SITE MANAGEMENT PLAN

OCEANSIDE PLAZA
NASSAU COUNTY, NEW YORK

NYSDEC Site Number: C130158

Prepared for:
Oceanside Plaza Associates, LLC
151 Irving Place
Woodmere, New York 11598

Prepared by:
Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster, PA 17602
(888) 735-2008

Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

CERTIFICATION: I, Charles McGuckin certify that I am currently a NYS registered professional engineer and that this site management plan was prepared in accordance with all applicable statutes and regulations, etc."

Mr. Charles McGuckin, NYS PE # 069509
Remedial Engineering, P.C.
209 Shafter Street, Islandia, New York, 11749

NOVEMBER 2013

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 Introduction

This document is required as an element of the remedial program at Oceanside Plaza (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index #A1-0538-0106, Site #C130158, which was executed on February 27, 2006.

1.1.1 General

Oceanside Plaza Associates, LLC entered into a BCA with the NYSDEC to remediate a 7.45-acre property located in the Town of Hempstead, Nassau County, Oceanside, New York. This BCA required the Remedial Party, Oceanside Plaza Associates, LLC, to investigate and remediate contaminated media at the Site. A figure showing the Site location and boundaries of this 7.45-acre parcel is provided in Figure 1. The boundaries of the Site are more fully described in the property Metes and Bounds description (Appendix A), that is also part of the Environmental Easement (AppendixB).

After completion of the remedial action described in the Remedial Action Work Plan, some contamination was left in the subsurface at this Site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Reliance Environmental, Inc., on behalf of Oceanside Plaza Associates, LLC, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

1.1.2 Purpose

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

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

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

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

It is important to note that:

1. This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);
2. Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA Index # A1-0538-0106; Site # C130158 for the Site, and thereby subject to applicable penalties.

1.1.3 Revisions

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

1.2 Site Background

1.2.1 Site Location and Description

The Site is located in the Town of Hempstead, County of Nassau, New York and is identified as Block 368 and Lots 18, 19, 20, 41 thru 45, 75 thru 92, 107 and 355 on the Official Land and Tax Map of Nassau County, New York. The Site is an approximately 7.45-acre parcel bounded by Windsor Parkway to the north, commercial and residential properties to the south, 4th Street and residential properties to the east, and Long Beach Road to the west (see Figure 2). The boundaries of the Site are more fully described in Appendix A – Metes and Bounds.

1.2.2 Site History

The following summary was generated from information presented in previous reports, which included the review of aerial photographs, topographic maps and Sanborn maps:

- The property was reported as being undeveloped in 1903 and 1918 topographic maps.
- The property was first reported to contain buildings in the 1947 topographic map. An "L-shaped" building was located in the central western portion of the parcel and was labeled as a restaurant in a 1950 Sanborn Map. A residential building was also present on the northeast corner of the parcel.
- Between 1953 and 1976, the property appears to have contained multiple commercial buildings, one structure on the central western portion of the parcel (restaurant), one structure on the southern portion of the parcel and/or one structure on the northwestern corner of the parcel. A residential building was located on the northeast corner of the parcel. The remainder of the property appears to have consisted of asphalt paved parking areas and undeveloped land.
- Between 1976 and 1980, the property was constructed to its existing footprint. The Site is currently utilized as a commercial property consisting of a multi-tenant strip shopping center with three

additional free standing structures. The row of stores includes a dry cleaning facility (former Jef-El Dry Cleaners). Other vendors include restaurants, a jewelry store, and various clothing and home appliance stores. All structures are single story retail buildings with a large asphalt parking lot. There is a strip of unpaved property to the rear of the shopping center.

- The operation of a dry cleaners which occupies one of the stores within the strip mall since 1977 is the apparent source of tetrachloroethylene (PCE) that has been detected in on-Site soil and groundwater. In October 2005, prior to entering the BCP, the property owner undertook excavation of PCE contaminated soil from within the dry cleaners, in the vicinity of the dry cleaning machinery. Approximately five tons of PCE contaminated soil was disposed of off-Site at a permitted disposal facility. Confirmatory end point soil samples collected from within the excavation detected PCE at less than one milligram/kilogram (mg/kg). Perforated plastic (PVC) piping was installed in the excavation (for future use) and then the area was backfilled and re-sealed with concrete.

1.2.3 Geologic Conditions

Long Island is located within the Atlantic Coastal Plain physiographic province. The province is defined as consisting of terminal moraine overlying Cretaceous-aged sedimentary bedrock, found at a depth in excess of 100 feet. Based on Site-specific data and observations gathered during the Site investigation, the subsurface soil is entirely (i.e. to a depth of approximately 18 feet) composed of medium/coarse grained quartz sands that are well sorted with some organic matter and urban fill near the surface. Bedrock was not encountered.

Upon completion of ground water monitoring well installation activities, well locations and top-of-casing elevations were surveyed by Control Point Associates, Inc., Watchung, New Jersey. Utilizing this information and historical depth-to-water readings (5' to 7' below grade depending on season variations), ground water has been calculated to flow in a south/southeastern direction beneath the Site at a gradient of approximately 0.00082 ft/ft. Groundwater flow is shown in Figure 3.

1.3 Summary of Remedial Investigation Findings

In July 1994, tetrachloroethene impacted soils were identified during the completion of a limited subsurface investigation, conducted as part of a Phase 1 Environmental Site Assessment. The source of the contamination was determined to be the result of previous practices/occurrences at a dry cleaning store (former Jef-El Dry Cleaners) occupying Retail Space 13 at the Site (Figure 1).

A Remedial Investigation (RI) was performed to characterize the nature and extent of tetrachloroethene related soil, ground water and vapor contamination at the Site. The results of the SI and RI are described in detail in the following reports:

1. Site Investigation Report, September 2006
2. Remedial Investigation Report, December 2010 (Revised August 2012)

Generally, the RI determined that the primary contaminant of concern at the Site is tetrachloroethylene. The impacted media are soil, groundwater, soil gas and indoor air. Under the BCP, SCG exceedances for PCE were detected in soil outside the facility, in an unpaved area. PCE was detected in subsurface soil at 1,300 mg/kg. The Unrestricted use and the Protection of Groundwater soil cleanup objective (SCO) for PCE is 1.3 mg/kg. In 2009, under a Department approved Interim Remedial Measure (IRM), subsurface soil was excavated from the contaminant source area. A total of 18.41 tons of contaminated soil was removed from the area and was transported off-Site to a permitted disposal facility. Post excavation

sampling revealed PCE levels as high as 5.7 mg/kg. Through the implementation of a second IRM in 2009 (soil vapor extraction system), PCE levels in the former source area are now below the Unrestricted use SCO.

Although the Site is nearly entirely covered by the shopping center and asphalt parking lots, additional soil sampling was conducted in May 2011 in an unpaved portion of the Site. Soil was collected from a depth of 6-12 inches below grade and analyzed for the full suite of analytes on the Target Compound List. Only copper, lead and zinc levels exceeded the Unrestricted use SCOs and their presence was below the Residential use and Protection of Groundwater SCOs. The presence of these metals may be due to the historic fill material used at the Site during construction of the shopping center.

PCE has been detected at a maximum concentration of 360 micrograms/liter (µg/l) in on-Site groundwater. The NYS groundwater standard for PCE is 5 µg/l. As previously described, in 2009 a sub-slab depressurization system (SSDS) was constructed in the vicinity of the former source area. From November 2005 through January 2010, the five on-Site groundwater monitoring wells were sampled on a quarterly basis. During this time, PCE levels ranged from non-detect (ND) to 360 µg/l in the five wells. From January 2010 through October 2012, the wells have been sampled on a semi-annual basis. During this time, PCE concentrations have ranged from ND to 10 µg/l. As a result of further remediation of the contaminant source area, PCE levels in groundwater have reached asymptotic conditions.

This data and the final construction criteria of the SSDS are memorialized in a Construction Completion Report dated January 25, 2010 which was prepared by a New York State licensed Professional Engineer and approved by DEC on May 4, 2010 and also in the draft Remedial Investigation Report which is dated August 2012. A Final Engineering Report for the Site is currently being prepared. In 2007, PCE was detected in sub-slab soil gas at concentrations ranging from 350 to 81,000 micrograms per cubic meter (ug/m3). In September 2009, PCE levels in indoor air ranged from 500 to 880 ug/m3. The New York State Department of Health (NYSDOH) guideline for PCE in air is 100 ug/m3. As a result of the operation of the SSDS beginning in October 2009, the levels of PCE in indoor air samples have been reduced to levels which are generally consistent with background concentrations. In December 2012, PCE was detected at 8.1 ug/m3 and 13 ug/m3 in the adjacent stores. PCE levels in sub-slab soil gas have diminished to a range of non detect to 9,830 ug/m3.

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in soil and groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A Soil Vapor Extraction system (a system that removes the vapor from beneath the building) installed in the on-Site building prevents indoor air quality from being affected by the contaminated soil vapor under the building. Sampling indicates soil vapor intrusion is not a concern for off-Site buildings.

Below is a summary of Site conditions when the RI was performed between 2004 and 2012:

1.3.1 Soils

PCE and related compounds were identified in subsurface soils at the Site, related to a dry cleaning operation located in Retail Space 13 (Figure 4) within the mall. Affected soils were identified both within the facility, near the machine room, and in a grass covered area exterior of the rear door of the cleaner. The interior soils were addressed in 2005, prior to the property owner entering into the BCP. The

delineated exterior soils were identified as the primary source of groundwater contamination in later investigations, and were the subject of Interim Remedial Measures (IRMs) designed to remove these soils/contaminants through excavation and disposal and soil vapor extraction.

Prior to the IRMs, PCE concentrations in the soils ranged from 0.51 mg/kg to 1,200 mg/kg (Table 1.3.1). The Track 1 Objective - Unrestricted Use Soil Cleanup Objective for PCE is 1.3 mg/kg.

1.3.2 Site-Related Ground Water

The presence of groundwater contaminated with PCE and related compounds were identified following the installation of monitoring wells at the subject property. Plume delineation activities clearly indicated the dry cleaning operation as the source, and specifically, the area just exterior of the rear of the facility. Well locations are provided on Figure 5.

Pre-remedial PCE concentrations in the ground water ranged from non-detect to 360 µg/l in source area well MW-4, and from 74 µg/l to 160 µg/l in down-gradient property boundary well MW-5. The Ground Water Standards/Criteria for PCE is 5.0 µg/l. Cis-1,2-Dichloroethene concentrations in the ground water ranged from non-detect to 54 µg/l in MW-5. The Ground Water Standards/Criteria for cis-1,2-Dichloroethene is 5.0 µg/l. Vinyl Chloride concentrations in the ground water ranged from non-detect to 17 µg/l in MW-5. The Ground Water Standards/Criteria for vinyl chloride is 2.0 µg/l. Table 1.3.2 provides a summary of the historical groundwater analytical results for the wells.

As a result of the completed remedial action, contaminant concentrations within the plume have reached either non-detect (source area) or asymptotic (down-gradient) conditions.

In accordance with the Decision Document (June 2013), the proposed remedy includes the placement of an Institutional Control in the form of an environmental easement restricting the use of ground water as a source of potable or process water, without necessary water quality treatment. As documented in the extensive groundwater monitoring program performed at the Site, residual groundwater contamination has been reduced to either non-detect (source area) and/or low asymptotic levels. An additional round of groundwater samples will be collected from monitoring wells MW-4 and MW-5 in 2013. These samples will be analyzed for volatile organic compounds (VOCs) via EPA 8260. Following submission of these results, NYSDEC will determine whether to modify or discontinue future groundwater monitoring. The monitoring wells will then be decommissioned following approval of this SMP, and DEC approval.

1.3.3 Site-Related Soil Vapor Intrusion

Sub-slab vapor, indoor air and ambient air samples were collected concurrently during several sampling events between 2007 and 2012. All vapor/air sample locations are shown on Figure 6.

Ambient air samples were collected to the rear (east) of Retail Space 9, near the rear property boundary fence, at a height of approximately four feet above the ground (a height representing the approximate breathing zone). Ambient samples reported the presence of PCE and TCE (Table 1.3.3). PCE concentrations in the ambient air ranged from non-detect to 13 µg/m^3. The NYSDOH guideline value for PCE is 30 µg/m^3. TCE concentrations in the ambient air ranged from non-detect to 1.4 µg/m^3. The NYSDOH guideline for TCE is 5 µg/m^3.

Indoor air quality samples were collected from the retail spaces immediately adjacent to the dry cleaners (i.e. 13 and 15) - Table 1.3.3. Pre-remediation PCE levels in indoor air samples ranged from 2.3 µg/m^3 to 880 µg/m^3. TCE levels in indoor air samples ranged from non-detect to 5.9 µg/m^3.

Sub-slab soil vapor samples were collected from three soil vapor ports located within the dry cleaners, four soil vapor ports in adjacent retail spaces (i.e. 9, 12, 14 and 16) and one soil vapor port to the rear (east) of the dry cleaners – Table 1.3.3. Pre-remediation PCE concentrations in the sub-slab soil vapor samples ranged from non-detect to 81,000 µg/m^3. TCE concentrations in the sub-slab soil vapor samples ranged from non-detect to 380 µg/m^3.

Soil vapor data indicates that the PCE plume encompasses approximately 945 square feet and the TCE plume encompasses approximately 415 square feet. Both plumes center on the dry cleaning operation.

Since the SSDS has been in operation, indoor air concentrations of PCE have been generally consistent with background concentrations. The SSDS is expected to continue running only as a short term remedy (i.e. <5 years from awarding of the COC) and is not considered a long term engineering control. While the system is in operation annual sampling of the sub-slab vapor, indoor air and ambient air will continue on an annual basis, in accordance with the Decision Document (June 2013).

1.4 Summary of Remedial Actions

The Site was remediated in accordance with the NYSDEC-approved Revised IRM Letter Work Plan dated September 10, 2008 and Revised Active Sub-Slab IRM Work Plan dated September 18, 2008. Remedial activities were completed at the Site in October/November/December 2005 and July 2009.

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

1. Excavation of exterior soils exceeding the unrestricted SCOs, to a maximum depth of 4.25 feet;
2. Sub-slab depressurization (vent) system installation and monitoring to prevent human exposure to vapors emanating from the contaminated soil remaining at the Site;
3. Execution and recording of an Environmental Easement to restrict groundwater use and prevent future exposure to any contamination remaining at the Site;
4. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and short-term Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

1.4.1 Removal of Contaminated Materials from the Site

Soil Excavation

Exterior Source Area Soil Excavation

Unrestricted and Residential Use (Chapter 4, Subpart 375-1.8(g)(1)(i) and (2)(i) Objectives, as presented in the Track 1 Soil Cleanup Objectives (Subpart 375-6, Tables 375-6.8(a) and 375-6.8(b)) were targeted for this Remedial Action. A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for this Site is provided in Table 1.4.1.

In July 2009, a contaminant source area located just outside the dry cleaners was excavated under an approved IRM work plan dated September 10, 2008. A figure showing areas where excavation was performed is shown in Figure 7. The source area was discovered during soil gas sampling in an unpaved area outside the rear of the building. The excavation was complicated by the presence of an electrical service cable and a concrete drain pipe which runs beneath the area and also by the shallow water table. When excavation was completed, six soil samples were collected from the base and sidewalls of the excavation and submitted for laboratory analysis for volatile organic compounds (Figure 8). The

excavated area was approximately six feet wide by ten feet long and extended to a maximum depth of 51 inches. A total of 18.41 tons of PCE contaminated soil was excavated and disposed of off-Site at a permitted disposal facility. The area was backfilled with virgin sand material supplied by Stony Creek Services LLC.

Of the six post excavation confirmatory soil samples collected from the base and sidewalls of the excavation, only one sample exceeded the Unrestricted Use and Protection of Groundwater soil cleanup objectives (SCO) of 1.3 mg/kg. PCE levels were in the range of 1.1 mg/kg to 5.7 mg/kg. The residual soil contamination was addressed by the soil vapor extraction system IRM described below. The IRM activities are memorialized in a Construction Completion Report dated January 28, 2010.

1.4.2 Site-Related Treatment Systems

Sub-Slab Depressurization System (short-term remedy)

In July 2009, an SSDS was constructed utilizing the perforated plastic piping installed under the slab of the dry cleaners during the soil excavation undertaken in October 2005 (Figure 9). The SSDS was constructed in accordance with an approved IRM work plan dated September 18, 2008. After construction of the system, performance monitoring was conducted in September and October of 2009. Indoor air sampling data demonstrated that the system was reducing impacts to indoor air. Since the system has been in operation, indoor air concentrations of PCE have been generally consistent with background concentrations. The most recent samples, collected in December 2012, revealed PCE concentrations of 8.1 ug/m3 and 13 ug/m3 in the adjacent stores. In conjunction with the monitoring detailed in this SMP, it is expected that this system will be terminated within five (5) years. No long-term treatment systems were installed as part of the Site remedy.

1.4.3 Remaining Contamination

SOIL

In the event that subsurface soil must be disturbed in the former source areas, any residual soil contamination will be addressed by the Excavation Work Plan. Tetrachloroethene contaminated soils associated with the dry cleaning store have been remediated to meet Track 1 Unrestricted use SCOs.

SOIL VAPOR

Soil vapor beneath a portion of the site contains levels of VOCs that currently requires mitigation. This area is currently being addressed through a short-term engineering control (SSDS).

GROUNDWATER

As documented during the extensive groundwater monitoring program, including eleven post-excavation/remediation events October 2009 and October 2012, the following can be stated:

Source Area - Tetrachloroethene concentrations decreased immediately following the remedial excavation activities, to non-detectable levels (January, April and October 2010). PCE concentrations rebounded slightly, from January 2011 and through April 2012; however, laboratory analysis has since reported PCE as non-detect in the well during the July 2012 and October 2012 sampling events.

Down-Gradient Property Boundary - A review of the laboratory data indicates decreasing PCE concentrations from July 2009 through July 2010 and eventually as non-detect during the January 2011 and July 2011 sampling events. Concentrations rebounded slightly in October 2011, but have since remained relatively constant (asymptotic), ranging from 8 µg/l to 14 µg/l.

Well Abandonment

As documented in the extensive groundwater monitoring program performed at the Site, residual groundwater contamination has been reduced to either non-detect (source area) and/or low asymptotic levels. Therefore, well abandonment will be performed in accordance with DEC's CP-43: Groundwater Monitoring Well Decommissioning Policy. The monitoring wells will be decommissioned following approval of this SMP and with the concurrence of DEC.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 Introduction

2.1.1 General

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

2.1.2 Purpose

This plan provides:

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

2.2 Engineering Controls

As provided in the Decision Document, a short term (i.e. < 5 years) engineering control has been employed at the Site.

2.2.1 Short Term Engineering Control Systems

2.2.1.1 Sub-Slab Depressurization System

As discussed in Section 1.4.2, an active sub-slab depressurization system has been installed at the former Jef El dry cleaner (currently Sunshine Cleaners/Retail Space 13) by converting the existing 2-inch diameter screened sub-slab piping (installed following the interior excavation activities) to an active system. The 2-inch screened pipe is approximately 10 feet long. A 4.0-Hp regenerative blower was connected to the existing sub-slab piping via 4-inch diameter Schedule 40 PVC piping as shown on Figure 9. The blower is rated for 200 cubic feet per minute and 90 inches of water vacuum. The blower was installed on the roof of the dry cleaning facility and is housed in a weather tight enclosure. The weather tight enclosure has a ventilation fan and thermostat. A knock-out tank was also installed at the inlet to the blower to prevent water from being drawn into the blower. The knock-out tank has a high level switch to shut down the blower if the knock-out tank fills with water. A dilution valve has been installed at the inlet to the blower to control the vacuum and flow rate. Vacuum gauges have been installed at the knock out tank and the inlet to the blower. A pressure gauge was installed on the discharge of the blower. The discharge from the blower was connected to a vapor phase carbon (VPGAC) drum and away from any roof air intakes.

Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which

may affect controls at the Site, occurs. Procedures for operating and maintaining the sub-slab depressurization system are included in the Operation and Maintenance Plan (Section 4 of this SMP).

