""><td>N/A</td></l></li>	N/A
1.1.2.2 Tetrachloroethane	<1 ppb	5.0	Cis-1,2 Dichloroethene	<l ppb<="" td=""><td>5.0</td></l>	5.0
1,2 Dibromo-3-Chloropropane	<5 ppb	N/A	Cis-1,3 Dichloropropena	<1 pgb	N/A
1.2 Dibromoethane	<1 ppb	N/A	Dibromomethane	ppb</td <td>N/A</td>	N/A
1.2 Dichlorobenzene	<1 ppb	4.7	Dichlorodifluoromethane	<1 pmb	N/A
1.2 Dichloroethane	<li>dqq.l&gt;</li>	5.0	Ethyl methacrylate	41 <1 ppb	N/A
1,2 Dichloropropane	<1 ppb	N/A	Ethylbenzene	<1 ppb	5.0
1.2.3 Trichlorobenzene	<10 ppb	N/A	Hexachlorobutadiene	<10 ppb	N/A
1,2,3 Trichloroprepage	<3 ppb	5.0	Iodoniethana	<5 ppb.	NVA
1,2,4 Trichlorobenzene	<10 ppb	5.0	Isopropyl Ether	<l ppb<="" td=""><td>N/A</td></l>	N/A
	<li><l ppb<="" td=""><td>5.0</td><td>Isomopyl Benzene</td><td>&lt;1 ppb</td><td>5.0</td></l></li>	5.0	Isomopyl Benzene	<1 ppb	5.0
1.2.4 Trimethylbenzene	<1 ppb	5.0	M.P-Xylene	<2 ppb	5.0
1.3 Dichlorobenzene	<1 ppb	5.0	Methory Ionitrile	< dqq 1>	N/A
1.3 Dichloropropane	<1 ppb	5,0	Methyl methacrylate	<1 mb	N/A
1,3,5 Trimethylbenzene	<1 ppo <1 mmb	5.0	Methyl t-Butyl Ether (MTBE)	<1 ppb.	10.0
1.4 Dichlorobenzene	<1 ppb	N/A	Methylene Chloride	<1 ppb	5.0
2,2 Dichloropropene	<5 ppb.	50.0	N-Butylbenzenz	<1 ppb	5.0
2-Butanone 2-Chloroeth I Vinel Ether	<1 ppb	N/A	N-Propylbenzene	<1 ppb	5.0
2-Chiorotoluene	<1 ppb	N/A	Naphthalene	*<10 ppb	10.0
2-Hexanone	<1 ppb	N/A	O-Xylene	<li><l pgb<="" td=""><td>5,0</td></l></li>	5,0
4-Chlorotoluene	<1 ppb	N/A.	P-Isopropylioluene	<1 ppb	5.0
4-Methyl-2-Pentanone	<5 ppb	50.0	Sec-Butylbenzene	<i ppb<="" td=""><td>5.0</td></i>	5.0
	<5 ppb	50.0	Styrene	<1 ppb	N/A
Acetonitrile	<1 ppb	N/A	Tert-Butylbenzene	<1 ppb	5.0
Acrolein	<5 ppb	N/A	Tetrachloroethene	<1 ppb	5.0
Acrylonitrile	<1 ppb	N/A	Toluene	<1 ppb	5.0
Benzene	<1 ppb	0.7	Truns-1,2 Dichloroethene	<lp><lppb< li=""></lppb<></lp>	5.0
Bromobenzene	<1 ppb	N/A	Trans-1-3 Dichloropropene	<1 ppb	N/A
Bromochloromethane	<5 ppb	N/A	Trichloroethene	<1-ppb	5.0
Bromodichloromethane	<1 ppb	N/A	Trichlorofluoromethane	<1 ppb	N/A
Bromoform	<1 ppb	NA	Vinyl Chloride	<1 फ्राफ	2.0
Bromomethane	<1 ppb	N/A	Vinyl Acetate	<1 ppb	N/A
Carbon Tetrachloride	<1 ppb	5.0			

NOTES:

< Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC Groundwater Criteria Standards for groundwater, are highlighted in RED.