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

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

2.2.2.1 Sub-Slab Depressurization System

The active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSDS is no longer required, a request to undertake termination sampling will be prepared and submitted by the property owner to the NYSDEC and NYSDOH. It is expected that the SSDS will be discontinued within 5 years (short-term engineering control).

2.3 Institutional Controls

A series of Institutional Controls is required by the Decision Document to prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination (soil vapor and groundwater). Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under this Site Management Plan.

These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

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

As required by the Environmental Easement, Site restrictions that apply to the Controlled Property are:

- The property may be used for Restricted Residential use provided that the Institutional Controls included in this SMP are employed.
- The use of the groundwater underlying the property is prohibited without testing and/or treatment rendering it safe for intended use;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) 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 retains the right to access such Controlled 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.

2.3.1 Excavation Work Plan

The Site has been remediated and satisfies the requirements for the issuance of a Conditional Track 1 Certificate of Completion. Any future intrusive work that encounters contamination (e.g. groundwater) will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix C to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section B-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

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

2.3.2 Soil Vapor Intrusion Evaluation

Until the SSDS can be discontinued, prior to the construction of any enclosed structures located over areas that contain remaining contamination and the potential for soil vapor intrusion (SVI) has been identified (see Figure 10), an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

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

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. Validated SVI data will be transmitted to the property owner within 30 days of validation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to all tenants and occupants of the property within 15 days of receipt of validated data.

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

2.4 Inspections and Notifications

2.4.1 Inspections

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

1. Whether short term Engineering Controls continue to perform as designed;
2. If these controls continue to be protective of human health and the environment;
3. Compliance with requirements of this SMP and the Environmental Easement;
4. Achievement of remedial performance criteria;
5. Sampling and analysis of appropriate media during monitoring events;
6. If Site records are complete and up to date; and
7. Changes, or needed changes, to the remedial or monitoring system.

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

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

2.4.2 Notifications

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

1. 60-day advance notice of any proposed changes in Site use that are required under the terms of the Brownfield Cleanup Agreement, 6NYCRR Part 375, and/or Environmental Conservation Law.
2. 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
3. Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
4. Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
5. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

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

1. At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Brownfield Cleanup Agreement, and all approved work plans and reports, including this SMP.
2. Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 Contingency Plan

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

2.5.1 Emergency Telephone Numbers

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

Table 2.5.1a: Emergency Contact Numbers	
Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 2.5.1b: Contact Numbers	
Michael P. Raffoni	(888) 735-2008

* Note: Contact numbers subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 3131-3221 Long Beach Road, Oceanside, NY 11572

Nearest Hospital Name: South Nassau Hospital

Hospital Location: 1 Healthy Way, Oceanside, NY 11572

Hospital Telephone: (516) 632-3000

Directions to the Hospital:

1. From the parking lot, turn right onto Long Beach Road, heading north.
2. Proceed approximately 0.8 miles and turn right onto Foxhurst Road.
3. Proceed approximately 0.3 miles and turn left onto Oceanside Road.
4. Proceed approximately 0.5 miles and turn right onto Oswald Court.

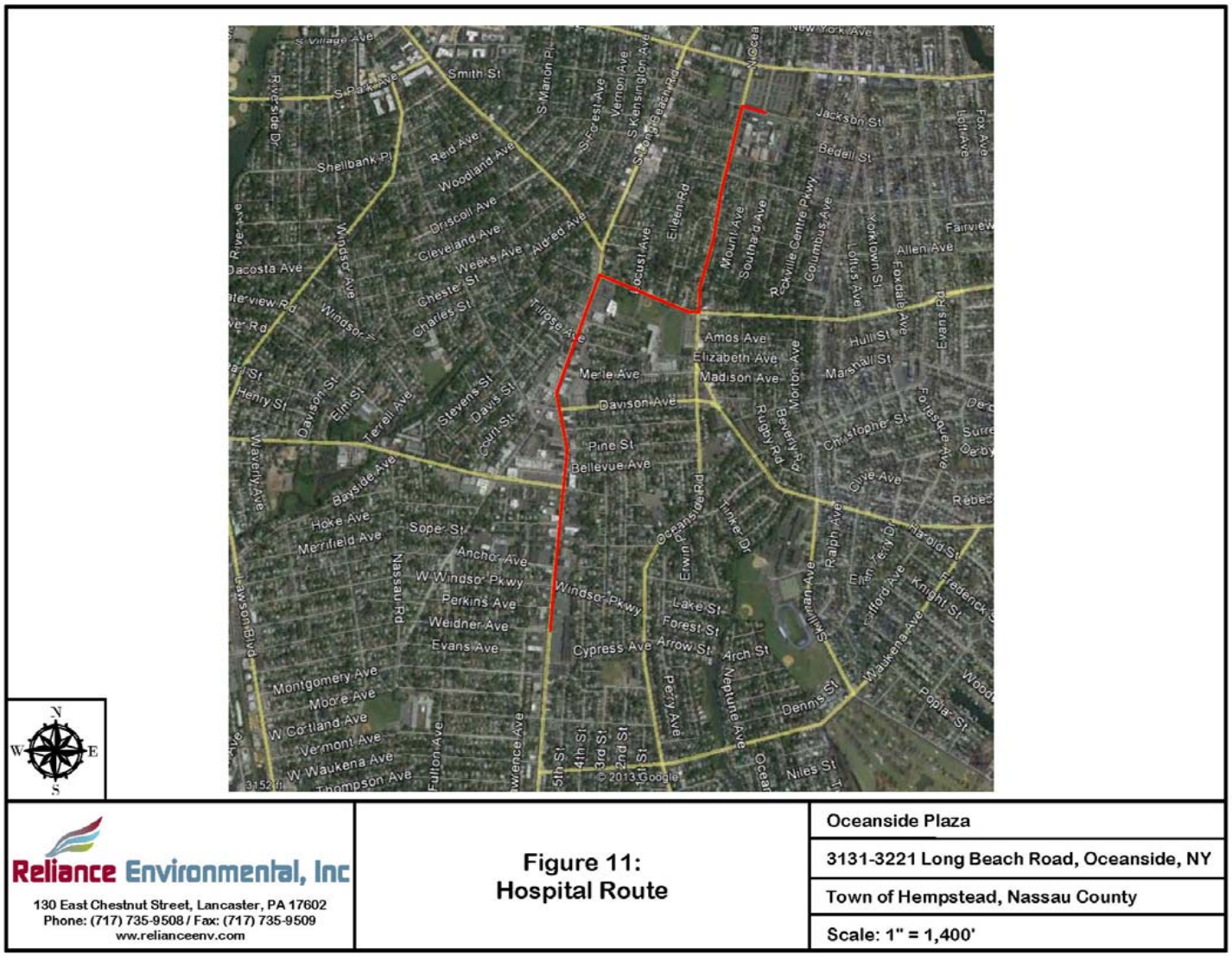
Total Distance: 1.6 miles

Total Estimated Time: 5 minutes

2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 2.5.1a). The list will also be posted prominently at the Site and made readily available to all personnel at all times.

Map Showing Route from the Site to the Hospital:



Reliance Environmental, Inc 130 East Chestnut Street, Lancaster, PA 17602 Phone: (717) 735-9508 / Fax: (717) 735-9509 ww.relianceenv.com	**Figure 11:** **Hospital Route**	**Oceanside Plaza** **3131-3221 Long Beach Road, Oceanside, NY** **Town of Hempstead, Nassau County** **Scale: 1" = 1,400'**

3.0 SITE MONITORING PLAN

3.1 Introduction

3.1.1 General

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

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Annual monitoring of the performance of the remedy and overall reduction in contamination on-Site will be conducted for the first 5 years. The frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in air, soil, and/or groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 3.1.2 and outlined in detail in Section 3.2 and 3.3 below.

Table 3.1.2: Monitoring/Inspection Schedule			
Monitoring Program	**Frequency***	**Matrix**	**Analysis**
Monitoring Wells	Single Event (11/2013)	Groundwater	VOCs (EPA 8260)
SSDS	Annual	Soil Vapor	Vinyl Chloride, 1,1-Dichloroethene, Trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Trichloroethene, and Tetrachloroethene (USEPA Method TO-15)
SSDS	Annual	Indoor Air Quality	Vinyl Chloride, 1,1-Dichloroethene, Trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Trichloroethene, and Tetrachloroethene (USEPA Method TO-15)

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

3.2 Media Monitoring Program

3.2.1 Soil Vapor/Indoor Air Quality and Groundwater Monitoring

Soil Vapor and Indoor Air Quality monitoring will be performed during the heating season as defined in DOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" on an annual basis to assess the performance of the SSDS. Indoor air quality samples, sub-slab vapor samples and an outdoor (ambient) air sample from the following locations (numbers correspond to the "Retail Space" numbers of Figure 10):

Indoor Air Quality	**Sub-Slab Vapor**	**Ambient**
Retail Space 14 (IAQ-Book) Retail Space 12 (IAQ-Vac)	Retail Space 14 (VS-Book) Retail Space 12 (VS-Vac) Retail Space 13 (DCF, DCR, MRE, Fence)	Retail Space 9 (rear)

An additional round of groundwater samples was collected from monitoring wells MW-4 and MW-5 in November 2013. These samples were analyzed for volatile organic compounds (VOCs) via EPA 8260. Upon review of the analytical data and assuming the asymptotic pattern of contaminant trends remains consistent, a petition to discontinue groundwater monitoring will be prepared and submitted to NYSDEC.

3.2.1.1 Sampling Protocol

As an initial step to collecting sub-slab vapor samples from the previously installed sub-slab soil gas sampling points, three volumes of air will be purged from the Teflon™ sampling tube using a low flow air pump at a rate of 100 ml/m. During purging activities a tracer gas (i.e., helium) will be used to verify that the ambient air from inside the retail spaces do not dilute the sub-slab or soil vapor sample that will be collected. An enclosure (i.e., clean empty five-gallon bucket) will be inverted over the sub-slab sampling point. Ultra-high purity (laboratory grade) helium will then be introduced into the bucket, creating a helium-enriched environment immediately over the borehole. A tedlar sampling bag will be attached to

the low-flow air pump and filled with the purge vapor as the helium is added to the enclosure over the top of the borehole. The purge volume in the tedlar bag will then be screened for the tracer gas (helium) using a direct read field meter. The atmosphere in the enclosure will also be screened for helium using a direct read field meter. The helium concentration in the tedlar bag will be compared to the concentration in the enclosure. If the helium concentration in the tedlar bag is greater than 20 percent of the helium concentration in the enclosure, the seals of the sampling equipment will have been verified and the tubing will be purged again until the helium concentration in the tedlar bag is less than 20 percent of the concentration in the enclosure.

Following purging activities, a laboratory cleaned and evacuated six-liter SUMMA canister will then be attached to the top of the Teflon™ tubing above land surface. The SUMMA canister will be equipped with a laboratory provided flow regulator that was pre-calibrated to collect samples over a continuous 8-hour time period. The valve on the SUMMA canister will be opened, allowing for the collection of a sub-slab vapor sample.

Indoor air quality and outdoor (ambient) air samples will be collected concurrently with the sub-slab vapor samples described above. The samples will be collected using a 6-liter SUMMA canister equipped with a pre-calibrated flow regulator set to collect the sample over an 8-hour period.

Indoor air quality, sub-slab vapor and ambient air samples will be submitted to TestAmerica Laboratories, Inc. of Burlington, Vermont under chain-of-custody procedures for analysis. All samples will be submitted for analysis for select VOCs (vinyl chloride, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene) using United States Environmental Protection Agency Method TO-15.

The sampling frequency may be modified with the approval NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

All soil vapor and indoor air quality sampling activities will be recorded in a field book and a sampling log presented in Appendix E. Other observations will be noted on the well sampling log. The sampling log will serve as the inspection form for the soil vapor and indoor air quality network.

3.2.1.2 Repairs, Replacement And Decommissioning

Repairs and/or replacement of soil vapor points will be performed based on assessments of structural integrity and overall performance.

3.4 Site-Wide Inspection

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

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;

- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that Site records are up to date.

3.5 Monitoring Quality Assurance/Quality Control

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the Site (Appendix G). Main Components of the QAPP include:

1. QA/QC Objectives for Data Measurement;
2. Sampling Program:
   - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
   - Sample holding times will be in accordance with the NYSDEC ASP requirements.
   - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
3. Sample Tracking and Custody;
4. Calibration Procedures:
   - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
   - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
5. Analytical Procedures;
6. Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.
7. Internal QC and Checks;
8. QA Performance and System Audits;
9. Preventative Maintenance Procedures and Schedules;
10. Corrective Action Measures.

3.6 Monitoring Reporting Requirements

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-Site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP. All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared subsequent to each sampling event. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;

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

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 3.6 below.

Table 3.6: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Report Submittal	**Annually**

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC.

4.0 OPERATION AND MAINTENANCE PLAN

4.1 Introduction

The Site remedy does not rely on any long-term mechanical systems, such as air sparge/soil vapor extraction systems to protect public health and the environment. However, a short term (i.e. < 5 years) SSDS has been employed at the Site. As such, this Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the Site. This Operation and Maintenance Plan:

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

A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

4.2 Engineering Control System Operation and Maintenance

This section describes the operation and maintenance activities that have been and will be performed at the Site. These activities include:

- Sub-slab vapor monitoring;
- Performance monitoring of the SSDS; and
- Inspection and maintenance of the SSDS.

4.2.1 Scope

The operation and maintenance requirements include guidelines for general O&M practices and procedures that will be used to control the equipment performance and reliability.

4.2.2 System Start-Up and Testing

The SSDS was started on July 30, 2009. A vacuum of approximately 2 in. w.c. was measured at the blower inlet (dilution valve 100% open). The vacuum readings measured at the five sub-slab monitoring points during start-up are as follows:

VS-DCF (front of dry cleaner store/Retail Space 13) .....0.8 in. of w.c.
VS-MRE (middle of dry cleaner store/ Retail Space 13).....1.7 in. of w.c.
VS-DCR (rear of dry cleaner store/ Retail Space 13).....0.4 in. of w.c.
VS-Book (inside bookstore/ Retail Space 14).....0.5 in. of w.c.
VS-Vac (inside wine store/ Retail Space 12) .....1.3 in. of w.c.
VS-Fence (exterior soil vapor point behind dry cleaner/ Retail Space 13).....0.4 in of w.c.

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

4.2.3 System Operation: Routine Operation Procedures

Routine operation procedures of the SSDS consists of monitoring the vacuum at the blower inlet and dilution valve setting (i.e., 50% open), PID readings of the blower effluent and monitoring the vacuum at the sub-slab vapor monitoring points.

4.2.4 System Operation: Routine Equipment Maintenance

The routine maintenance activities include visual inspections, operating data collection and general maintenance. Visual inspection is the routine part of the SSDS operator's activities. The system operator will note any conditions which present a potential hazard or could cause future system shutdown. In the field, special attention will be paid to the condition of the blower and appurtenances, vapor phase carbon unit, and the SSDS aboveground piping and supports. At the blower enclosure, special attention should be given to any unusual or excessive noise or vibrations from the piping and blower. The piping and valves will be inspected for leaks.

All equipment maintenance will be performed in accordance with manufacturer's instructions. Specific routine maintenance tasks are outlined below:

- Inspect SSDS piping to confirm operation of appropriate valves (i.e., dilution valve);
- Inspect vacuum/pressure gauges for proper operation;
- Check and clean air filter on knockout tank; and
- Check for the presence of water in the knockout tank.

4.2.5 System Operation: Non-Routine Equipment Maintenance

Non-routine equipment maintenance consists of maintenance activities that will be performed with less frequency than the routine (i.e., semi-annually) on several system components. Non-routine equipment maintenance will be performed in accordance with manufacturer's instructions. Specific non-routine maintenance tasks are outlined below:

- Replacement of blower enclosure exhaust fan;
- Check float switch in knockout tank for proper operation;
- Replacement of vacuum/pressure gauges; and
- Change bearings on blower after 15,000 hours of operation.

4.3 Engineering Control System Performance Monitoring

To ensure that the SSDS system performs as designed, a sampling and monitoring plan has been implemented since start-up of the SSDS. Vapor samples will also be collected from the sub-slab monitoring points to evaluate the performance and effectiveness of the SSDS in mitigating the sub-slab soil vapor using 6-liter Summa Canisters and analyzed for USEPA TO-15. The effluent of the blower and the VPGAC unit will continue to be monitored with a PID.

In addition, system monitoring will be performed by collecting operating data such as flow rates, vacuums and pressures from the treatment system components and measuring vacuum in the sub-slab vapor monitoring points.

4.3.1 Monitoring Schedule

The SSDS will be monitored on a monthly basis. Sub-slab vapor samples will be collected on an annual basis to verify achievement of the SSDS in mitigating the sub-slab soil vapor.

Inspection frequency is subject to change with the approval of the NYSDEC. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Monitoring deliverables for the SSDS system are specified later in this Plan.

4.3.2 General Equipment Monitoring

A visual inspection of the SSDS will be conducted during each monitoring event. SSDS components to be monitored include, but are not limited to, the following:

- Vacuum/pressure and air flow readings at the blower;
- Vacuum readings at the sub-slab vapor monitoring points; and
- PID readings of the blower effluent and the effluent of the VPGAC unit.

A complete list of components to be checked is provided in the Inspection Checklist, presented in Appendix H. If any equipment readings are not within their typical range, any equipment is observed to be malfunctioning, or the system is not performing within specifications, maintenance and repair as per the Operation and Maintenance Plan are required immediately, and the SSDS system restarted.

4.3.3 System Monitoring Devices and Alarms

The SSDS has a float switch for the knockout tank to indicate a high liquid level in the knock out tank that will shut down the system. The blower has an overload relay that will shutdown the blower for too high voltage or current.

In the event that the warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS system restarted. Operational problems will be noted in the subsequent Periodic Review Report.

4.3.4 Sampling Event Protocol

All SSDS monitoring sampling activities will be recorded in a field book and a monitoring log. The sub-slab vapor monitoring point sampling protocol will follow the procedures discussed in Section 3.2.1.

4.4 Maintenance and Performance Monitoring Reporting Requirements

Maintenance reports and any other information generated during regular operations at the Site will be kept on-file on-Site. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and submitted as part of the Periodic Review Report, as specified in the Section 5 of this SMP.

4.4.1 Routine Maintenance Reports

Checklists or forms (see Appendix H) will be completed during each routine maintenance event. Checklists/forms will include, but not be limited to the following information:

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

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

4.4.2 Non-Routine Maintenance Reports

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

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

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 Site Inspections

5.1.1 Inspection Frequency

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

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

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

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

5.1.3 Evaluation of Records and Reporting

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

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

5.2 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a qualified environmental professional and/or Professional Engineer licensed to practice in New York State (for the duration of the short term engineering control – SSDS) will prepare the following certification:

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

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;

- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program [and generally accepted engineering practices]; and
- The information presented in this report is accurate and complete.
- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-Site contamination are no longer valid; and

Every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Charles McGuckin, P.E., of Roux, Associates, Inc., am certifying as the Owner's Designated Site Representative: I have been authorized and designated by all Site owners to sign this certification for the Site.

The signed certification will be included in the Periodic Review Report described below (for the duration of the short term engineering control – SSDS).

Following a Department approved discontinuance of the short term control (SSDS), the following will be enforced:

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

- The institutional control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the environmental easement.
- The information presented in this report is accurate and complete.

- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-Site contamination are no longer valid; and

Every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Michael P. Raffoni, P.G., of Reliance Environmental, Inc., am certifying as Owner's Designated Site Representative for the Site.

The signed certification will be included in the Periodic Review Report described below (for years/reports following the termination of the short term engineering control – SSDS).

5.3 Periodic Review Report

A Periodic Review Report will be submitted to the Department every year, within eighteen months after the Certificate of Completion is issued. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix A (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual Site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Site-specific RAWP, ROD or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
  - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - The overall performance and effectiveness of the remedy.

- A performance summary for the short term treatment system (until discontinued) at the Site during the calendar year, including information such as:
  - The number of days the system was run for the reporting period;
  - The average, high, and low flows per day;
  - The contaminant mass removed;
  - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - A description of the resolution of performance problems;
  - A summary of the performance, effluent and/or effectiveness monitoring; and
  - Comments, conclusions, and recommendations based on data evaluation.