N/A: Limit not available

ppb:

Parts per Billion

TABLE 6

### GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8270 (STARS LIST)

Compound	NYSDEC (1)	MW-1	MW-2	MW-3	MW-4
Acenaphthene	20 *	ND	ND	8	ND
Anthracene	50 *	ND	ND	ND	ND
Benzo(a)anthracene	0.002 *	ND	ND	ND	ND
Benzo(a)pyrene	ND.	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002 *	ND	ND	ИД	MD
Benzo(g,h,i)perylene	NS	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002 *	ЙD	ND	ND .	ND
Chrysene	0.002 *	ND	ND	ND	ND
Dibenzo(a,h)anthracene	NS	ND	ND	ND	ND
Fluoranthene	50 ≄	ND	ND	ND	ND
Fluorene	50 *	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002 *	ND	ND	ND	ND
Naphthalene	10 *	DИ	ND	ND	ИD
Phenanthrene	50 *	ND	ND	ND	ND
Рутепе	50 *	ND	ND	ND	ND

### Notes:

1 - NYSDEC Class GA Drinking Water Standards and Guidance Values, TOGS 1.1.1, June 1998

\* - Guidance Value

ND - Not Detected

NS - Not specified

All units are ug/l.

74		THE WANTE	Antivited Parameters	Soil Bordhole 1151	NYSDEC Groundwater
Galvical Parameters 2	Soft Borelinit (IB)	<b>"现实还是我们的证明的,我们还是不是是不是</b>		(Sympling Depth in Iree)	Standards
Controlled Controlled	samping Depth in Feet	Stateback	a real to the state of the state of	GW1	Groundwater
	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND	Groundwater		(12")	(ppb)
	GW1	(ppb)		<1.0 ppb	50.0
1 1	(12')	5.0	Carbon disulfide	<1.0 ppb	5.0
Dichloroethane	<1.0 ppb	5.0	Chlorobenzene		N/A
Dichloroethene	<1.0 ppb	N/A	Chlorodibromomethane	<1.0 ppb	50.0
Dichloropropene	<1.0 ppb	5.0	Chloroethane	<1.0.ppb	7.0
1 Trichloroethane	<1.0 ppb	N/A	Chloroform	<1.0 ppb	N/A
1,2 Tetrachloroethane	<1.0 ppb		Chloromethane	<1.0 ppb	N/A
2 Trichloroethane	<1.0 ppb	N/A	Cis-1,2 Dichloroethene	<1.0 ppb	N/A
2,2 Tetrachloroethane	<1.0 ppb	5.0	Cis-1.3 Dichloropropene	<1.0 ppb	N/A
Dibromo-3-Chloropropane	<5.0 ppb	N/A	Dibromomethane	<1.0 ppb	N/A
Dibromo-3-Chioroproparo	<1.0 ppb	N/A	Dichlorodifhoromethane	<1.0 ppb	N/A
Dibromoethane	<1.0 ppb	4.7	Ethyl methacrylate	<1.0 ppb	5.0
2 Dichlorobenzene	<1.0 ppb	5.0	Ethylbenzene	<1.0 ppb	N/A
2 Dichloroethane	<1.0 ppb	N/A.	Hexachlorobutadiene	<10.0 ppb	N/A
2 Dichloropropane	<10.0 ppb	N/A_	Iodomethane	<5.0 ppb	N/A
2,3 Trichlorobenzene	<5.0 ppb	5.0	Isopropyl Ether	<1.0_ppb	N/A
2,3 Trichloropropane	<10.0 ppb	5.0	Isopropyl Benzene	<1.0 <b>pp</b> b	5.0
2,4 Trichlorobenzene	<1.0 ppb	N/A	1SOPTOPY Delizers	<2.0 ppb	N/A
2,4 Trimethylbenzene	<1.0 ppb	5.0	M,P-Xylene	<1.0 ppb	N/A
3 Dichlorobenzene	<1.0 ppb	5.0	Methacrylonitrile	<1.0 ppb	
,3 Dichloropropane	<1.0 ppb	N/A	Methyl methacrylate	<1.0 ppb	N/A
,3,5 Trimethyibenzene	<1.0 ppb	5.0	Methyl t-Butyl Ether (MTBE)	<1.0 ppb	5.0
,4 Dichlorobenzene	<1.0 ppb	N/A	Methylene Chloride	<1.0 ppb	N/A
2 Dichloropropane	<5.0 ppb	50.0	N-Butylbenzene	<1.0 ppb	N/A
2-Butanone	<1.0 ppb	N/A	N-Propylbenzene	<10.0 ppb	N/A
2-Chloroethyl Vinyl Ether	<1.0 ppb	N/A	Naphthalene	<1.0 ppb	5.0
2-Chlorotoluene	<1.0 ppb	N/A	O-Xylene	<1.0 ppb	N/A
2-Hexanone	<1.0 ppb	N/A	P-Isopropyltoluene	<1.0 ppb	N/A
4-Chlorotoluene	<5.0 ppb	50.0	Sec-Butylbenzene	<1.0 ppb	N/A
4-Methyl-2-Pentanone	8.41 ppb	50.0	Styrene	<1.0 ppb	N/A
Acetone	<1.0 ppb	N/A	Tert-Burylbenzene	2.78 ppb	5.0
Acetonitrile	<5.0 ppb	N/A	Tetrachloroethene	<1.0 ppb	5.0
Acrolein	<1.0 ppb	N/A	Toluene	<1.0 ppb	5.0
Acrylonitrile	<1.0 pps	0.7	Trans-1,2 Dichloroethene	<1.0 ppb	N/A
Benzene	<1.0 ppb	N/A	Trans-1,3 Dichloropropene	<1.0 ppb	5.0
Bromobenzene	<5.0 ppb	N/A	Trichloroethene	<1.0 ppb	N/A
Bromochloromethane	<1.0 ppb	N/A	Trichlorofluoromethane	<1.0 ppb	2.0
Bromodichloromethane	<1.0 ppb	N/A	Vinyl Chloride	<1.0 ppb	N/A
Bromoform	<1.0 ppb	N/A	Vinyl Acetate		
Bromomethane	<1.0 ppb	5.0	1 1		