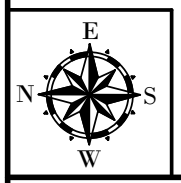
The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 Corrective Measures Plan

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

FIGURES

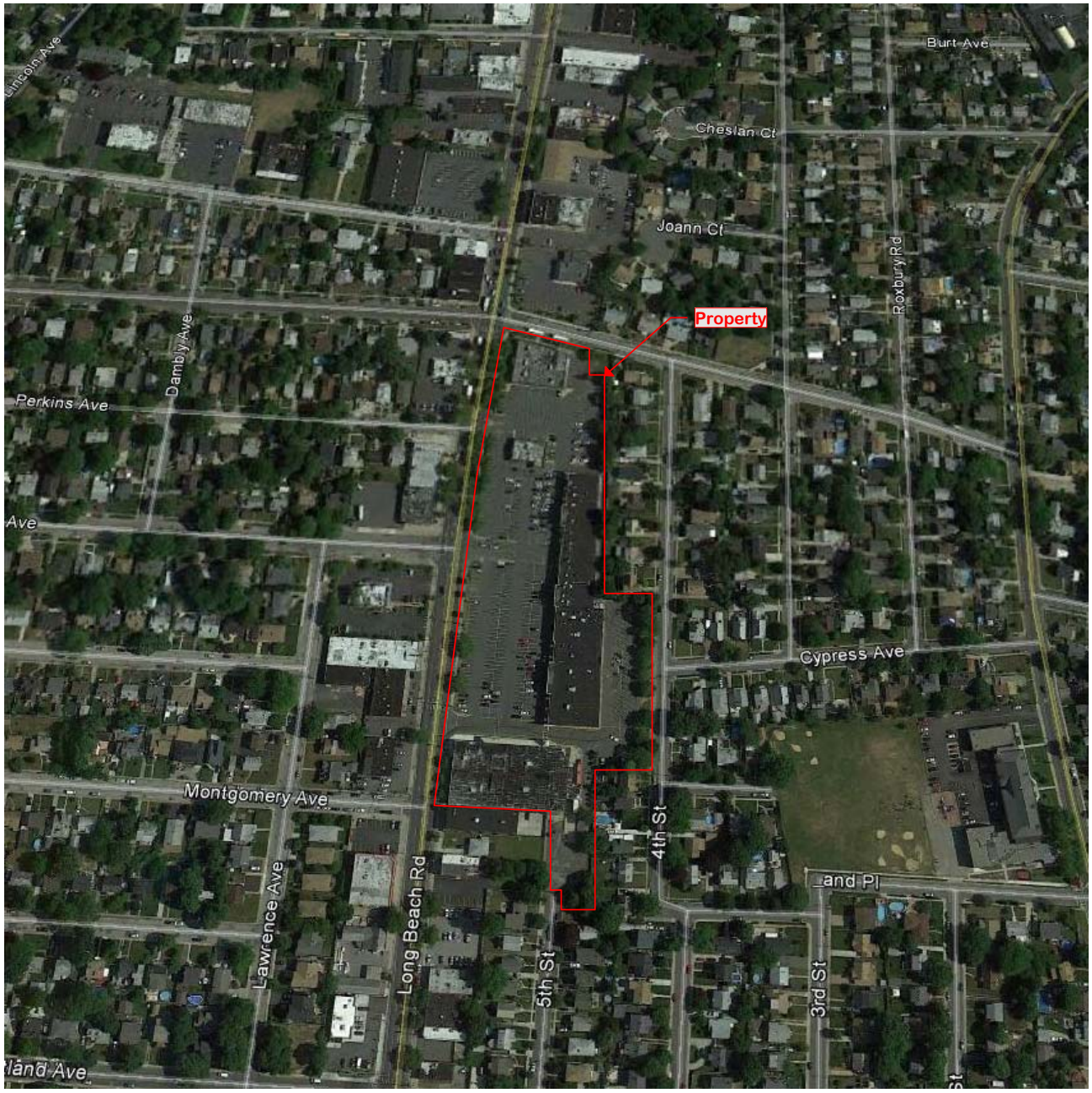
1 : Nathan's Famous
2 : Greenpoint Bank
3 : Massage Envy
4 : Day Spa
5 : Yogurt Plus
6 : Vacant
7 : Gamestop
8 : AT&T Wireless
9 : Protass
10 : Temptations Boutique
11 : Opticians
12 : Vino 100
13 : Jef-El Dry Cleaners
14 : Swirls & Twirls Yogurt
15 : Kravit Jewelers
16 : Italian Restaurant
17 : Jos. A BankHallmark
18 : Citibank
19 : Rite Aid
20 : TJ Maxx



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

Figure 1:
Retail Space Identification and Site Boundaries

Oceanside Plaza
3131-3221 Long Beach Road, Oceanside, NY
Town of Hempstead, Nassau County
Not to Scale



N
W E
S

Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

Figure 2:
Site Location Map

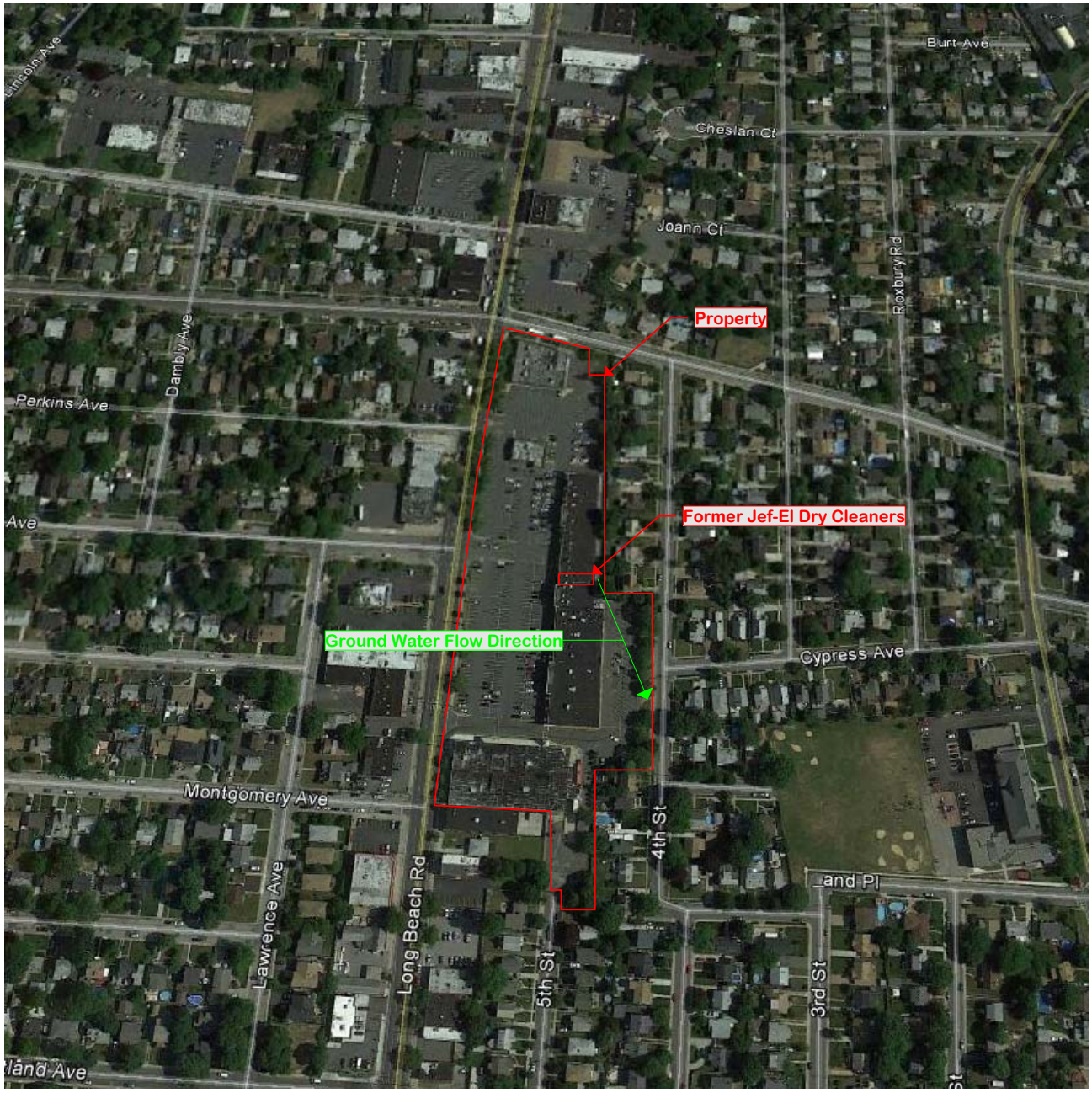
Google Earth (June 17, 2010)

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 350'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

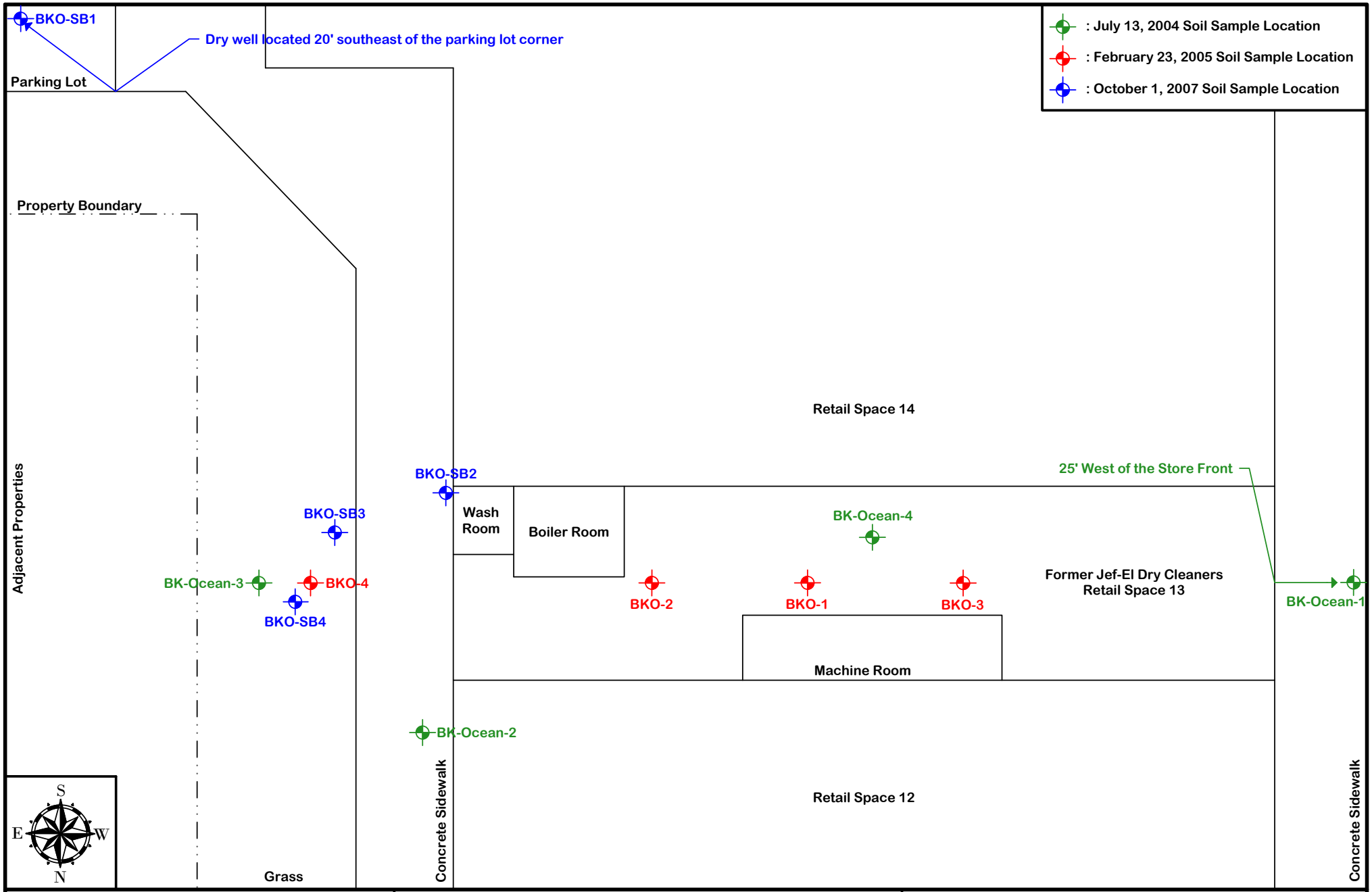
Figure 3:
Ground Water Flow Map

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 350'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

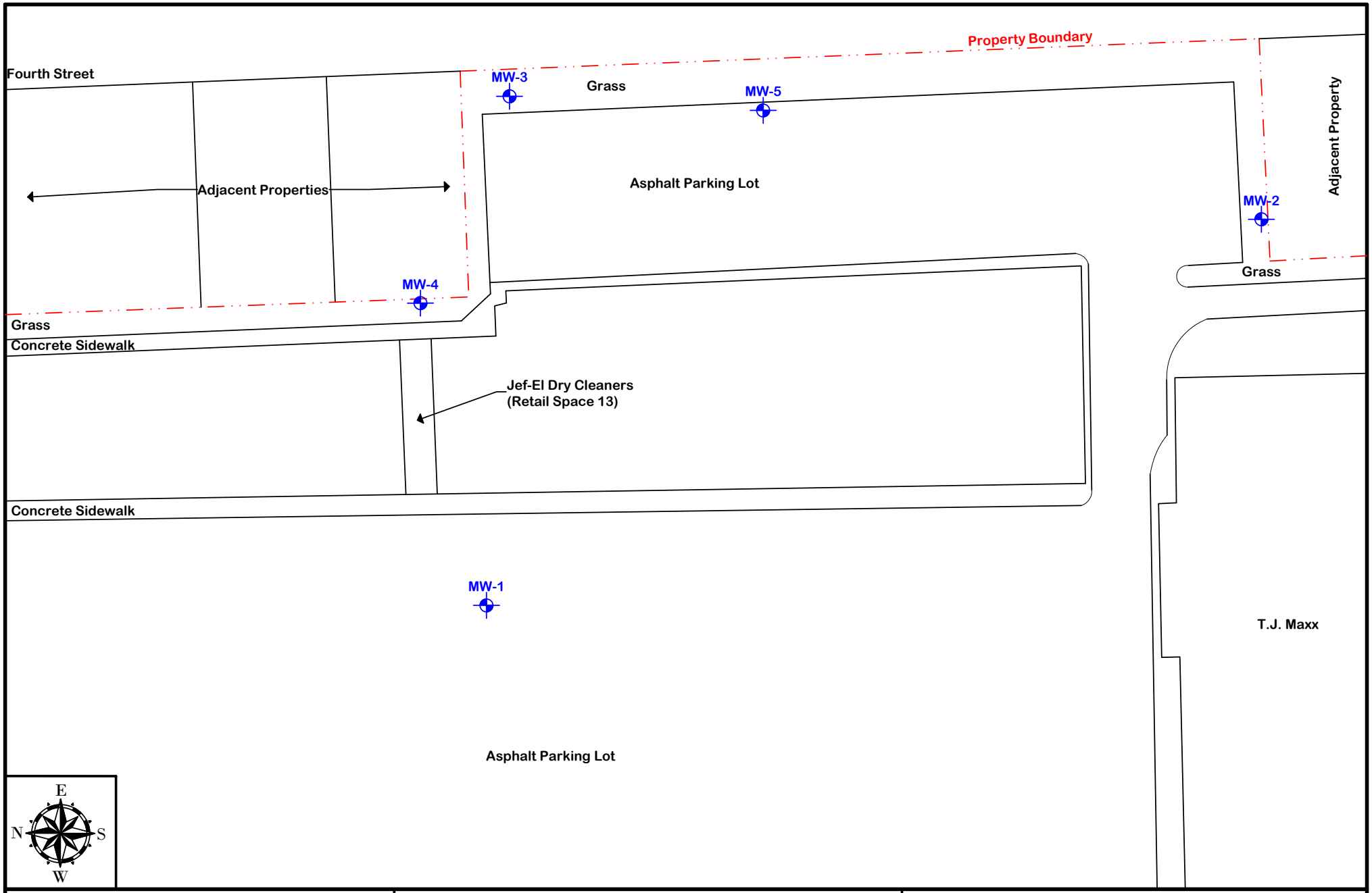
Figure 4:
Pre-Remediation
Soil Contamination Summary

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

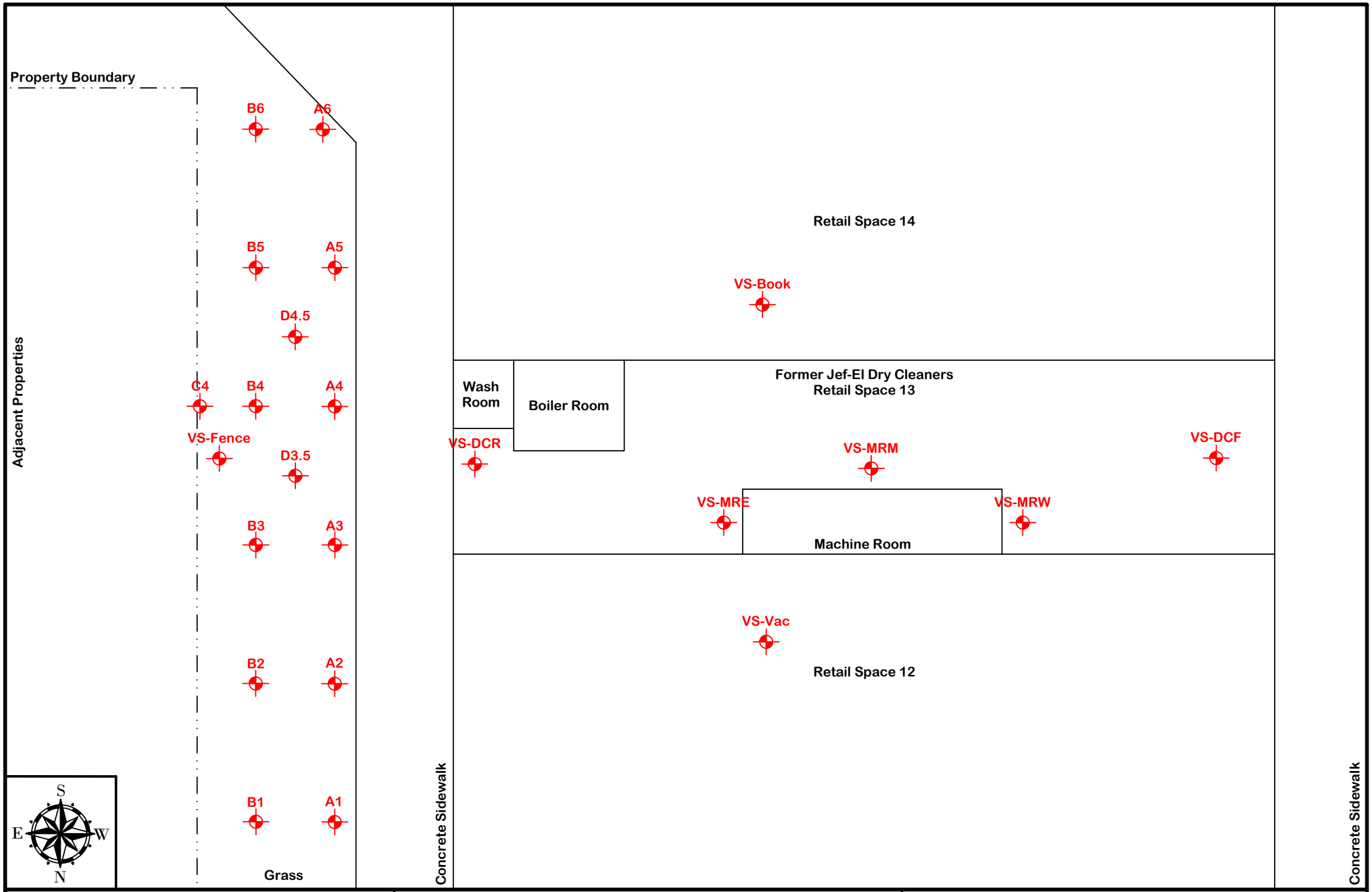
Figure 5:
Ground Water Monitoring Well Location Map