NOTES:

Concentrations above MDL are highlighted in bold BLACK.
Concentrations exceeding the NYSDEC TAGM #4046 Soil Cleanup Objectives to protect Groundwater Quality, for soil and the NYSDEC TAGM #4046 Criteria, for groundwater are highlighted in RED.

Limit not available N/A:

Parts per Million ppm:

ppb:

Parts per Billion

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

NOTES:

< Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.
Concentrations exceeding the NYSDEC TAGM #4046 Soil Cleanup Objectives to protect Groundwater Quality, for soil and the NYSDEC TAGM #4046 Groundwater Standards/Criteria, for groundwater are highlighted in RED.

N/A: Limit not available

ppm:

Parts per Million

ppb:

Parts per Billion



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

GW2 (8-10') - Associated with Soil Boring #03

Parameter	Result (ug/L) ppb	NYSDEC TAGM 4046 Groundwater Standards Criteria (ppb)
Naphthalene	<1	10.0
Acenaphthene	<1	20.0
Flourene	<1	50.0
Phenanthrene	<]	50.0
Anthracene	<1	50.0
Fluoranthene	<1	50.0
Pyrene	<1	50.0
Benzo(a)anthracene	<1	0.002
Chrysene	<1	0.002
Benzo(b)fluoranthene	<1	0.002
Benzo(k)fluoranthene	<1	0.002
Benzo(a)pyrene	<1	0.002
Indeno (1,2,3-cd)pyrene	<1	0.002
Dibenzo(a,h)anthracene	<1	50.0
Benzo(g,h,I)perylene	<1	5.0
2-Methylnaphthalene	To a large and a	50.0
Acenaphthylene		20.0

N/A:

Limit not available Parts per Million

ppm:

mg/Kg. milligrams per kilogram (parts per million)

ug/L: micrograms per liter (ppb)

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Mothod of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the PSYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

<sup>\*</sup> Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCL? Alternative Outdance Values" for groundwater protection. Values reported on a dry weight basis.



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

GW3 (8-10') - Associated with Soil Boring #04

Parameter	Result (ug/L) ppb	NYSDEC TAGM 4046 Groundwater Standards Criteria (ppb)
Naphthalene	<b>&lt;1</b>	10.0
Acenaphthene	<1	20.0
Flourene	<1	50.0
Phenanthrene	<1	50.0
Anthracene	<1	50.0
Fluoranthene	<1	50.0
Pyrene	<1	50.0
Benzo(a)anthracene	</td <td>0.002</td>	0.002
Chrysene	<1	0.002
Benzo(b)fluoranthene	◁	0.002
Benzo(k)fluoranthene	<1	0.002
Benzo(a)pyrene	ব	0.002
Indeno (1,2,3-cd)pyrcue	ব	0.002
Dibenzo(a,h)anthracene	<1	50.0
Benzo(g,h,l)perylenc	<1	5.0
2-Methylnaphthalene		50.0
Acenaphthylene		20.0

N/A:

Limit not available Parts per Million

ppm:

mg/Kg: milligrams per kilogram (parts per million)

ug/Li micrograms per liter (ppb)

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK.