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 60'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

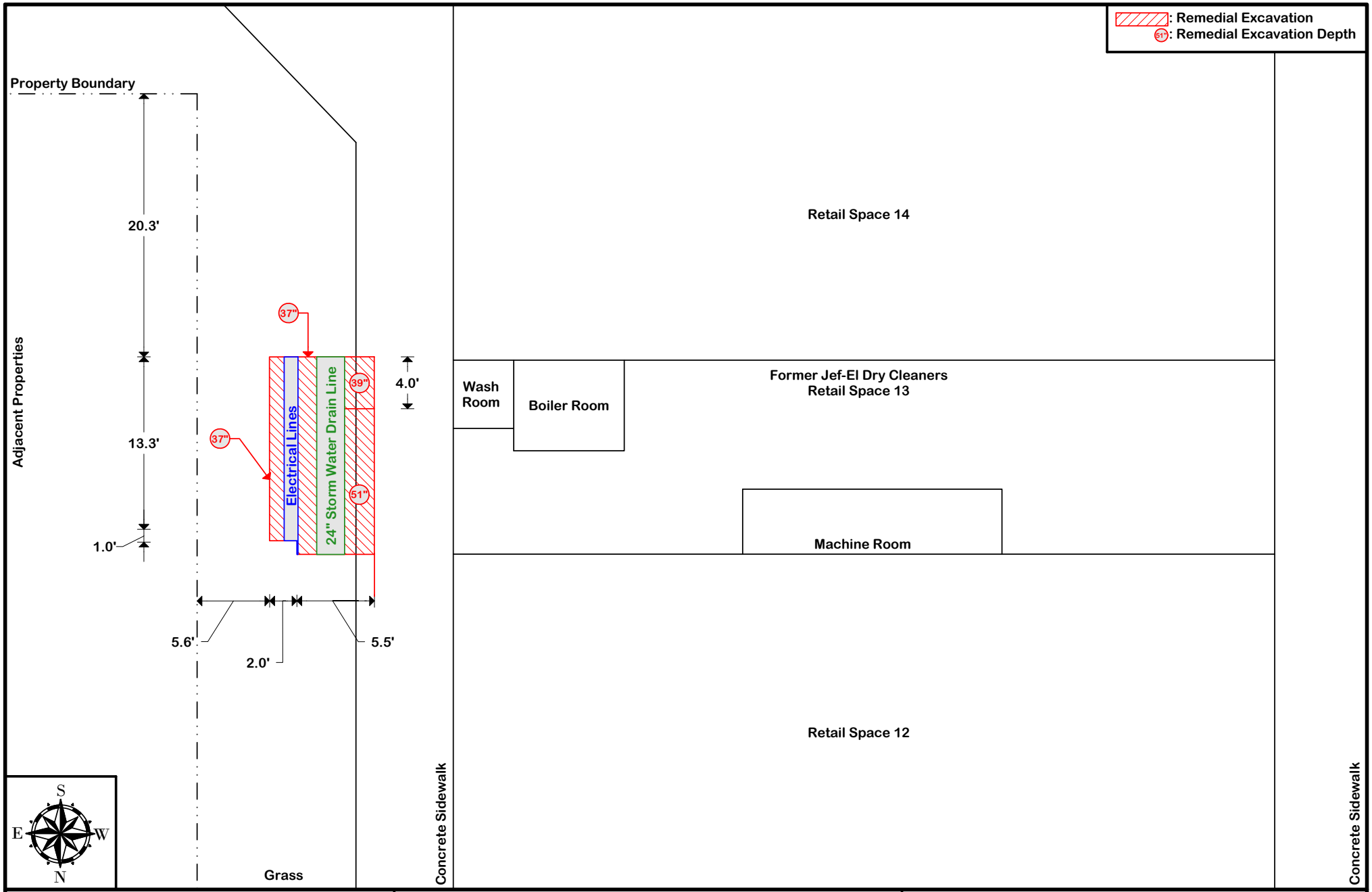
Figure 6:
Remedial Investigation
Soil Vapor Data

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

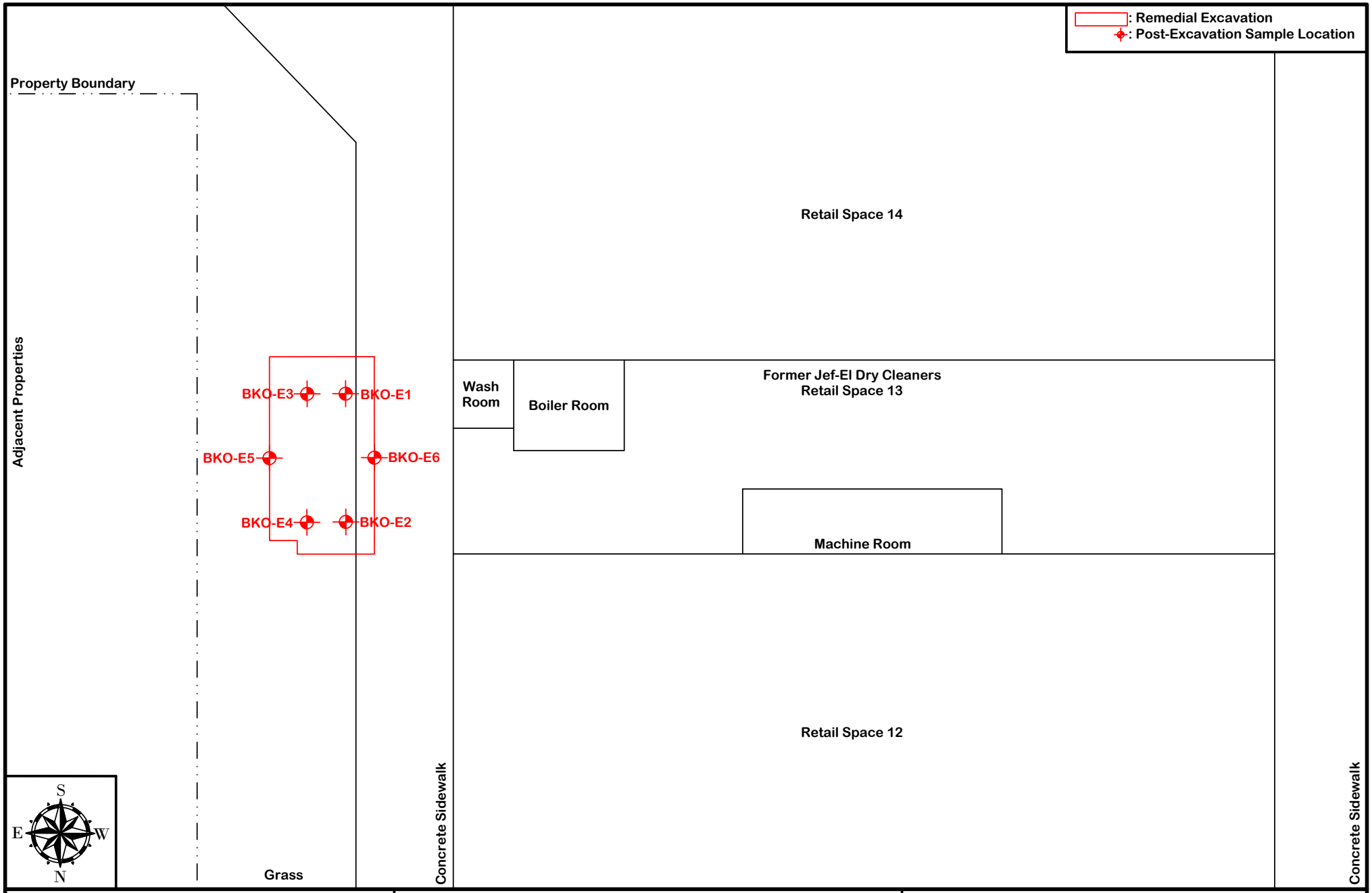
Figure 7: Extent of Remedial Excavation Performed (July 2009)

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

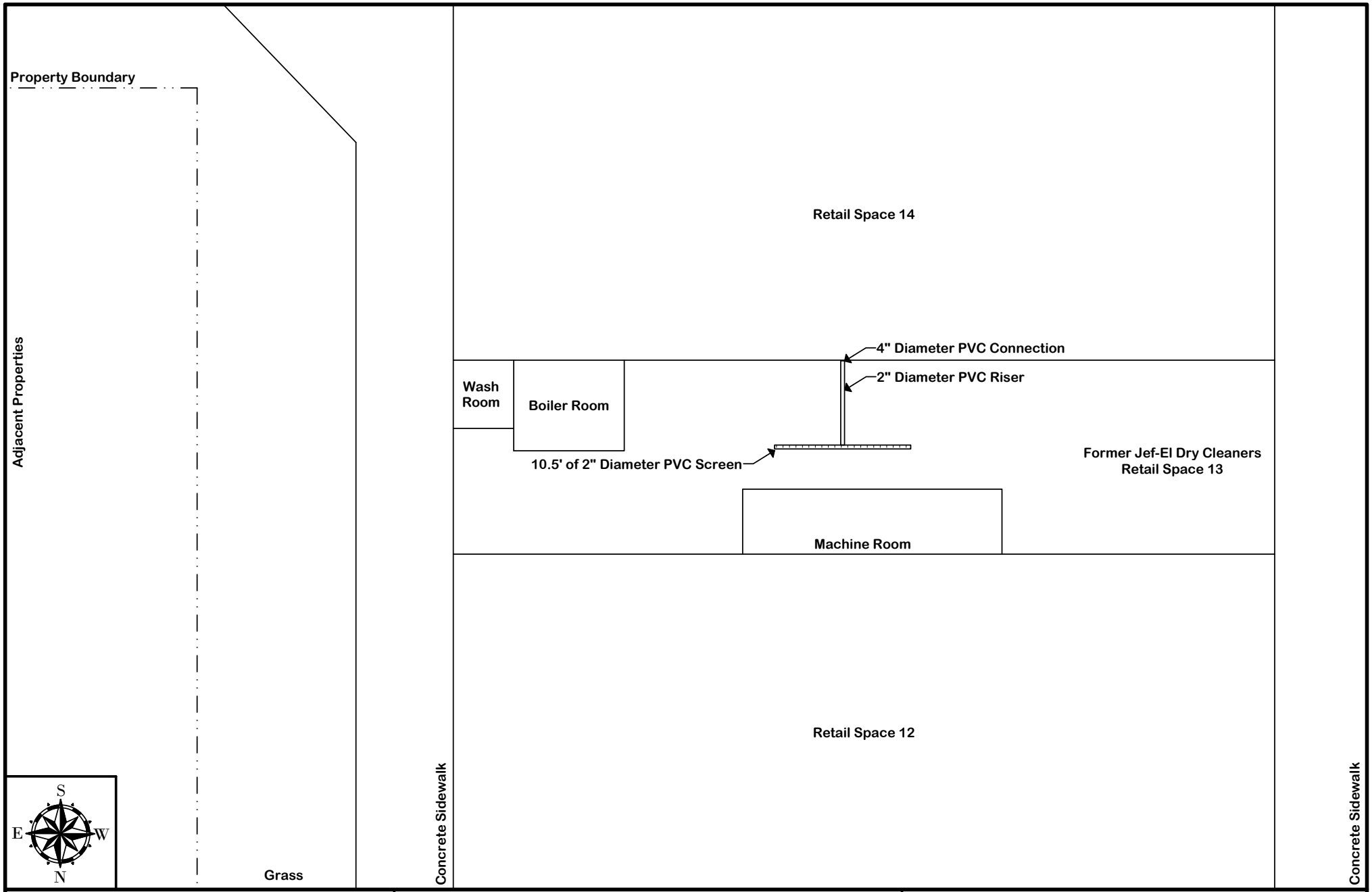
Figure 8:
Post Interim Remedial Measure
Soil Sample Locations

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

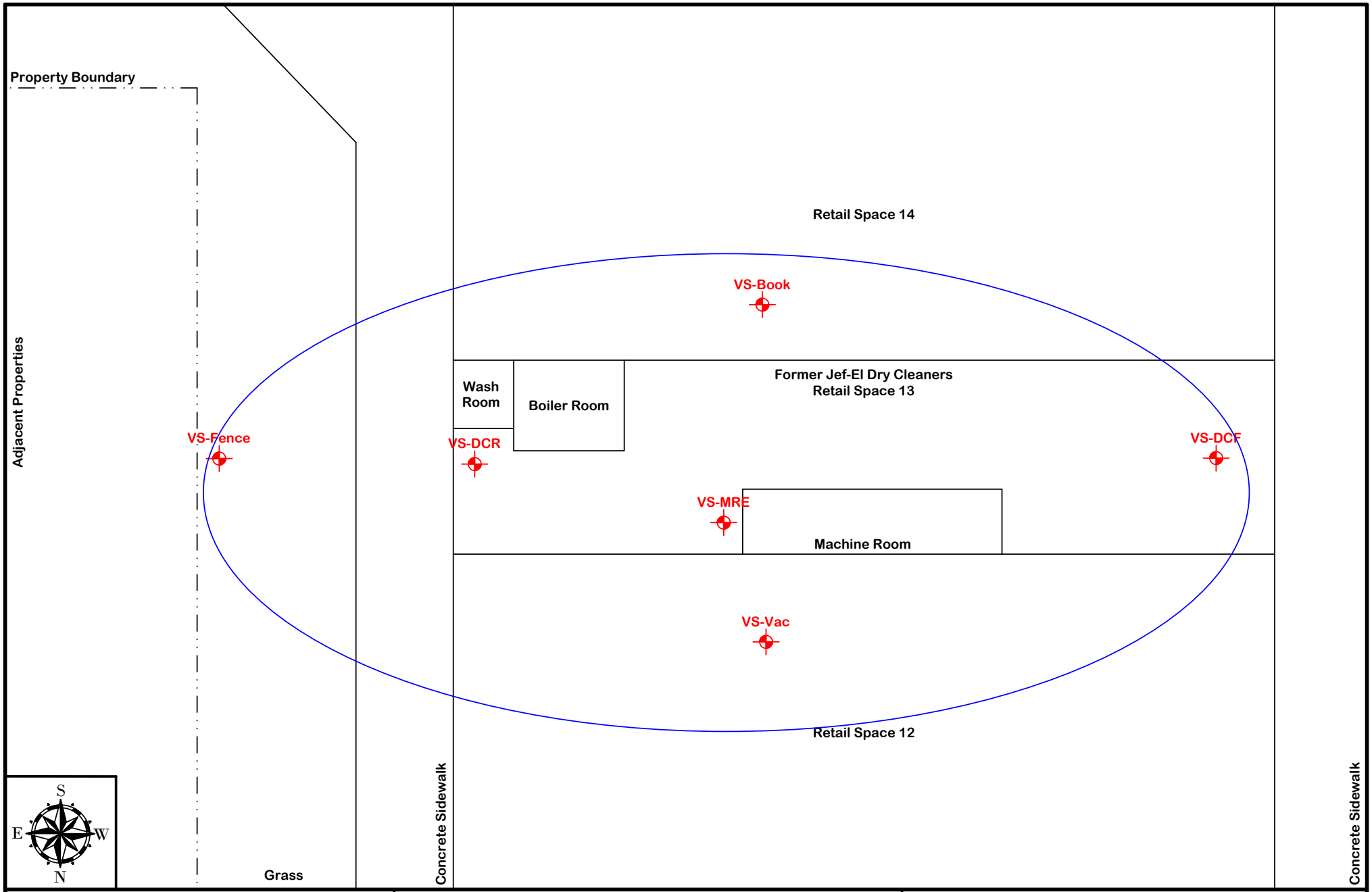
Figure 9: Location of Remedial Treatment System

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
ww.relianceenv.com

Figure 10: Area of Soil Vapor Intrustion Concern

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'

TABLES

TABLE 1.3.1
Remedial Investigation Soil Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample ID	Sample Date	Sample Depth (feet)	1,1-Dichloroethene (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Tetrachloroethene (mg/kg)	Toluene (mg/kg)	Trichloroethene (mg/kg)	Vinyl Chloride (mg/kg)
SCO*	na	na	0.33	0.25	1.3	0.70	0.47	0.02
BK-Ocean-1	7/13/2004	8	ND	ND	ND	ND	ND	ND
BK-Ocean-2	7/13/2004	6	ND	ND	0.51	ND	ND	ND
BK-Ocean-3	7/13/2004	6	ND	ND	0.67	ND	ND	ND
BK-Ocean-4	7/13/2004	2	ND	ND	**85**	ND	0.11	ND
BKO-1	2/23/2005	1	ND	ND	0.41	ND	ND	ND
		3	ND	ND	0.075	ND	ND	ND
BKO-2	2/23/2005	1	ND	ND	0.20	ND	ND	ND
		3	ND	ND	0.14	ND	ND	ND
BKO-3	2/23/2005	1	ND	ND	**1.6**	ND	0.0017	ND
		3	ND	ND	0.057	ND	ND	ND
		7	ND	ND	0.016	ND	ND	ND
BKO-SB1**	10/1/2007	3	ND	ND	ND	**4.1**	ND	ND
BKO-SB2	10/1/2007	18	ND	ND	0.52	ND	ND	ND
BKO-SB3	10/1/2007	12	ND	ND	**740**	ND	ND	ND
BKO-SB4	10/1/2007	18	ND	ND	**1,200**	ND	ND	ND
E1	12/20/10	39	ND	ND	ND	ND	ND	ND
		80***	ND	ND	ND	ND	ND	ND
E2	12/20/10	51	ND	ND	0.031	ND	ND	ND
		80***	ND	ND	ND	ND	ND	ND
E3	12/20/10	42	ND	ND	0.005	ND	ND	ND
		80***	ND	ND	ND	ND	ND	ND
E4	7/21/09	42	ND	ND	1.1	ND	ND	ND
E5	7/21/09	18	ND	ND	1.3	ND	ND	ND
E6	12/20/10	24	ND	ND	0.022	ND	ND	ND
		80***	ND	ND	0.019	ND	ND	ND

* = Track 1 - Unrestricted Use Soil Cleanup Objectives (Chapter 4, Subpart 375-6, Table 375-6.8(a))
** = Collected from strom water dry well located in the eastern parking lot.
*** - Sample collected at the soil/water interface.

na = Not Applicable.
ND = Non Detect.
BOLD = Exceeds the Track 1 Soil Cleanup Objectives.

Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
www.relianceenv.com

TABLE 1.3.2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
GWQS*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
MW-1	11/16/2005	5.54	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	5.77	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	5.79	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	6.51	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
MW-2	11/16/2005	6.06	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	**12**
	2/22/2006	6.28	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.23	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	**13**
	10/1/2007	6.99	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
MW-3	11/16/2005	6.53	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	6.74	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.78	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	7.48	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

na = Not Applicable.

* = Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

TABLE 1.3.2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
GWQS*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
MW-4	11/16/2005	6.60	<2.0	<2.0	**360**	<2.0	<1.0	<2.0	<2.0
	2/22/2006	6.82	<2.0	<2.0	**230**	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.84	<2.0	<2.0	**100**	<2.0	<1.0	<2.0	<2.0
	10/1/2007	7.57	<5.0	<5.0	**110**	<5.0	<5.0	<5.0	NA
	7/21/2009	6.90	<0.8	<0.8	**77**	<0.8	<1.0	<1.0	NA
	10/7/2009	7.33	<5.0	<5.0	**21**	<5.0	<5.0	<5.0	NA
	1/21/2010	7.09	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	5.95	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	7.53	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	7.05	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	NA
	7/19/2011	7.49	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	10/26/2011	7.00	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	1/24/2012	7.13	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	NA
	4/25/2012	7.23	<5.0	<5.0	**9**	<5.0	<5.0	<5.0	NA
	7/20/2012	7.21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	7.46	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

na = Not Applicable.

* = Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

TABLE 1.3.2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
GWQS*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
MW-5	7/21/2009	6.44	<0.8	<0.8	**160**	<0.8	1.00	<1.0	NA
	10/7/2009	6.88	<5.0	**54**	**74**	<5.0	<5.0	**17**	NA
	1/21/2010	6.64	<5.0	<5.0	**80**	<5.0	<5.0	<5.0	NA
	4/7/2010	5.49	<5.0	<5.0	**37**	<5.0	<5.0	<5.0	NA
	7/22/2010	7.06	<5.0	**74**	**69**	<5.0	<5.0	<5.0	NA
	1/26/2011	6.56	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	7.03	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	6.55	<5.0	**57**	**8**	<5.0	<5.0	**13**	NA
	1/24/2012	6.67	<5.0	**80**	**7**	<5.0	<5.0	**10**	NA
	4/25/2012	6.76	<5.0	**11**	**10**	<5.0	<5.0	<5.0	NA
	7/20/2012	6.75	<5.0	**9**	**14**	<5.0	<5.0	<5.0	NA
	10/18/2012	6.99	<5.0	**11**	**10**	<5.0	<5.0	<5.0	NA

na = Not Applicable.

* = Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

TABLE 1.3.2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
GWQS*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
Duplicate (MW-4)	10/1/2007***	na	<5.0	<5.0	**160**	<5.0	<5.0	<5.0	NA
	7/21/2009***	na	<0.8	<0.8	**75**	<0.8	<1.0	<1.0	NA
	10/7/2009***	na	<5.0	<5.0	**20**	<5.0	<5.0	<5.0	NA
	1/21/2010***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011***	na	<5.0	<5.0	**13**	<5.0	<5.0	<5.0	NA
	7/19/2011***	na	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	10/26/2011***	na	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	1/24/2012***	na	<5.0	<5.0	**12**	<5.0	<5.0	<5.0	NA
	4/25/2012***	na	<5.0	<5.0	**9**	<5.0	<5.0	<5.0	NA
	7/20/2012***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

na = Not Applicable.

* = Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

TABLE 1.3.2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
GWQS*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
Field Blank	11/16/2005	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	<0.8	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/21/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

na = Not Applicable.

* = Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

TABLE 1.3.2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
GWQS*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
Trip Blank	11/16/2005	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	<0.8	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/21/2020	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

na = Not Applicable.

* = Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

TABLE 1.3.3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Indoor Air Quality								
Air Guideline Value*		DNE	DNE	DNE	30	DNE	5	DNE
Chapter One Books, Inc. (Retail Space 14)	12/6/2007	0.63U	0.63U	0.63U	**88**	0.63U	**5.9**	0.41U
	9/2/2009	2U	2U	2U	**500**	2U	2.7U	1.3U
	10/28/2009	0.63U	0.63U	0.63U	11	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	2.3	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	**32**	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	8.1	0.79U	0.33	0.51U
Vino 100 (Retail Space 12)	12/6/2007	0.63U	0.63U	0.63U	2.6	0.63U	0.86U	0.41U
	9/2/2009	4U	4U	4U	**880**	4U	5.4U	2.6U
	10/28/2009	0.63U	0.63U	0.63U	7.5	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	5.2	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	28	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	13	0.79U	0.21U	0.51U
Sub-Slab Vapor								
Chapter One Books, Inc. (Retail Space 14)	12/6/2007	48U	48U	48U	8,100	48U	64U	31U
	10/28/2009	0.63U	0.63U	0.63U	2.5	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	467	0.79U	7	0.51U
	3/1/2012	3.2U	3.1U	3.2U	232	3.2U	1.2	2U
	12/18/2012	3.2U	3.1U	3.2U	131	3.2U	0.86U	2U

* = NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” (Indoor Air Quality Only).

** = Ambient air quality sample.

BOLD = Exceeds the Air Guideline Value.

DNE = Does Not Exist.

TABLE 1.3.3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Sub-Slab Vapor								
Vino 100 (Retail Space 12)	12/6/2007	120U	120U	120U	18,000	120U	160U	77U
	10/28/2009	0.63U	0.63U	0.63U	2.4	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	4,180	0.79U	78.5	0.51U
	3/1/2012	44U	43U	44U	21,100	44U	97.8	28U
	12/18/2012	13U	13U	13U	9,830	13U	36U	8.2U
Jef-El Dry Cleaners (DCF) (Retail Space 13)	12/6/2007	1.2U	1.2U	1.2U	350	1.2U	2.5	0.77U
	10/28/2009	0.63U	0.63U	0.63U	2.2	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	150	0.79U	2.6	0.51U
	3/1/2012	3.2U	3.1U	3.2U	766	3.2U	3.7	2U
	12/18/2012	3.2U	3.1U	3.2U	11	3.2U	0.86U	2U
Jef-El Dry Cleaners (DCR) (Retail Space 13)	12/6/2007	320U	320U	320U	81,000	320U	430U	200U
	10/28/2009	0.63U	0.63U	0.63U	2.9	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	3,480	0.79U	21	0.51U
	3/1/2012	3.2U	3.1U	3.2U	1,990	3.2U	2.2	2U
	12/18/2012	3.2U	3.1U	3.2U	164	3.2U	0.86U	2U

* = NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” (Indoor Air Quality Only).

** = Ambient air quality sample.

BOLD = Exceeds the Air Guideline Value.

DNE = Does Not Exist.

TABLE 1.3.3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Sub-Slab Vapor								
Jef-El Dry Cleaners (MRE) (Retail Space 13)	12/6/2007	280U	280U	280U	50,000	280U	380	180U
	9/4/2009	3.2U	3.2U	3.2U	37	3.2U	51	2U
	10/28/2009	0.63U	0.63U	0.63U	2.5	0.63U	15	0.41U
	1/13/2012	0.79U	0.79U	0.79U	1,080	0.79U	56.4	0.51U
	3/1/2012	3.2U	3.1U	3.2U	902	3.2U	3.5	2U
	12/18/2012	3.2U	3.1U	3.2U	205	3.2U	0.86U	2U
Jef-El Dry Cleaners (Fence) (Retail Space 13)	12/6/2007	1.2U	1.2U	1.2U	240	1.2U	1.6U	0.77U
	1/13/2012	0.79U	0.79U	0.79U	46	0.79U	0.39	0.51U
	3/1/2012	3.2U	3.1U	3.2U	224	3.2U	0.86U	2U
	12/18/2012	3.2U	3.1U	3.2U	1.1U	3.2U	0.86U	2U
Pizzaiola (Retail Space 13)	6/14/2010	0.63U	0.63U	0.63U	5	0.63U	0.86U	0.41U
Protass (Retail Space 9)	6/14/2010	0.63U	0.63U	0.63U	17	0.63U	0.86U	0.41U

* = NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” (Indoor Air Quality Only).

** = Ambient air quality sample.

BOLD = Exceeds the Air Guideline Value.

DNE = Does Not Exist.

TABLE 1.3.3 Remedial Investigation Soil Vapor Data Oceanside Plaza (NYSDEC Site Number: C130158) 3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York								
Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Ambient								
AMB**	12/6/2007	0.63U	0.63U	0.63U	1.1U	0.63U	0.86U	0.41U
	9/2/2009	0.63U	0.63U	0.63U	1.1U	0.63U	0.86U	0.41U
	6/14/2010	0.63U	0.63U	0.63U	13	0.63U	1.40	0.41U
	1/13/2012	0.79U	0.79U	0.79U	0.6	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	0.57	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	1.2	0.79U	0.21U	0.51U

* = NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” (Indoor Air Quality Only).

** = Ambient air quality sample.

BOLD = Exceeds the Air Guideline Value.

DNE = Does Not Exist.

TABLE 1.4.1 Soil Cleanup Objectives for the Site Oceanside Plaza (NYSDEC Site Number: C130158) 3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York					
1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
0.33	0.25	1.3	0.19	0.47	0.02

All Siol cleanup Objectives are reported in mg/kg.

Track 1 - Unrestricted Use Soil Cleanup Objectives (Chapter 4, Subpart 375-6, Table 375-6.8(a))

APPENDIX A
METES AND BOUNDS

METES AND BOUNDS DESCRIPTION
LOTS 18-20, 41-45, 75-92, 107 & 355, BLOCK 368, SECTION 43
TOWN OF HEMPSTEAD
NASSAU COUNTY. STATE OF NEW YORK

ALL THAT CERTAIN TRACT, LOT OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE TOWN OF HEMPSTEAD, COUNTY OF NASSAU, STATE OF NEW YORK, BEING PARTIALLY KNOWN AND DESIGNATED AS LOTS 27-44 IN BLOCK 368 ON A CERTAIN MAP ENTITLED. "MAP OF SUNSHINE TERRACE, SITUATED AT OCEANSIDE, NEW YORK, OWNED BY CHAS. F. BEHR, MARBRIDGE BUILDING, BROADWAY AND 34TH STREET, NEW YORK CITY," PREPARED BY SMITH AND MALCOLMSON, INC., DATED JANUARY 1925, FILED IN THE NASSAU COUNTY CLERK'S OFFICE ON MAY 12, 1925 AS MAP NO. 560, ALSO BEING PARTIALLY KNOWN AS LOTS 15-17 IN BLOCK R AND LOT 16 IN BLOCK S ON A CERTAIN MAP ENTITLED, "MAP OF MIRAMAR, SECTION 2, SITUATED AT OCEANSIDE, LONG ISLAND, PROPERTY OF CASTON, INC.," PREPARED BY SMITH AND MALCOMSON, INC., DATED JANUARY 1926, FILED IN THE NASSAU COUNTY CLERK'S OFFICE ON JANUARY 30. 1926 AS MAP NO. 590. BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHERLY LINE OF WINDSOR PARKWAY (A.K.A. ANCHOR AVENUE, A.K.A. WATSON AVENUE, A.K.A. DRAPER AVENUE, VARIABLE WIDTH) WHERE THE SAME IS INTERSECTED BY THE EASTERLY LINE OF LONG BEACH ROAD (VARIABLE WIDTH) AND FROM SAID POINT OF BEGINNING RUNNING THENCE:

1. ALONG SAID LINE OF WINDSOR PARKWAY, SOUTH 64 DEGREES - 06 MINUTES - 51 SECONDS EAST, A DISTANCE OF 192.60 FEET TO A POINT, THENCE:
2. ALONG THE DIVIDING LINE BETWEEN LOT 355 AND LOT 356, BLOCK 368, SOUTH 15 DEGREES – 20 MINUTES - 00 SECONDS WEST, A DISTANCE OF 59.57 FEET TO A POINT, THENCE:
3. ALONG THE DIVIDING LINE BETWEEN LOT 45 AND LOT 356, BLOCK 368, SOUTH 74 DEGREES – 40 MINUTES - 00 SECONDS EAST, A DISTANCE OF 50.98 FEET TO A POINT, THENCE:
4. ALONG THE DIVIDING LINE BETWEEN LOTS 45 & 44 AND LOTS 357, 251,54·57, 148, 147 & 63·74, BLOCK 368, SOUTH 11 DEGREES - 30 MINUTES - 00 SECONDS WEST, A DISTANCE OF 491.07 FEET TO A POINT, THENCE;
5. ALONG THE DIVIDING LINE BETWEEN LOT 75 AND LOT 74, BLOCK 368, SOUTH 78 DEGREES – 30 MINUTES - 00 SECONDS EAST, A DISTANCE OF 100.00 FEET TO A POINT ON THE WESTERLY LINE OF FOURTH STREET (A.K.A. CHARLES STREET, 50 FEET WIDE), THENCE:
6. ALONG SAID LINE OF CHARLES STREET, SOUTH 11 DEGREES - 30 MINUTES - 00 SECONDS WEST, A DISTANCE OF 360.00 FEET TO A POINT, THENCE:
7. ALONG THE DIVIDING LINE BETWEEN LOT 92 AND LOT 93, BLOCK 368, NORTH 78 DEGREES – 30 MINUTES - 00 SECONDS WEST, A DISTANCE OF 100.00 FEET TO A POINT, THENCE:
8. ALONG THE DIVIDING LINE BETWEEN LOTS 41, 20 & 107 AND LOTS 93-106, BLOCK 368, SOUTH 11 DEGREES - 30 MINUTES - 00 SECONDS WEST, A DISTANCE OF 286.30 FEET TO A POINT, THENCE:

9. ALONG THE DIVIDING LINE BETWEEN LOT 107 AND LOT 138, BLOCK 368, NORTH 76 DEGREES – 46 MINUTES - 00 SECONDS WEST, A DISTANCE OF 47.40 FEET TO A POINT ON THE EASTERLY LINE OF FIFTH STREET (50 FEET WIDE), THENCE;
10. ALONG SAID LINE OF FIFTH STREET, NORTH 13 DEGREES - 14 MINUTES - 00 SECONDS EAST, A DISTANCE OF 50.29 FEET TO A POINT, THENCE;
11. ALONG THE NORTHERLY TERMINUS OF FIFTH STREET AND THE SOUTHERLY LINE OF LOTS 20, 19 AND 18, BLOCK 368, NORTH 76 DEGREES - 46 MINUTES - 00 SECONDS WEST, A DISTANCE OF 50.00 FEET TO A POINT, THENCE:
12. ALONG THE DIVIDING LINE BETWEEN LOTS 18 & 41 AND LOTS 139, 145 & 40, BLOCK 368, NORTH 13 DEGREES - 14 MINUTES - 00 SECONDS EAST, A DISTANCE OF 150.00 FEET TO A POINT, THENCE;
13. ALONG THE DIVIDING LINE BETWEEN LOT 41 AND LOT 40, BLOCK 368, NORTH 76 DEGREES – 46 MINUTES - 00 SECONDS WEST, A DISTANCE OF 200.00 FEET TO A POINT ON THE AFOREMENTIONED LINE OF LONG BEACH ROAD. THENCE:
14. ALONG SAID LINE OF LONG BEACH ROAD. NORTH 13 DEGREES - 14 MINUTES - 00 SECONDS EAST, A DISTANCE OF 610.99 FEET TO AN ANGLE POINT IN SAME, THENCE;
15. STILL ALONG SAID LINE OF LONG BEACH ROAD, NORTH 16 DEGREES - 44 MINUTES – 30 SECONDS EAST, A DISTANCE OF 429.96 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 324,532 SQUARE FEET OR 7.450 ACRES.

THIS DESCRIPTION IS WRITTEN WITH REFERENCE TO A TITLE REPORT PREPARED BY LAWYER'S TITLE INSURANCE CORPORATION, TITLE NO. LT040293, WITH AN EFFECTIVE DATE OF JUNE 1, 2004.

APPENDIX B
ENVIRONMENTAL EASEMENT

NASSAU COUNTY CLERK'S OFFICE
ENDORSEMENT COVER PAGE

Recorded Date: 12-03-2013
Recorded Time: 2:38:18 p

Liber Book: D 13020
Pages From: 809
To: 823

Control Number: 1671
Ref #: RE 008686
Doc Type: D02 EASEMENT

Record and Return To:
MAB SERVICES
ONE OLD COUNTRY RD
STE 467
CARLE PLACE, NY 11514

Location:	Section	Block	Lot	Unit
HEMPSTEAD (2820)	0043	00368-00	00018	
HEMPSTEAD (2820)	0043	00368-00	00019	
HEMPSTEAD (2820)	0043	00368-00	00020	
HEMPSTEAD (2820)	0043	00368-00	00041	
HEMPSTEAD (2820)	0043	00368-00	00042	

Taxes Total	.00
Recording Totals	265.00
Total Payment	265.00

KAL001

THIS PAGE IS NOW PART OF THE INSTRUMENT AND SHOULD NOT BE REMOVED
MAUREEN O'CONNELL
COUNTY CLERK

201312030l671

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 12th day of November, 2013 between Owner(s) Oceanside Plaza Associates, LLC, having an office at 151 Irving Place, Woodmere, New York 11598 (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 3131-3221 Long Beach Road, Oceanside, New York in the Town of Hempstead, County of Nassau and State of New York, known and designated on the tax map of the County Clerk of Nassau as tax map parcel numbers: Section 43 Block 368 Lot(s) 18-20, 41-45, 75-92, 107 & 355, being the same as that property conveyed to Grantor by deed dated December 9, 2004 and recorded on December 29, 2004 in the Nassau County Clerk's Office in Liber 11893 Cp 398. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 7.450 +/- acres, and is hereinafter more fully described in the Land Title Survey dated September 5, 2013 prepared by Control Point Associates, Inc., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

AR
MAB SERVICES
ONEOID COUNTRY RD, STE 467
CARLE PLACE, NY 11514

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: A1-0538-0106, 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. Purposes. 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. Institutional and Engineering Controls. 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:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), 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)

(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) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) 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;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) 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 purposes as defined in 6NYCRR 375-1.8(g)(2)(i), 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.

[10/12]

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, 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 b 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. Right to Enter and Inspect. 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. Reserved Grantor's Rights. 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 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. Notice. 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: C130158
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. Recordation. 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. Amendment. 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. Extinguishment. 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. Joint Obligation. 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.

Grantor: Oceanside Plaza Associates, LLC
By: Basser-Kaufman 320, LLC [Member]
By: Basser-Kaufman of Oceanside, LLC [Member]

By: _____

Print Name: Steven Kaufman

Title: Managing Member Date: _____

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Nassau)

On the 6th day of November in the year 2013, before me, the undersigned, personally appeared Steven Kaufman 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

MARIE-LOUISE UNAPANTA
Notary Public, State of New York
No. 01UN6024076
Qualified in Nassau County
Commission Expires 5/3/15

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: _____

Robert W. Schick, Director
Division of Environmental Remediation

State of New York)
)ss.:
County of Albany)

On the 12th day of November in the year 2013 before me, the undersigned, personally appeared Robert Schick personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that (s)he executed the same in his/her capacity, 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

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

SCHEDULE "A" PROPERTY DESCRIPTION

Property Address: 3131 – 3221 Long Beach Road, Oceanside, New York
T/O Hempstead, Nassau County
Tax Map: 43-368-18-20,41-45,75-92,107 & 355

NOVEMBER 1, 2013
C04307.01
DEC SITE NAME: OCEANSIDE PLAZA
DEC SITE #C130158

SCHEDULE A
DESCRIPTION OF ENVIRONMENTAL EASEMENT

PARCEL 1 (LOTS 18 TO 20, 41, 42 & 107):

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT OCEANSIDE (UNINCORPORATED AREA) TOWN OF HEMPSTEAD, COUNTY OF NASSAU, AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EASTERLY SIDE OF LONG BEACH ROAD DISTANT 504.53 FEET NORTHERLY FROM THE CORNER FORMED BY THE INTERSECTION OF THE EASTERLY SIDE OF LONG BEACH ROAD AND THE NORTHERLY SIDE OF CORTLAND AVENUE, WHICH POINT OF BEGINNING IS WHERE THE NORTHERLY SIDE OF LAND NOW OR FORMERLY OF THE BANK OF ROCKVILLE CENTRE TRUST COMPANY INTERSECTS THE SAID SIDE OF LONG BEACH ROAD, AND FROM SAID POINT OF BEGINNING;

RUNNING THENCE NORTH 13 DEGREES 14 MINUTES EAST ALONG THE EASTERLY SIDE OF LONG BEACH ROAD, 230 FEET TO LAND NOW OR FORMERLY OF KRAUSE;

RUNNING THENCE SOUTH 76 DEGREES 46 MINUTES EAST ALONG LAND NOW OR FORMERLY OF KRAUSE AND L. M. SHORE, 284.32 FEET TO LAND AS SHOWN ON MAP OF SUNSHINE TERRACE;

RUNNING THENCE SOUTH 11 DEGREES 30 MINUTES WEST ALONG LAND AS SHOWN ON MAP OF SUNSHINE TERRACE, 430.47 FEET TO THE NORTHERLY LINE OF LOT 15 IN BLOCK S AS SHOWN ON MAP OF MIRAMAR SEC. 2;

RUNNING THENCE NORTH 76 DEGREES 46 MINUTES WEST ALONG THE NORTHERLY SIDE OF LOT 15, BLOCK S AS SHOWN ON MAP OF MIRAMAR SEC. 2, 47.40 FEET TO THE EASTERLY SIDE OF FIFTH STREET;

RUNNING THENCE NORTH 13 DEGREES 14 MINUTES EAST ALONG THE EASTERLY SIDE OF FIFTH STREET, 50.29 FEET;

RUNNING THENCE NORTH 76 DEGREES 46 MINUTES WEST ALONG THE NORTHERLY SIDE OF FIFTH STREET, 50 FEET;

RUNNING THENCE NORTH 13 DEGREES 14 MINUTES EAST, 150 FEET;