Concentrations exceeding the NYSDEC.TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\* Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis.



E23262

Site Address:

River Plaza - 134 Wildey Street, Tarrytown, NY

Sample ID #:

GW4 (8-9') - Associated with Soil Boring #05

Parameter	Result (ug/L) ppb	NYSDEC TAGM 4046 Groundwater Standards Criteria (ppb)
Naphthalene	<1	10.0
Acenaphthene	<1	20.0
Flourenc	<1	50.0
Phonanthrene	<1	50.0
Anthracene	<1	50.0
Fluoranthene	<1	50.0
Pyrene		50.0
Benzo(a)anthraceue	<1	0.002
Chrysene	<1	0.002
Benzo(b)fluoranthene	<1	0,002
Benzo(k)fluoranthene	<1	0.002
Benzo(a)pyrene	<1	0.002
Indeno (1,2,3-cd)pyrene	<1	0.002
Dibenzo(a,h)anthracene	<	50.0
Bcnzo(g,h,l)perylene	<1	5.0
2-Methylnaphthalene		50.0
Acenaphthylene		20.0

N/A: ppm Limit not available Parts per Million

mg/Kg: milligrams per kilogram (parts per million)

ug/L: micrograms per liter (ppb)

<sup>&</sup>lt; Minimum Detection Limit

<sup>&</sup>lt; Below Minimum Detection Limit (MDL) for Method of analysis and instrumentation.

Concentrations above MDL are highlighted in bold BLACK

Concentrations exceeding the NYSDEC TAGM 4046-Guidance Values for soil or groundwater are Highlighted in RED.

\*\*Compounds not found in NYSDEC TAGM 4046, referred to NYSDEC STARS Memo #1 "TCLP Alternative Guidance Values" for groundwater protection. Values reported on a dry weight basis.

Table 1

### GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCs) BY EPA METHOD 8260

Compound	NYSDEC (1)	GP-2 1/21/2005	GP-3 1/21/2005	GP-4 1/21/2005	Trip Blank
	5	ND	ND	ND	ND
Chlorodifluoromethane	5	ND	ND	ND	ND
Chloroethane	7	0.65	3	0.5	ND
Chloroform	5	ND	ND	ND	ND
Chloromethane	5	2.4	0.47	0.9	ND
is-1,2-Dichloroethene	0.4	ND	ND	ND	ND
is-1,2-Dichloropropene	50 *	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND
Diisopropyl ether	NS	ND	ND	ND	ND
Ethanol	NS.	ND	ND	ND	ND
Ethyl acetate	NS	ND	ND	ND	ND
Ethylbenzene	5	ND ND	ND	ND	ND
Freon-114	NS	The state of the s	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND
Isopropyl acetate	NS	ND	ND	ND	ND
Isopropyibenzene	5	ND	ND	ND	ND
m + p Xylene	5	ND	ND	ND	ND
Methyl tertiary butyl ether	10	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND
Naphthalene	10 *	ND		ND	ND
n-Butyl acetate	. NS	ND .	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND
n-Propyl acetate	NS	ЙD	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND
o Xylene	5	ND.	ND		ND
p-Diethylbenzene	NS	ND	ND	ND ND	ND
p-Ethyltoluene	NS	ND	ND	-	ND.
sec-Butylbenzene	5	ND	ND	ND	ND ND
Styrene	5	ND	ND	ND	ND
t-Butyl alcohol	NS	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND
Tetrachloroethene	5	3.6	1.9	3	ND
Toluene	5	ND	ND	ND	ND
trans-1,2-Dichloroethene	.5	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	ND	_
Trichloroethene	5	ND	ND	0.52	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl acetate	NS	ND	ND	ND	ND ND
Vinyl chloride	2	8.9	ND	ND	עא ב

- 1 NYSDEC Class GA Drinking Water Standards and Guidance Values, TOGS 1.1.1, June 1998
- \* Guidance Value

ND - Not Detected

NS - Not specified

Bold text denotes exceedance of standard or guidance value.

# APPENDIX N Environmental Easement

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.



\*511753214EAS002T\*

Name: Debra Leibler Phone: 914-288-8166 Address 1: 1311 Mamaroneck Avenue, Suite 260 Fax: Address 2: Email: dieibler@acadiarealty.com City/State/Zip: White Plains NY 10605 Reference for Submitter: Tarrytown Easement  Document Details
Address 1: 1311 Mamaroneck Avenue, Suite 260 Fax: Address 2: Email: dlelbler@acadiarealty.com City/State/Zip: White Plains NY 10605 Reference for Submitter: Tarrytown Easement
Address 2: Email: dleibler@acadiarealty.com City/State/Zip: White Plains NY 10605 Reference for Submitter: Tarrytown Easement
City/State/Zip: White Plains NY 10605 Reference for Submitter: Tarrytown Easement
Unity Classification and the Control of the Control
Control Number: 511753214 Document Type: Easement (EAS)
Total Dana County 40
acinago ID.
Parties Additional Parties on Continuation page 1st PARTY 2nd PARTY
1: ACADIA TARRYTOWN LLC - Other 1: NEW YORK STATE OF - Other
2:
Property Additional Properties on Continuation
Street Address: 124 WILDEY STREET Tax Designation: 1-2-P-25
City/Town: GREENBURGH Village: TARRYTOWN
Cross- References Additional Cross-Refs on Continuation
1: 2: 3: 4:
Supporting Documents
1: TP-584  Martaga Tayos
Recording Fees Mortgage Taxes  Statutent Recording Fee: \$40.00 Document Date:
Statutory necording Fee.
rage ree.
Basic: \$0.00
Mortgage Affidavit Filing Fee: \$0.00  RP-5217 Filing Fee: \$0.00  A Ultimate of the second sec
Additional: \$0.00  TP-584 Filling Fee: \$5.00
MTA: \$0.00
Total Recording Fees Paid: \$95.00 Special: \$0.00
Transfer Taxes  Yonkers: \$0.00  Consideration: \$0.00  Total Mortgage Tax: \$0.00
Consideration: \$0.00 Total Mortgage Tax: \$0.00  Transfer Tax: \$0.00
Mansion Tax: \$0.00 Dwelling Type: Exempt:
Transfer Tax Number: 30820 Serial #:
Popard and Return To.
RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK    Pick-up at County Clerk's office
Recorded: 06/30/2011 at 01:43 PM  Control Number: 511753214
Witness my hand and official seal
Acadia Tarrytown LLC c/o Acadia Realty Trust
c/o Acadia Realty Trust
1311 Mamaroneck Ave., Suite 260
Westchester County Clerk White Plains, NY 10605
Attn: Debra Leibler

amended by W3-1127-08-11

### ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 13 day of 2011, between Owner(s), Acadia Tarrytown LLC, having an office at c/o Acadia Realty Trust, 1311 Mamaroneck Avenue, Suite 260, White Plains, County of Westchester, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department," as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and.

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 124-134 Wildey Street, in the Village of Tarrytown, County of Westchester and State of New York, known and designated on the tax map of the County Clerk of Westchester as tax map parcel numbers: Section #1, Block/Sheet #2, Lot #P-25 and #P-25B, being the same as that property conveyed to Grantor by deed dated May 13, 2004 and recorded in the County of Westchester, County Clerk's Office under Control No. 450620662. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 3.250 +/- acres, and is hereinafter more fully described in the Land Title Survey dated October 2, 2007 and revised on February 14, 2011 by Control Point Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: W3-1055-05-03, as amended by W3-1127-08-11, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

- 1. <u>Purposes</u>. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls</u>. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
  - A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv) if current land use is selected, enter current use.