RUNNING THENCE NORTH 76 DEGREES 46 MINUTES WEST ALONG THE NORTHERLY LINE OF LAND NOW OR FORMERLY OF BANK OF ROCKVILLE CENTRE TRUST COMPANY, 200 FEET TO THE EASTERLY SIDE OF LONG BEACH ROAD, TO THE POINT OR PLACE OF BEGINNING

PARCEL 2 (LOTS 43 TO 45, 75 TO 92 & 355):

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT OCEANSIDE IN THE TOWN OF HEMPSTEAD, COUNTY OF NASSAU, AND STATE OF NEW YORK, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE EASTERLY SIDE OF LONG BEACH ROAD WITH THE SOUTHERLY SIDE OF WINDSOR PARKWAY;

RUNNING THENCE SOUTH 65 DEGREES 33 MINUTES 51 SECONDS EAST ALONG THE SOUTHERLY SIDE OF WINDSOR PARKWAY 192.60 FEET;

THENCE SOUTH 13 DEGREES 53 MINUTES 00 SECONDS WEST 59.57 FEET;

THENCE SOUTH 76 DEGREES 07 MINUTES 00 SECONDS EAST 50.98 FEET;

THENCE SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST 491.07 FEET;

THENCE SOUTH 79 DEGREES 57 MINUTES 00 SECONDS EAST 100 FEET TO THE WESTERLY SIDE OF FOURTH STREET;

THENCE ALONG THE WESTERLY SIDE OF FOURTH STREET, SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST 360 FEET;

THENCE NORTH 79 DEGREES 57 MINUTES 00 SECONDS WEST 100 FEET;

THENCE NORTH 10 DEGREES 03 MINUTES 00 SECONDS EAST 144.19 FEET;

THENCE NORTH 78 DEGREES 13 MINUTES 00 SECONDS WEST 284.38 FEET TO THE EASTERLY SIDE OF LONG BEACH ROAD;

THENCE ALONG THE EASTERLY SIDE OF LONG BEACH ROAD, THE FOLLOWING TWO COURSES AND DISTANCES:

1. NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST 380.99 FEET;

2. NORTH 15 DEGREES 17 MINUTES 30 SECONDS EAST 429.96 FEET TO THE CORNER, THE POINT OR PLACE OF BEGINNING.

OVERALL DESCRIPTION:

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT OCEANSIDE IN THE TOWN OF HEMPSTEAD, COUNTY OF NASSAU, AND STATE OF NEW YORK, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF WINDSOR PARKWAY WITH THE EASTERLY SIDE OF LONG BEACH ROAD;

RUNNING THENCE SOUTH 65 DEGREES 33 MINUTES 51 SECONDS EAST, ALONG THE SOUTHERLY SIDE OF WINDSOR PARKWAY, 192.60 FEET;

THENCE THE FOLLOWING FOUR COURSES AND DISTANCES:

1. SOUTH 13 DEGREES 53 MINUTES 00 SECONDS WEST, 59.57 FEET;

2. SOUTH 76 DEGREES 07 MINUTES 00 SECONDS EAST, 50.98 FEET;

3. SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST, 491.07 FEET;

4. SOUTH 79 DEGREES 57 MINUTES 00 SECONDS EAST, 100.00 FEET TO THE WESTERLY SIDE OF FOURTH (CHARLES ST.);

THENCE SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST, ALONG THE WESTERLY SIDE OF SAID FOURTH (CHARLES STREET) STREET, 360.00 FEET;

THENCE THE FOLLOWING THREE COURSES AND DISTANCES:

1. NORTH 79 DEGREES 57 MINUTES 00 SECONDS WEST, 100.00 FEET;

2. SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST, 286.30 FEET;

3. NORTH 78 DEGREES 10 MINUTES 00 SECONDS WEST, 47.40 FEET TO THE EASTERLY SIDE OF FIFTH STREET:

THENCE NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST, ALONG THE EASTERLY SIDE OF FIFTH ST., 50.29 FEET;

THENCE THE FOLLOWING THREE COURSES AND DISTANCES:

1. NORTH 73 DEGREES 13 MINUTES 00 SECONDS WEST, 50.00 FEET;

2. NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST, 150.00 FEET;

3. NORTH 78 DEGREES 10 MINUTES 00 SECONDS WEST, 200.00 FEET TO THE EASTERLY SIDE OF LONG BEACH ROAD;

THENCE ALONG THE EASTERLY SIDE OF LONG BEACH ROAD, THE FOLLOWING TWO COURSES AND DISTANCES:

1. NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST, 610.99 FEET;

2. NORTH 15 DEGREES 17 MINUTES 30 SECONDS EAST, 429.96 FEET TO THE CORNER AT THE POINT OR PLACE OF BEGINNING.

BEING THE PREMISES CONVEYED TO OCEANSIDE PLAZA ASSOCIATES AND LBRO REALTY CORP., BY DEEDS DATED MARCH 3, 1976 IN LIBER 8920, PG. 127 AND LIBER 8920, PG. 135 AND A DEED MODIFICATION AGREEMENT DATED DECEMBER 9, 2004 RECORDED ON DECEMBER 29, 2004 IN LIBER D 11893 PAGES 377 TO 384 IN THE NASSAU COUNTY CLERK'S OFFICE

THIS DESCRIPTION IS WRITTEN WITH REFERENCE TO A TITLE REPORT PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. NY110527, WITH AN EFFECTIVE DATE OF APRIL 1, 2013.

THIS DESCRIPTION IS ALSO WRITTEN WITH REFERENCE TO A MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, OCEANSIDE PLAZA ASSOCIATES, 3131-3221 LONG BEACH ROAD, LOTS 18-20, 41-45, 75-92, 107 & 355, BLOCK 368, SECTION 43, TOWN OF HEMPSTEAD, NASSAU COUNTY, STATE OF NEW YORK," PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED NOVEMBER 16, 2004, LAST REVISED OCTOBER 31, 2013 AS REVISION #8.

CONTROL POINT ASSOCIATES, INC.

_____

DATE

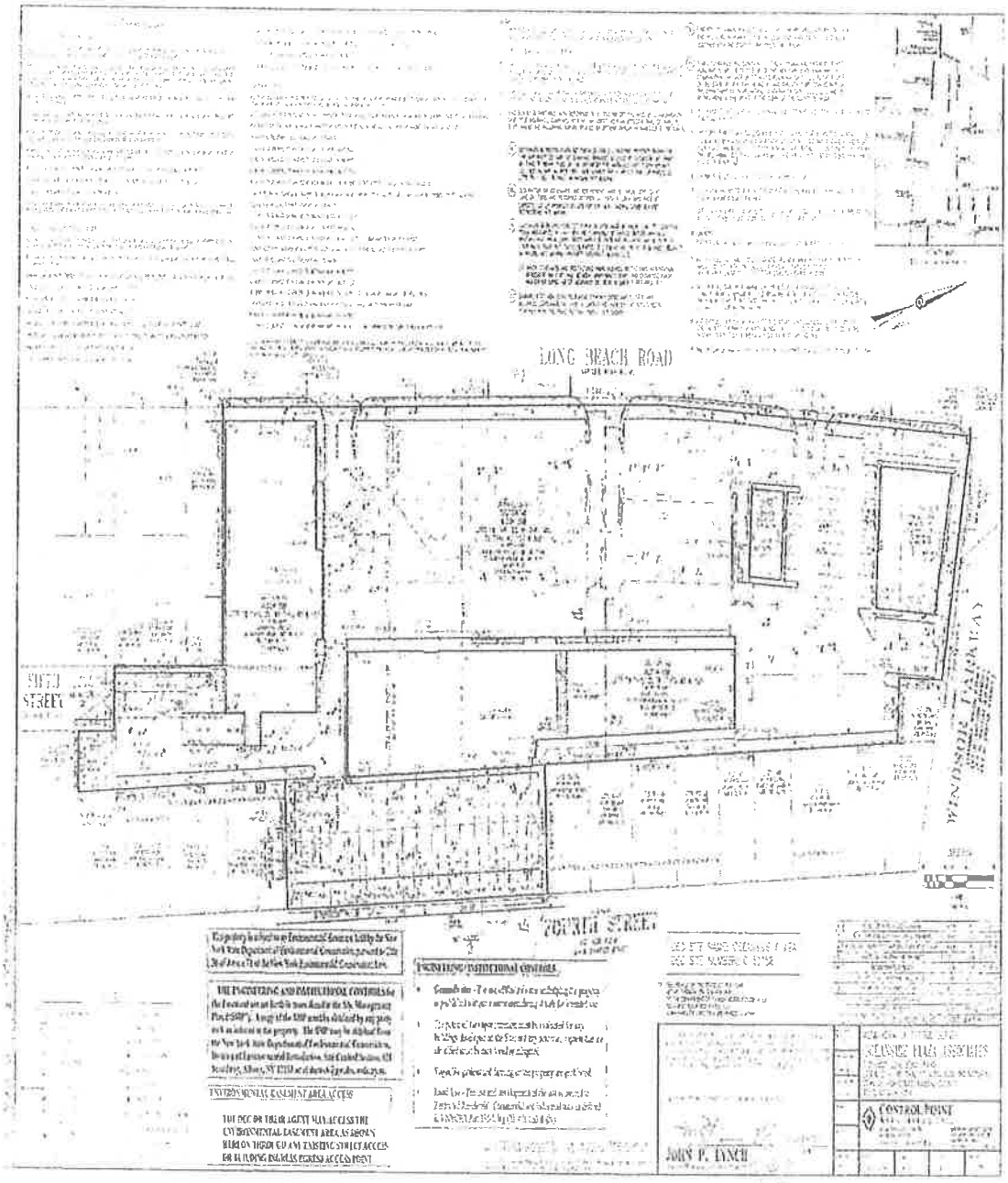
JOHN P. LYNCH

STATE OF NEW YORK
PROFESSIONAL LAND SURVEYOR

#50720
JPL/la P:\surveys\2004\C04307\C04307.01\M&B\M&B - PARCEL 1 - 11-1-13.doc

Prepared By:_____
Reviewed By:_____

Survey



CONTROL POINT ASSOCIATES, INC.
traditional methods | modern approaches

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

NOVEMBER 1, 2013
C04307.01
DEC SITE NAME: OCEANSIDE PLAZA
DEC SITE #C130158

SCHEDULE A
DESCRIPTION OF ENVIRONMENTAL EASEMENT

PARCEL 1 (LOTS 18 TO 20, 41, 42 & 107):

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT OCEANSIDE (UNINCORPORATED AREA) TOWN OF HEMPSTEAD, COUNTY OF NASSAU, AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EASTERLY SIDE OF LONG BEACH ROAD DISTANT 504.53 FEET NORTHERLY FROM THE CORNER FORMED BY THE INTERSECTION OF THE EASTERLY SIDE OF LONG BEACH ROAD AND THE NORTHERLY SIDE OF CORTLAND AVENUE, WHICH POINT OF BEGINNING IS WHERE THE NORTHERLY SIDE OF LAND NOW OR FORMERLY OF THE BANK OF ROCKVILLE CENTRE TRUST COMPANY INTERSECTS THE SAID SIDE OF LONG BEACH ROAD, AND FROM SAID POINT OF BEGINNING;

RUNNING THENCE NORTH 13 DEGREES 14 MINUTES EAST ALONG THE EASTERLY SIDE OF LONG BEACH ROAD, 230 FEET TO LAND NOW OR FORMERLY OF KRAUSE;

RUNNING THENCE SOUTH 76 DEGREES 46 MINUTES EAST ALONG LAND NOW OR FORMERLY OF KRAUSE AND L. M. SHORE, 284.32 FEET TO LAND AS SHOWN ON MAP OF SUNSHINE TERRACE;

RUNNING THENCE SOUTH 11 DEGREES 30 MINUTES WEST ALONG LAND AS SHOWN ON MAP OF SUNSHINE TERRACE, 430.47 FEET TO THE NORTHERLY LINE OF LOT 15 IN BLOCK S AS SHOWN ON MAP OF MIRAMAR SEC. 2;

RUNNING THENCE NORTH 76 DEGREES 46 MINUTES WEST ALONG THE NORTHERLY SIDE OF LOT 15, BLOCK S AS SHOWN ON MAP OF MIRAMAR SEC. 2, 47.40 FEET TO THE EASTERLY SIDE OF FIFTH STREET;

RUNNING THENCE NORTH 13 DEGREES 14 MINUTES EAST ALONG THE EASTERLY SIDE OF FIFTH STREET, 50.29 FEET;

RUNNING THENCE NORTH 76 DEGREES 46 MINUTES WEST ALONG THE NORTHERLY SIDE OF FIFTH STREET, 50 FEET;

RUNNING THENCE NORTH 13 DEGREES 14 MINUTES EAST, 150 FEET;

RUNNING THENCE NORTH 76 DEGREES 46 MINUTES WEST ALONG THE NORTHERLY LINE OF LAND NOW OR FORMERLY OF BANK OF ROCKVILLE CENTRE TRUST COMPANY, 200 FEET TO THE EASTERLY SIDE OF LONG BEACH ROAD, TO THE POINT OR PLACE OF BEGINNING

PARCEL 2 (LOTS 43 TO 45, 75 TO 92 & 355):

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT OCEANSIDE IN THE TOWN OF HEMPSTEAD, COUNTY OF NASSAU, AND STATE OF NEW YORK, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE EASTERLY SIDE OF LONG BEACH ROAD WITH THE SOUTHERLY SIDE OF WINDSOR PARKWAY;

RUNNING THENCE SOUTH 65 DEGREES 33 MINUTES 51 SECONDS EAST ALONG THE SOUTHERLY SIDE OF WINDSOR PARKWAY 192.60 FEET;

THENCE SOUTH 13 DEGREES 53 MINUTES 00 SECONDS WEST 59.57 FEET;

THENCE SOUTH 76 DEGREES 07 MINUTES 00 SECONDS EAST 50.98 FEET;

THENCE SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST 491.07 FEET;

THENCE SOUTH 79 DEGREES 57 MINUTES 00 SECONDS EAST 100 FEET TO THE WESTERLY SIDE OF FOURTH STREET;

THENCE ALONG THE WESTERLY SIDE OF FOURTH STREET, SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST 360 FEET;

THENCE NORTH 79 DEGREES 57 MINUTES 00 SECONDS WEST 100 FEET;

THENCE NORTH 10 DEGREES 03 MINUTES 00 SECONDS EAST 144.19 FEET;

THENCE NORTH 78 DEGREES 13 MINUTES 00 SECONDS WEST 284.38 FEET TO THE EASTERLY SIDE OF LONG BEACH ROAD;

THENCE ALONG THE EASTERLY SIDE OF LONG BEACH ROAD, THE FOLLOWING TWO COURSES AND DISTANCES:

1. NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST 380.99 FEET;

2. NORTH 15 DEGREES 17 MINUTES 30 SECONDS EAST 429.96 FEET TO THE CORNER, THE POINT OR PLACE OF BEGINNING.

OVERALL DESCRIPTION:

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT OCEANSIDE IN THE TOWN OF HEMPSTEAD, COUNTY OF NASSAU, AND STATE OF NEW YORK, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF WINDSOR PARKWAY WITH THE EASTERLY SIDE OF LONG BEACH ROAD;

RUNNING THENCE SOUTH 65 DEGREES 33 MINUTES 51 SECONDS EAST, ALONG THE SOUTHERLY SIDE OF WINDSOR PARKWAY, 192.60 FEET;

THENCE THE FOLLOWING FOUR COURSES AND DISTANCES:

1. SOUTH 13 DEGREES 53 MINUTES 00 SECONDS WEST, 59.57 FEET;

2. SOUTH 76 DEGREES 07 MINUTES 00 SECONDS EAST, 50.98 FEET;

3. SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST, 491.07 FEET;

4. SOUTH 79 DEGREES 57 MINUTES 00 SECONDS EAST, 100.00 FEET TO THE WESTERLY SIDE OF FOURTH (CHARLES ST.);

THENCE SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST, ALONG THE WESTERLY SIDE OF SAID FOURTH (CHARLES STREET) STREET, 360.00 FEET;

THENCE THE FOLLOWING THREE COURSES AND DISTANCES:

1. NORTH 79 DEGREES 57 MINUTES 00 SECONDS WEST, 100.00 FEET;

2. SOUTH 10 DEGREES 03 MINUTES 00 SECONDS WEST, 286.30 FEET;

3. NORTH 78 DEGREES 10 MINUTES 00 SECONDS WEST, 47.40 FEET TO THE EASTERLY SIDE OF FIFTH STREET:

THENCE NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST, ALONG THE EASTERLY SIDE OF FIFTH ST., 50.29 FEET;

THENCE THE FOLLOWING THREE COURSES AND DISTANCES:

1. NORTH 73 DEGREES 13 MINUTES 00 SECONDS WEST, 50.00 FEET;

2. NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST, 150.00 FEET;

3. NORTH 78 DEGREES 10 MINUTES 00 SECONDS WEST, 200.00 FEET TO THE EASTERLY SIDE OF LONG BEACH ROAD;

THENCE ALONG THE EASTERLY SIDE OF LONG BEACH ROAD, THE FOLLOWING TWO COURSES AND DISTANCES:

1. NORTH 11 DEGREES 47 MINUTES 00 SECONDS EAST, 610.99 FEET;

2. NORTH 15 DEGREES 17 MINUTES 30 SECONDS EAST, 429.96 FEET TO THE CORNER AT THE POINT OR PLACE OF BEGINNING.

BEING THE PREMISES CONVEYED TO OCEANSIDE PLAZA ASSOCIATES AND LBRO REALTY CORP., BY DEEDS DATED MARCH 3, 1976 IN LIBER 8920, PG. 127 AND LIBER 8920, PG. 135 AND A DEED MODIFICATION AGREEMENT DATED DECEMBER 9, 2004 RECORDED ON DECEMBER 29, 2004 IN LIBER D 11893 PAGES 377 TO 384 IN THE NASSAU COUNTY CLERK'S OFFICE

THIS DESCRIPTION IS WRITTEN WITH REFERENCE TO A TITLE REPORT PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. NY110527, WITH AN EFFECTIVE DATE OF APRIL 1, 2013.

THIS DESCRIPTION IS ALSO WRITTEN WITH REFERENCE TO A MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, OCEANSIDE PLAZA ASSOCIATES, 3131-3221 LONG BEACH ROAD, LOTS 18-20, 41-45, 75-92, 107 & 355, BLOCK 368, SECTION 43, TOWN OF HEMPSTEAD, NASSAU COUNTY, STATE OF NEW YORK," PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED NOVEMBER 16, 2004, LAST REVISED OCTOBER 31, 2013 AS REVISION #8.

CONTROL POINT ASSOCIATES, INC.

11/1/2013

JOHN P. LYNCH DATE
STATE OF NEW YORK
PROFESSIONAL LAND SURVEYOR #50720

JPL/la P:\surveys\2004\C04307\C04307.01\M&B\M&B - PARCEL 1 - 11-1-13.doc

Prepared By:_____
Reviewed By:_____

STATE OF NEW YORK
COUNTY OF NASSAU } SS:
COUNTY CLERK'S OFFICE

RE 008686

I, MAUREEN O'CONNELL, County Clerk of the County of Nassau and the Supreme and County Courts, Courts of Record thereof,

DO HEREBY CERTIFY, that I have compared the annexed with the original.

EASEMENT Bk-Pg D13020 Pg 809 to 823

Grantor: OCEANSIDE PLAZA ASSOCIATES LLC Grantee: NYS DEPT OF ENVIRONMENTAL

FILED AND RECORDED in my office 12/03/2013

and that the same is a true transcript thereof and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of said County at Mineola, N.Y. this 3rd day of December, 2013.

Maureen O'Connell

Maureen O'Connell
County Clerk

APPENDIX C
EXCAVATION WORK PLAN

C-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination (groundwater), the site owner or their representative will notify the Department. Currently, this notification will be made to:

Mr. Ajay Shah
Regional Hazardous Waste Remediation Engineer
50 Circle Road, Stony Brook, NY 11790-3409

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of soil to be excavated and any work that may impact the short term engineering control;
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix C of this document,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with any required chemical testing results.

C-2 PROCEDURES IF SOIL CONTAMINATION IS ENCOUNTERED

While no soil contamination has been documented to remain at the site, should any isolated areas of volatile contaminants be encountered, the following screening methods and procedures must be enforced:

C-2.1 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all development excavations into potentially contaminated material – should any be encountered. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

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

C-2.2 STOCKPILE METHODS

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

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.
Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

C-2.3 MATERIALS EXCAVATION AND LOAD OUT
A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

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

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

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete.

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

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

C-2.4 MATERIALS TRANSPORT OFF-SITE
All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

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

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

Truck transport routes must be prepared if applicable. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; [(g) community input [where necessary]]

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.
Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

C-2.5 MATERIALS DISPOSAL OFF-SITE

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

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

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

C-2.6 MATERIALS REUSE ON-SITE

If applicable (i.e. if contaminated soils are encountered), all excavated materials will be screened throughout the excavation process with a calibrated PID and visual/olfactory senses for the presence of volatile organic compounds. All materials reporting a PID reading of <10 ppm that are free of liquids, staining and odors may be stockpiled separately and sampled for reuse on-site, as per current NYSDEC protocols and regulations. Analytical testing should include volatile organic compounds (EPA 8260). Analytical results must be in compliance with Track 1 Unrestricted SCOs to be acceptable for reuse on-site.

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table 4. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed

below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

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

C-3 FLUIDS MANAGEMENT

If groundwater is encountered during construction or other site work, and this water must be removed as part of the activities, the following must be enforced:

It is recommended that water be pretested prior to initiating work so as to predetermine appropriate fluid management. All liquids to be removed from the site, including excavation dewatering and, if applicable, groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Untreated dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, but will be managed off-site.

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

C-4 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the Decision Document. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), a figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

C-5 BACKFILL FROM OFF-SITE SOURCES

All backfill material will consist of virgin sand, stone or top soil, as certified by the quarry/source providing such materials. As such, no chemical sampling will be applicable. All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site.

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

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 4. Soils that meet ‘exempt’ fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Transportation of the backfill material to the site must be provided on trucks with appropriate DOT certifications/permits. Trucks entering the site with imported soils will be securely covered with tight fitting covers.

The backfill material may be temporarily stockpiled within any asphalt covered portion of the parking lot. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

C-6 STORMWATER POLLUTION PREVENTION

In accordance with New York Standards and Specifications for Erosion and Sediment Control (August 2005), structural controls that reduce erosion, control runoff, or keep sediment on the construction site will be utilized during any ground intrusive activities.

- A sediment barrier, silt fencing or hay bales, will be installed around the entire perimeter of the construction area.
- Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.
- Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.
- All undercutting or erosion of the silt fence toe anchors shall be repaired immediately with appropriate backfill materials.
- Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

C-7 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition. Additionally NYSDEC's Spill Hotline, the site owner, the Environmental Professional and the NYSDEC Case Manager – as provided in the SMP must be notified within 2 hours of discovery.

Depending upon the quantity of material, all suspect liquids will be either solidified in-place prior to excavating or removed using a vac-truck/pump. Once all free liquids have been addressed, suspect solids, drums and/or tanks will be systematically excavated/removed using field instrumentation (PID). Solids will be temporarily stockpiled within the asphalt covered rear parking lot. The excavated material will be placed on 6-mil plastic sheeting and a runoff berm will be constructed using hay bales. Upon completion of the excavation activities, the stockpile will be covered and secured with plastic sheeting, pending analysis and off-site disposal. Any drums or tanks are to be managed to avoid impact to the site, exposure to any receptors, and should be removed and properly disposed as soon as possible. Disposal must be documented and all activities must be summarized in a report.

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

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

C-8 COMMUNITY AIR MONITORING PLAN

In accordance with Appendix 1A of DER-10, a Community Air Monitoring Program (CAMP) will be conducted during all investigative or remedial work activities encountering volatile contaminated media, except those which are not considered intrusive activities. A figure showing the location of air sampling stations based on generally prevailing wind conditions must be prepared. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

The will consist of the following activities:

- Continuous monitoring will be conducted during all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.
- Periodic monitoring for VOCs will be conducted during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection will consist of taking a reading upon arrival at a sample location, the opening a well cap, during well baling/purging, and prior to leaving a sample location.

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

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued.

After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.
4. All 15-minute readings will be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, will also be recorded.

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time a DR-4000 (particulates), which is capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.
2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.
3. All readings will be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

C-9 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site and on-site. Specific odor control methods to be used on a routine basis will include using additives, atomization and/or vaporization. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding

open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

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

C-10 DUST CONTROL PLAN

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

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

C-11 OTHER NUISANCES

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

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

APPENDIX D
HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN

Reliance Environmental, Inc

130 E. Chestnut Street, Lancaster, PA 17602 (888) 735-2008
Lancaster, PA – Sarasota, FL

HEALTH AND SAFETY PLAN
AND
COMMUNITY AIR MONITORING PLAN

OCEANSIDE PLAZA
NASSAU COUNTY, NEW YORK
NYSDEC Site Number: C130158

Prepared for:
Oceanside Plaza Associates, LLC
151 Irving Place
Woodmere, New York 11598

Prepared by:
Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster, PA 17602
(888) 735-2008

JULY 2013

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

APPENDICES

LIST OF TABLES

SIGN-OFF SHEET

This form is to be signed by each Reliance Environmental, Inc. employee and contractors/subcontractors who will be present during all investigative or remedial work activities encountering volatile contaminated media, except those which are not considered intrusive activities. This form should be signed prior to the start of the each work day.

PROJECT NAME: Oceanside Plaza

I certify that I have read and understand the contents of the Health and Safety Plan. Furthermore, I agree to perform all activities in accordance with the Health and Safety Plan.

PRINT NAME	SIGNATURE	DATE

PRINT NAME	SIGNATURE	DATE

1.0 INTRODUCTION

This Health and Safety Plan contains the requirements for protection of all personnel during all investigative or remedial work activities encountering volatile contaminated media, except those which are not considered intrusive activities, at the Oceanside Plaza, Oceanside, New York facility. These locations may fall within the scope of Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1910 and are therefore considered hazardous waste operations.

This Health and Safety Plan was written with the intent of developing the awareness of site personnel with regards to health and safety hazards that may exist. All field operations require strict adherence to procedures in order to prevent injury, loss of life, or a health hazard to site personnel or to the public.

The objective of this Health and Safety Plan is to assure that safe working conditions exist at the site. The following procedures have been established based on an analysis of potential hazards and personnel protection measures have been selected in response to these risks.

All work will be performed in accordance with applicable Local, State, and Federal policies and regulations, including those of the U. S. Environmental Protection Agency, and OSHA. Strict adherence to all sections of the following regulations will be enforced:

29 CFR 1910.1000	"Air Contaminants".
29 CFR 1910.120	"Hazardous Waste Operations and Emergency Response".
29 CFR 1910.134	"Respiratory Protection".
40 CFR 280	"Technical Standards and Corrective Actions Requirements for Owners and Operators of Underground Storage Tanks (UST)".
40 CFR 311	"Worker Protection Standards for Hazardous Waste Operations and Emergency Response".
49 CFR 172	"Hazardous Materials Tables, Hazardous Materials Communications Requirements and Emergency Response Information Requirements".

2.0 RESPONSIBILITIES

2.1 Project Manager/Operations Manager

The Project Manager is responsible for the coordination of all work activities and contact with the client. In some cases, site operations managers will be assigned to direct the actual on-site activities. The project/operations manager has the primary responsibility for:

- Assuring that all personnel are aware of the potential hazards of the site and the proper procedures for handling those hazards including any health and safety provisions in this plan.
- Provide authorization to perform work on-site for personnel meeting medical surveillance and training requirements.
- Assuring required personal protection equipment is available and utilized properly by all site personnel.
- Monitoring the safety performance of personnel to ensure that mandatory health and safety procedures are adequate and correcting any performances that do not comply with this health and safety plan.
- Consulting with the Health and Safety Officer.
- Preparation and submittal of any and all project reports including progress, accident, incident and contractual.

2.2 Site Health and Safety Officer

The initial site Health and Safety Officer will be a professional safety officer, trained in safety and industrial hygiene. After the project starts and the Health and Safety Officer has had time to evaluate the potential for hazardous site conditions, he or she may determine that a member of the project team may assume the duties. The primary responsibilities of the site health and safety officer are:

- Advise the project manager on all health and safety related matters involved at the site.
- Implementation of the health and safety plan.
- Conduct worker exposure assessment (monitoring) to determine levels of personal equipment protection.
- Monitor workers for signs of heat or cold stress.
- Ensure that the field crews observe the appropriate work practices and decontamination procedures.
- Stop-work authorization which will be executed upon determination of an imminent safety hazard, emergency situation, or other potentially dangerous situations, (i.e. weather conditions) where this action is appropriate.
- Report any safety violations to the Project Manager.

2.3 Safety Supervisor

The Safety Supervisor responsibilities are to:

- Consider the "responsibility" for safety and the "authority" to enforce safety to be a matter of first importance.
- Be the leader in using proper personal safety gear and set an example in following the rules that are being enforced on others.
- Enforce the use of proper personal safety equipment and take appropriate corrective action when proper personal protective safety equipment is not being used.
- Understand that proper maintenance of tools and equipment and general "housekeeping" on the excavation equipment will provide the environment to promote and enforce safety.
- Ensure that the equipment operator (who may be the safety supervisor) has had adequate training and is thoroughly familiar with the machinery, its controls, and its capabilities prior to commencement of drilling activities.
- Inspect the equipment at least daily for structural damage, loose bolts and nuts, proper tension in chain drives, loose or missing guards or protective covers, fluid leaks, damaged hoses and/or damaged pressure gauges and pressure relief valves; document the maintenance and the repairs of all equipment in the field notebook.
- Check and test all safety devices such as emergency shut-down switches at least daily and preferably at the start of each work shift. Excavation should not be permitted until all emergency shutdown and warning systems are working correctly. Do not wire around, bypass or remove an emergency device.
- Check that all gauges, warning lights and control levers are functioning properly and listen for unusual sounds on each starting of an engine.
- Ensure that all site workers are informed of safe operating practices on and around the excavation. Provide each worker with a copy of the organization's operations safety manual, and when appropriate, the manufacturer's operations and maintenance manual for machinery the worker will utilize. The safety supervisor should assure that each new employee reads and understands the safety manual. Conduct a ‘tailgate’ safety briefing prior to the implementation of new activities.
- Ensure a first-aid kit and fire extinguisher is available and properly maintained in each work area and in each company vehicle.
- Be well trained and capable of using first-aid kits, fire extinguisher and all other safety devices and equipment.
- Maintain a list of addresses and telephone numbers of emergency assistance units (ambulance services, police, hospitals, etc.) and inform other members of the excavation crew of its location.
- Carefully instruct a new worker in excavation safety and observe the new worker's progress towards understanding safe operating practices.
- Observe the mental, emotional and physical capability of each worker to perform the assigned work in a proper and safe manner. Dismiss any worker from the job site whose mental and physical capabilities might cause injury to the worker or co-workers.

2.4 Work Crew and Other Field Personnel

These individuals will be those employees involved in fieldwork. All personnel engaged in site activities are required to become thoroughly familiar with, and to conform to, the provisions of this Health and Safety Plan, and such other safety directives as may be considered appropriate by the Project Manager, Health and Safety Officer, and Safety Supervisor. Personnel are encouraged to offer ideas, suggestions or recommendations regarding any operational condition, procedure or practice, that may enhance the safety of site personnel or the public. Their primary responsibilities will be:

- Perform all required work safely.
- Familiarize them with and understand the site health and safety plan, including proper use of personal protective equipment.
- Report any unsafe conditions to supervisory personnel.
- Be aware of signs and symptoms of potential exposure to site contaminants and thermal stress.

3.0 DISCUSSION

3.1 Site Description

The Oceanside Plaza is located at 3131-3221 Long Beach Road, in Oceanside, Nassau County, New York. The facility is a strip-type shopping mall containing a dry cleaning operation. The site is bordered by Long Beach Road (west), Windsor Parkway (north), Fourth Street/residential properties (east) and commercial properties (south).

The facility is a relatively flat (topographically) paved lot occupied by a single-story strip mall and detached buildings (all commercial facilities).

3.2 Project Description

Soil, ground water and soil vapor investigation and remediation activities may be performed at the subject site, as needed. Contamination originates at the dry cleaner facility in the approximate center of the mall building. Activities may include soil excavation/backfilling, ground water well installations and soil vapor port installations.

4.0 HAZARD ANALYSIS

4.1 Hazard Assessment

Different levels and types of hazards can be expected to be encountered during site operations. Each activity presents specific occupational hazards that must be addressed. The purpose of this assessment is to identify suspected conditions or activities that may pose routine occupational hazards or immediate danger to life or health of site personnel. This assessment also provides information for selection and application of personal protective equipment (PPE) and environmental monitoring methods.

4.1.1 Physical Hazards

Physical hazards expected to be encountered during work activities are listed below as:

- Slipping, tripping, falling, strains, cuts, bruises, puncture wounds, pinch points from heavy equipment, falling objects and splinters.
  - Exposure to these hazards will be minimized by using safe work practices and personnel protective equipment such as steel toe, steel shank boots, hardhat, gloves, etc.
- Operation of Heavy Equipment
  - Use of properly trained individuals and daily equipment inspections will minimize the physical hazards associated with operating heavy equipment.
- Excavation Work
  - Safe distances will be established to minimize any fall hazards related to the excavation areas.
  - All personnel are instructed and must keep back three (3) feet from the top edge of excavation faces, unless operating equipment that is designed to safely cross the excavation face.
  - No workers are permitted to enter the excavation areas once depths exceed three (3) feet.

4.1.2 Chemical Hazards

Exposure to contaminated soil and/or groundwater may occur during the implementation of the work covered by this Health and Safety Plan. Site personnel must be cautious of the flammability, skin absorption, skin contact, and inhalation routes of exposure. Environmental monitoring, dust control, and the use of personal protective equipment will minimize exposure to potential site contaminants.

Table 4-1 contains exposure information for several compounds, elements, and manufactured products. Of the parameters listed, **tetrachloroethene and related daughter products** are the principle contaminants of concern that are expected to be encountered at this site (highlighted).

TABLE 4-1
HAZARD CHARACTERISTICS OF SUSPECTED SITE COMPOUNDS/ELEMENTS
VOLATILE ORGANIC COMPOUNDS

SUBSTANCE	TOXICITY/CARCONOGENICITY	PERMISSIBLE EXPOSURE LIMITS (PELs)
Acetone	Moderately toxic by ingestion and inhalation. A skin and severe eye irritant. Narcotic at high concentrations, can cause coma	750 ppm, 1,000 ppm STEL (1989 OSHA) 1,000 ppm, 2,400 mg.kg^3 (1997 OSHA) 590 mg/m^3 (NIOSH)
Benzene	Suspected human carcinogen. Moderately toxic by ingestion, inhalation, and skin absorption. Irritant to eyes, nose, and throat.	1ppm (OSHA) 5 ppm (STEL) See PSHA benzene standard
Bis (2-ethylhexyl) phthalate Or di-sec-octyl phthlate	Confirmed carcinogen with experimental carcinogenic and tumorigenic data. Poison by intravenous route. Human systemic effects by ingestion: gastrointenstinal tract effects. Mild skin and eye irritant	TWO 5 mg/m3 OSHA 10 mg/m^3 STEL, 1989 OSHA, NIOSH 15 minutes
2-Butanone (Methy Ethyl Ketone or MEK)	Narcotic by inhalation. Experimental teratogen. Moderately toxic by ingestion and dermal routes. Strong irritant. Affects CNS	200 ppm, 590 mg/m^3 1997 PSHA STEL 300 ppm or 885 mg/m^3, 1989 OSHA, NIOSH
Dibenzofuran*	Suspected carcinogenic (skin cancer). Target organs include the respiratory system, bladder, kidneys, lungs, and skin. Structurally similar to PCBs with which is often associated	No standard defined; recommended the use of: 0.5 mg/m^3 based on 54% chlorodiphenyl
Ethylbenzene	Moderately toxic by ingestion and intraperitoneal route. Mildly toxic by inhalation and skin contact. Eye nose, throat, and skin can irritate and represent a potential carrier	TWA – 100 ppm, 435 mg/m^3 1997 OSHA STEL – 125 ppm, 1989 PSHA, NIOSH
Methylene Chloride	Confirmed carcinogenic with experimental carcinogenic and fumorigenic data. Poison intravenous route. Moderately toxic by ingestion and intraperitoneal routes	TWO 125 ppm, 1987 STEL 135 ppm for 15 minutes 1997 OSHA/ Sell also methylene

TABLE 4-1 *(Continued)*
HAZARD CHARACTERISTICS OF SUSPECTED SITE COMPOUNDS/ELEMENTS

VOLATILE ORGANIC COMPOUNDS

SUBSTANCE	TOXICITY/CARCONOGENICITY	PERMISSIBLE EXPOSURE LIMITS (PELs)
Naphthalene	Human poison by ingestion, experimental poison by ingestion, intravenous, and intraperitoneal routes. An experimental teratogen.	10 ppm, 50 mg/m^3 1997 OSHA STEL 15 ppm, 1989 OSHA and NIOSH
p-Nitrosodiphenylamint	Confirmed carcinogenic with experimental carcinogenic and neoplastic data. Poison by intravenus route and moderately toxic.	No exposure limited determined. As indicated , materials should be protected and results provided to me.
Toluene	Poison by intraperitoneal route. Moderately toxic by intravenous and subcutaneous routes. Mildly toxic by inhalation.	200 ppm TWA 300 ppm ceiling 500 MMP is good for one week. 15-minutes 150 ppm STEL
Tetrachloroethene	Irritating to the eyes, nose, throat and skin. Suspected carcinogen (ingestion: liver).	Minimize workplace exposure concentrations; limit number of workers exposed. OSHA TWA – 100 ppm; 200 ppm ceiling; 300 ppm maximum peak 5 minutes in any 3 hour period.
Trichloroethene	Toxic by inhalation. Suspected carcinogen	TWA 100 ppm, 200 ppm ceiling, 300 ppm maximum peak 5 minutes; 1998 OSHA 50 ppm PEL, 200 ppm STEL; 1989 OSHA
1,1,1-Trichloroethane	Irritating to eyes and tissue. Narcotic in high concentrations. Causes pro-arrhythmic activity. NIOSH recommends caution due to structural similarity with chloro-ethanes shown to be carcinogenic.	350 ppm, 1,900 mg/m^3 1997 OSHA 450 ppm, 1989 OSHA
Xylenes	Moderately toxic by intraperitoneal and subcutaneous routes. Mildly toxic by ingestion and inhalation. Experimental teratogen.	TWA 100 ppm, 435 mg/m^3 1997 OSHA STEL 150 ppm, 1989 OSHA, NIOSH

TABLE 4-1 *(Continued)*
HAZARD CHARACTERISTICS OF SUSPECTED SITE COMPOUNDS/ELEMENTS

SEMI-VOLATILE ORGANIC COMPOUNDS

SUBSTANCE	TOXICITY/CARCONOGENICITY	PERMISSIBLE EXPOSURE LIMITS (PELs)
Acenaphthene*	Suspected carcinogen (skin cancer). Target organs include the respiratory system, bladder, kidneys, lungs and skin.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Acenaphthylene*	Suspected carcinogen (skin cancer). Target organs include the respiratory system, bladder, kidneys, lungs and skin.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Anthracene	A known carcinogen. Affects the respiratory system, lungs, bladder, Kidneys, and skin.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Benzo (a) anthracene	Irritant to stomach, skin, and eyes	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Benzo (a) pyrene	Toxic by inhalation. Suspected human carcinogen.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Benzo (a) fluoranthene	Causes irritation of lungs, breathing difficulty.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Benzo (g,h,i) pyrene*	Suspected carcinogen (skin cancer). Target organs include the respiratory system, bladder, kidneys, lungs and skin.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Benzo (k) fluoranthene	Confirmed carcinogen with experimental tumorgenic data. Mutation data reported. When heated to decomposition, emits acrid smoke and irritating fumes.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH

TABLE 4-1 *(Continued)*
HAZARD CHARACTERISTICS OF SUSPECTED SITE COMPOUNDS/ELEMENTS

SEMI-VOLATILE ORGANIC COMPOUNDS

SUBSTANCE	TOXICITY/CARCONOGENICITY	PERMISSIBLE EXPOSURE LIMITS (PELs)
Chrysene	Suspected human carcinogen.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Dibenzo (a,h) anthracene	Confirmed carcinogen with experimental carcinogenic, tumorigenic, and neoplastic data. Poison by intravenous route. Emits acrid smoke and irritating fume when heated to decomposition.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Fluroanthene	Questionable carcinogen with experimental tumorigenic data. Poison by intravenous route. Moderately toxic by ingestion and skin contact.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Fluorene*	Suspected carcinogen (skin cancer). Target organs include the respiratory system, bladder, kidneys, lungs, and skin.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Indeno (1,2,3-cd) pyrene	Confirmed carcinogen with experimental carcinogenic and tumorigenic data.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Phenanthrene	Known carcinogen	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH
Pyrene	Questionable carcinogen with experimental tumorigenic data. Poison by inhalation, moderately toxic by ingestion and intraperitoneal routes. Skin irritant.	TWA 0.2 mg/m^3 1997, 1989 OSHA TWA 0.1 mg/m^3 NIOSH IDLH 80 mg/m^3 NIOSH

Notes:
1) PEL – Permissible Exposure Limit – "allowable" average exposure over a nominal 8-hour period.
2) STEL – Short Term Exposure Limit – 15-minutes TWA exposure which should not be exceeded at any time.
3) IDLH – Immediately Dangerous to Life or Health
4) Confirmed human carcinogen – The agent is carcinogenic to humans based on the findings of epidemologic studies of, or convincing clinical evidence in, exposed humans.
5) Ceiling – The concentration that should not be exceeded during any part of the working exposure.