- (2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.
- (4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

  [5/11]

Site No: #360084 Order on Consent Index: W3-1055-05-03, as

County: Westchester Site No: #360084 amended by W3-1127-08-11

- (8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.
- (9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential or Restricted Residential purposes, and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, New York 12233 Phone: (518) 402-9553

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

Order on Consent Index: W3-1055-05-03, as

County: Westchester Site No: #360084 amended by W3-1127-08-11

- G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
  - (2) the institutional controls and/or engineering controls employed at such site:
    - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her 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
  - (7) the information presented is accurate and complete.
- 3. <u>Right to Enter and Inspect.</u> Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights</u>. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;
- B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

### 5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any [5/11]

interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice</u>. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: #360084

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to:

Site Control Section

Division of Environmental Remediation

NYSDEC 625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. <u>Recordation</u>. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

- 8. <u>Amendment</u>. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

ACADIA TARRYTOWN LLC:
By:
Print Name: ROBERT MASTERS
Title: Senior Vice Presiden Date: 5 31 11

### Grantor's Acknowledgment

) ss:
COUNTY OF WESTCHESTER )
On the 314 day of May, in the year 2011, before me, the undersigned personally appeared Robert Masters, personally known to me or proved to me on the basis
of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within
instrument and acknowledged to me that he/she/they executed the same in his/her/their
capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the
person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

STATE OF NEW YORK

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

Dale A. Desnoyers, Director Division of Remediation

Grantee's Acknowledgment

STATE OF NEW YORK	) ) ss:
COUNTY OF ALBANY	)

On the 134 day of 500 in the year 201, before me, the undersigned, personally appeared Dale Desnoyers, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County,
Gemmission Expires August 22, 20

### SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain plot, piece or parcel of land, situate, lying and being in the Village of Tarrytown, Town of Greenburgh, County of Westchester and State of New York, bounded and described as follows:

BEGINNING at the point on the easterly side of Cortlandt Street where the same is intersected by the northerly line of the land now or formerly of the Village of Tarrytown;

RUNNING THENCE along the easterly side of Cortlandt Street, the following courses and distances and curves:

- North 01 degrees 42 minutes 20 seconds east, 28.84 feet to a point of curve;
- Along a curve to the right having a radius of 416.00 feet, a distance of 97.40 feet to a point of tangency;
- North 15 degrees 07 minutes 15 seconds east, 113.66 feet;

THENCE the following courses and distances:

- South 69 degrees 50 minutes 53 seconds east, 77.53 feet;
- North 20 degrees 09 minutes 07 seconds east, 167.00 feet;
- South 69 degrees 50 minutes 53 seconds east, 16.58 feet, and
- North 20 degrees 09 minutes 07 seconds east, 110.00 feet to the southerly side of Wildey Street;

THENCE along the southerly side of Wildey Street, south 69 degrees 50 minutes 53 seconds east, 98.32 feet to a point of curve;

THENCE along a curve to the right having a radius of 95.00 feet, a distances of 77.83 feet to the southwesterly side of Central Avenue;

THENCE along the southwesterly side of Central Avenue, south 22 degrees 54 minutes 22 seconds east, 112.04 feet to a point of curve and along a curve to the left having a radius of 334.00 feet, a distance of 117.33 feet to a point of reverse curve;

THENCE along a curve to the right having a radius of 44.00 feet, a distance of 42.89 feet to a point on the westerly side of Cottage Place;

THENCE along the westerly side of Cottage Place, south 12 degrees 49 minutes 20 seconds west, 13.56 feet to the northerly line of land now or formerly of Moten;

THENCE along the said northerly line of land now or formerly of Moten, north 73 degrees 35 minutes 40 seconds west, 27.64 feet and north 59 degrees 41 minutes 10 degrees west, 51.46 feet to the westerly line of said land now or formerly of Moten;

THENCE in part along the westerly line of land now or formerly of Moten and in part along the westerly line of land now or formerly of Monti, south 33 degrees 15 minutes 24 seconds west, 84.29 feet to a point;

THENCE CONTINUING in part along the westerly line of land now or formerly of Monti and in part along the westerly line of land now or formerly of Alpine, South 08 degrees 21 minutes 21 seconds west, 108.91 feet to the northerly line of land now or formerly of Asbury Terrace;

THENCE in part along the northerly line of land now or formerly of Asbury Terrace and in part along the northerly line of land now or formerly of the Village of Tarrytown, north 86 degrees 25 minutes 00 seconds west, 358.16 feet to the easterly side of Cortlandt Street and the point or place of BEGINNING.

TOGETHER with the Benefits and Subject to the burdens of an Easement contained in instrument recorded in Liber 7295 page 427 and modified by instrument in Liber 7588 page 568.

APPENDIX O
Previous Investigations
Laboratory Analytical Data
(On Disk)