References:
29 CFR, Part 19100.1000, Air Contaminants: July 1, 1997
"Guide to Occupational Exposure Values". American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio 1992
"Pocket Guide to Chemical Hazards". National Institute for Occupational Safety and Health and Occupational Safety and Health Administration, Publication No. 78-210, Cincinnati, Ohio 1985
"Pocket Guide to Chemical Hazards". National Institute for Occupational Safety and Health and Occupational Safety and Health Administration, Publication No. 97-140, Cincinnati, Ohio 1997
Hawley, Gessner, G. "The Condensed Chemical Dictionary", Tenth Edition, New York, Van Nostrand Reinhold, 1981
Sax, R. Irving. "Dangerous Properties of Industrial Materials", Sixth Edition, New York, Van Nostrand Reinhold, 1984
Lewis, Richard J. "Hazardous Chemical Desk Reference", Third Edition, New York, Van Nostrand Reinhold, 1993

4.2 Community Air Monitoring Program

In accordance with TAGM 4031, a volatile organic compounds and fugitive dust suppression and particulate monitoring program will be conducted during all investigative or remedial work activities encountering volatile contaminated media, except those which are not considered intrusive activities.

The monitoring program will consist of the following procedures:

1. Real-time monitoring using a DR-4000 (particulates) and a MiniRAE PID (VOC's). The DR-4000 will be calibrated to monitor particulate matter less of than ten microns (PM_{10}) with the following minimum performance standards:

   Object to be measured: Dust, Mists, and Aerosols
   Size range: <0.1 to 10 microns
   Sensitivity: 0.001 mg/m^3
   Range: 0.001 to 10 mg/m^3
   Overall Accuracy: ±10% as compared to gravimetric analysis of stearic acid or reference dust

   Operating Conditions:
   Temperature: 0 to 40^oC
   Humidity: 10 to 99% Relative Humidity
   Power: Battery operated with a minimum capacity of eight hours continuous operation

2. Volatile organic compound and particulate levels will be monitored immediately upwind and downwind of the work site and integrated over a period not exceeding 15 minutes.

3. A particulate monitoring action level of 150 ug/m^3 will be established over the integrated period not to exceed 15 minutes. If particulate levels are detected in excess of 150 ug/m^3, the upwind background level will be measured immediately using the same portable monitor. If the work site particulate measurement is reported to be greater than 100 ug/m^3 above the background level, additional dust suppression techniques will be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration.

4. A volatile organic compound monitoring action level of 5 ppm will be established over the integrated period not to exceed 15 minutes. If volatile organic compound levels are detected in excess of 5 ppm, the upwind background level will be measured immediately using the same portable monitor. If the work site volatile organic compound measurement is reported to be greater than 10 ppm above the background level, additional suppression techniques will be implemented to reduce the generation of volatile organic compounds in the atmosphere and corrective action taken to protect site personnel and reduce the potential for contaminant migration.

4.3 Action Levels

Action levels have been established to determine the levels of protection or actions required in the event that contaminants are detected. Any action taken will be the decision of the site Health and Safety Officer. In addition to the task-specific compounds/elements provided in Table 4-1, Table 4-2 lists the type of monitoring equipment, action levels, and actions to be taken.

TABLE 4-2 ACTION LEVELS			
Hazard	**Monitoring Equipment**	**Action Level** (continuous readings above background over 1 minute; worker exposure)	**Protective Measures**
Organic Vapors	PID (10.6 ev lamp)	0-50 ppm	Level D
		50-99 ppm	Modified Level D
		100-1,000 ppm	Level C
		>1,000 ppm	Evacuate area and reassess.
Oxygen	O2/Explosive Meter	<19.5%	Evacuate Area
		19.5 – 25.0%	Continue Work
		>25.0%	Evacuate Work
Explosive Vapors	O2/Explosive Meter	<20% LEL	Continue Work
		>20% LEL	Evacuate Work

4.4 Overhead and Buried Utilities

The use of various equipment on a site or project within the vicinity of electrical power lines and other utilities requires that both supervisors and the members of the crew take special precautions. Electricity can shock, burn, and cause death.

- The state underground service notification service will be contacted to mark underground utilities in the proposed vicinity of the proposed work.
- Overhead and buried utilities should be located, noted and emphasized on all location plans. This may require site-specific as-built plans provided by the property owner and/or the use of line-tracing equipment.
- When overhead electrical lines exist at or near a work site or project, consider all wires to be alive and dangerous.
- Watch for sagging power lines before entering a site. Do not lift power lines to gain entrance. Call the utility and ask them to raise the power lines or de-energize (turn off) the power.
- Before raising any equipment overhead on a site in the vicinity of power lines, walk completely around the equipment. Determine what the minimum distance from any point on the drill rig to the nearest power line will be when the equipment is raised and/or being raised. Do not raise the mast or operate the equipment if this distance is less than 20 feet (6m), or if known, the minimum clearance stipulated by federal, state and local regulations.

5.0 PERSONAL PROTECTION

5.1 Overview

Protective clothing and respiratory protection help prevent on site workers from coming in contact with contaminants. It is imperative that personal protective equipment be appropriate to protect against the known potential hazards for each work site. The selection of protective equipment will be based upon the types, concentrations, and routes of personal exposure that may be encountered.

There are four (4) levels of personal protection recommended by the U.S. Environmental Protection Agency. Level D is used when little or no contamination exists, however, a Modified Level D may be required for additional dermal protection. Upgrading to Level C is required when contamination levels require protection from bodily contact and the filtering of breathing air. Level B will be used when contamination requires protection from bodily contact and the use of a supplied breathable air source. Level A provides the highest available protection from bodily contact, respiratory and eye irritation. The following are descriptions of the equipment required for each level of personal protection.

Levels of Protection:

Level D - Work uniform.
Gloves.
Chemically resistant steel-toed safety boots or steel-toed safety boots with disposable booties.
Hardhat.
Eye protection, as required (safety officer decision).
Hearing protection, as required (safety officer decision).

Modified
Level D - Inner latex gloves.
Chemically resistant tyveks (polycoated/sarnax).
Outer chemically resistant gloves.
Chemically resistant steel-toed safety boots.
Hardhat.
Eye protection (splash shield for high-pressure decontamination).
Hearing protection, as required (safety officer decision).

Level C - Chemically resistant tyveks (polycoated/sarnax).
Inner latex gloves.
Outer chemically resistant gloves.
Chemically resistant steel-toed safety boots.
Outer disposable chemically resistant boots.
Full-face, air purifying respirator (APR).
NIOSH/MSA approved air-purifying cartridges.
Emergency escape respirator (as applicable).
Hardhat.
Hearing protection, as required (safety officer decision).

Level B - Chemically resistant tyveks (polycoated/saranax).
Inner latex gloves.
Outer chemically resistant gloves.
Chemically resistant steel-toed safety boots.
Outer disposable chemically resistant boots.
Full-face supplied air respirator.
Emergency escape 5 minute air supply.
Hardhat.
Hearing protection, as required (safety officer decision).

5.2 Respiratory Protection - General

- Only properly cleaned, maintained, NIOSH/MHSA approved respirators shall be used on-site.
- The Health and Safety Officer will make selection of respirators, as well as any decisions regarding upgrading or downgrading of respiratory protection.
- Air purifying cartridges shall be replaced at the end of each shift or when load-up or breakthrough occurs.
- Only employees who have had pre-issue qualitative fit tests and semi-annual fit tests thereafter, shall be allowed to work in atmospheres where respirators are required.
- Contact lenses are not to be worn.
- Excessive facial hair (e.g. beards) prohibits proper face fit and effectiveness of air purifying respirators. Persons required to wear respiratory protection must not have beards, etc. All personnel will be required to be clean- prior to each day's shift.
- Regular eyeglasses cannot be worn with full-face respirators (breaks the facepiece seal). Inserts must be utilized.
- The respiratory protection utilized on-site will be in compliance with OSHA, 29 CFR 1910.134.

5.3 Task Specific Protection

Table 5-1 outlines the levels of protection required for each specific task to be undertaken during the activities of this project. This information is based on the types of contaminants and the probability of exposure.

TABLE 5-1
SPECIFIC TASK PROTECTION

TASK	PROTECTION LEVEL
Soil Excavation	Modified Level D to Level C
Soil Sampling	Modified Level D
Monitoring Well Installation	Level D
Soil Vapor Port Installation	Level D

5.4 Communication Procedures

The following standard hand signals will be used in case of failure of radio communications:

- Hand gripping throat.....Out of air, can't breathe.
- Gripping partner's wrist or put both hands around partner's wrist……Leave area immediately.
- Hands on top of head.....Need assistance.
- Thumbs up.....OK, I am all right, I understand.
- Thumbs down.....No, negative.

6.0 HEALTH AND SAFETY PROCEDURES

6.1 Unsafe Situations

- All employees are directed to bring to the attention of the most readily accessible supervisor any unsafe condition, practice, or circumstance associated with or resulting from site activities.
- In case of immediate hazard to employees or the public, any employee on the scene should take all practicable steps to eliminate or neutralize the hazard, this may include leaving the site. Follow-up consultation with the Project Manager or Supervisor must then be made at the first opportunity. In such circumstances the Project Manager or Supervisor must take, or cause to be taken, the necessary steps to ensure that the project can be completed safely. Such steps may include changes in procedure, removal or neutralization of a hazard, or consultation with appropriate experts. In cases where the hazard is not immediate, the employee should consult the supervisor or management regarding appropriate corrective measures. Application of this rule requires exercising good judgment and common sense by all employees.

6.2 Personal Precautions

- Eating, drinking chewing gum or tobacco, smoking, or any practices that increase the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as contaminated.
- Hands and face must be thoroughly washed upon leaving the work area.
- Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garment is removed.
- Contact with contaminated or suspected contaminated surfaces should be avoided. Whenever possible, do not walk through puddles, leachate, or discolored surfaces; or lean, sit, or place equipment on drums, containers, or on soil suspected of being contaminated.
- Medicine and alcohol can exacerbate the effect from exposure to toxic chemicals. Personnel should not take prescribed drugs on response operation where the potential for absorption, inhalation, or ingestion of toxic substances exists unless specifically approved by a qualified physician. Alcoholic beverages intake should be avoided during response operations.

6.3 On-site Personal Requirements

- All personnel going on site must be thoroughly briefed on anticipated hazards, and trained on equipment to be worn, safety procedures, emergency procedures, and communications.
- Personnel on site must use the buddy system when wearing respiratory protective equipment.
- Visual contact must be maintained between crew teams on site and site safety personnel. Drilling crewmembers should remain close together to assist each other during emergencies.
- All field personnel should make full use of their senses to alert themselves to potentially dangerous situations that they should avoid, e.g., presence of strong and irritating or nauseating odors.
- Personnel should practice unfamiliar operations prior to operations.

- Field personnel, shall be familiar with the and document in the field notebook the physical characteristics of the site, including:
  - wind direction in relation to the working area.
  - accessibility to associates, equipment, and vehicles.
  - communications.
  - operation zones.
  - site access.
  - nearest water sources.
- Personnel and equipment in the working area should be kept to a minimum, consistent with effective site operations. A log of personnel entering and leaving the site will be maintained at the site.
- Procedures for leaving a work area must be planned and implemented prior to going on site in accordance with the site health and safety plan.
- All visitors to the job site must comply with the health and safety plan procedures. Personal protective equipment may be modified for visitors depending on the situation. The site Health and Safety Officer must approve any modifications.
- The nearest hospital or medical care facility shall be located. Emergency phone numbers (police, fire, hospital, ambulance, and poison center) shall be available on-site in case of incident (See Section 12.3).

6.4 General Work Practices

- At least one copy of this procedure shall be available at each job work site.
- Contaminated reusable protective equipment, such as respirators, hoses, boots, etc., shall not be removed from the regulated area until it has been cleaned, or properly packaged and labeled.
- Legible and understandable precautionary labels shall be affixed prominently to containers of contaminated scrap, waste, debris, and clothing.
- Removal of contaminated soil from protective clothing or equipment by blowing, shaking, or any other means that disperse contaminants into the air is prohibited.
- Transportation and disposal of contaminated materials shall comply with all applicable local, state, and federal regulations. The transporter and disposer will address these items.
- Contaminated materials shall be stored in tightly closed containers in well-ventilated areas.
- Containers shall be moved only with the proper equipment and shall be secured to prevent dropping or loss of control during transport.
- All trenching, shoring, and excavation work must comply with all federal OSHA rules.
- Disposable equipment, such as protective clothing, shall be disposed of in containers labeled in accordance with appropriate state and federal standards.
- Portable or fixed emergency shower/eyewash stations shall be located near work activities.

7.0 MEDICAL SURVEILLANCE PROGRAM

7.1 Medical Monitoring - General

All personnel entering the designated work area shall have successfully completed a baseline medical examination by an occupational physician in accordance with requirements as specified in 29 CFR 1910.120, paragraph (f) and 1910.134, paragraph (e)(6). Personnel shall be found to be medically qualified for work prior to assignment at the project site. If one year has elapsed since the baseline exam, an updated medical history and examination will be required prior to the project start.

7.2 Surveillance Program - Environmental Physicals

It is suggested that the following tests be performed during baseline or annual environmental physicals for all site personnel.

- Complete physical exam.
- Chest x-rays (P/A and lateral)
- Electrocardiogram.
- Pulmonary function (FEV1, FVC).
- Audiometry (500 to 8,000 Hz)
- Visual
- Urinalysis
- SMAC-21 or equivalent.
- Drug and alcohol screening.
- PCB screening (dependent on exposure).
- Heavy metal screen (24-hr urine, dependent on exposure).

Environmental physicals will be conducted in the event of exposure. In addition, pre- and post-exams may be required for a specific project based on the types and levels of contaminants present.

Annual 8-hour refresher training will be completed for the above trained classifications. All personnel entering an exclusion zone will provide proof of the required training will be provided prior to the field work and maintained at the project site.

8.0 WORKING TRAINING PROGRAM

All personnel accessing the work area shall complete an environmental training program that meets the requirement specified in 29 CFR 1910.120, paragraph (e).

General site workers engaged in operations, which are exposed or potentially exposed to hazardous substances, and health hazards will receive a minimum of 40 hours of instruction off site and 3 days of supervised actual field experience.

Workers on site only occasionally for a specific limited task and who are unlikely to be exposed over permissable exposure limits and published exposure limits will receive a minimum of 24 hours of instruction. In addition, 1 day of supervised actual field experience will be required.

Workers regularly on site who work in areas where no health hazards or possibility of exposure exists require 24 hours of instruction and 1 day on supervised actual field experience.

On-site managers and supervisors directly responsible for employees engaged in hazardous waste operations will receive 8 hours of specialized training in addition to the requirement for general site workers (40 hour).

9.0 REGULATED AREAS

9.1 Site Organization/Operation Zones

The site organization and the establishment of operation zones are designed to prevent or reduce the transfer of hazardous materials off site by workers and equipment involved on-site operations. While the proposed remedial activities are not foreseen to generate any hazardous materials, the operation zones will be established if necessary.

In general, if hazardous materials are encountered, three (3) operation zones will be established to reduce the potential for contaminant migration and the risk of personnel exposure to hazardous substances. Site control involves the physical arrangement and control of the operation zones and the methods for removing contaminants from workers and equipment.

The three-(3) operation zones established on the site are:

1. Exclusion Zone (Contamination Zone)
2. Contamination Reduction Zone
3. Support Zone

The Project Manager and Health and Safety Officer shall be responsible for establishing the site and distance between zones at the site. Considerable judgment is required to assure safe working distances for each zone are balanced against practical work considerations.

9.1.1 Exclusion Zone (Contamination Zone)

The exclusion zone constitutes the area where active excavation, or cleanup operations take place. ***Within the identified exclusion zone, all personnel must be granted access by the on-site Reliance Environmental, Inc. project manager and must wear prescribed levels of protection.*** The hotline, or exclusion zone boundary, is initially established based upon the presence of actual wastes, active work areas, or apparent spilled material, and is placed around all physical indicators of hazardous substances and excavation zones (i.e., drums, tanks, ponds, liquid runoff, portable pits). The hotline may be readjusted based upon subsequent observations and measurements. This boundary should be physically well defined and easily visible (e.g. yellow caution tape). Under some circumstances, the exclusion zone may be subdivided into zones based upon environmental measurements of expected on-site work conditions.

9.1.2 Contamination Reduction Zone

Between the exclusion zone and the support zone is the contamination reduction zone. This zone provides an area to prevent or reduce the transfer of hazardous materials that may have been picked up by personnel or equipment leaving the exclusion area. Some decontamination activities occur in this area. The organization of the contamination reduction zone, and the control of decontamination operations, are described in the next section.

9.1.3 Support Zone (Clean Zone)

The support zone is the outermost area of the site and is considered a non-contaminated or clean area. The support zone contains the headquarters for field operations, first aid station, and other work and

cleanup support. Normal work clothes are appropriate apparel within this zone. Potentially contaminated personnel clothing, equipment, etc., are not permitted.

9.2 Labeling

All bags, containers, drums, etc. containing contaminated materials must be labeled according to specifications.

10.0 DECONTAMINATION

10.1 Decontamination Procedures - General

This section describes general decontamination procedures for the planned activities.

Personnel working at a site could possibly become contaminated in a number of ways, including:

- Exposure to vapors, gases, mists, or particulates in air.
- Skin contact with contaminated tools, dusts, or fluids.

Protective clothing and respirators help prevent the wearer from becoming contaminated or inhaling contaminants, while good work practices help reduce contamination on protective clothing, instruments, and equipment. Even with these safeguards, however, contamination may occur. Harmful materials can be transferred into clean areas, exposing unprotected personnel. In removing contaminated clothing, personnel may contact contaminants on clothing or inhale them. To prevent such occurrences, decontamination procedures and methods must be established before anyone enters a site, and must continue and/or be modified when necessary throughout site operations.

10.1.1 Decontamination Equipment

Decontamination equipment, materials, and supplies are generally selected based on availability. Other considerations are ease of equipment decontamination or disposal. Most equipment and supplies can be easily procured. Soft-bristle scrub brushes or long-handle brushes are used to physically remove contaminated material from surfaces. Water and detergent, or solvents, are to be used in this process with buckets or garden sprayers used for rinsing. Large galvanized wash tubs or stock tanks can hold wash and rinse solutions. Large plastic garbage cans or other similar containers lined with plastic bags may be used to store contaminated clothing and equipment. Contaminated liquids and solids can be stored temporarily in metal or plastic cans or drums. Other gear includes paper or disposable towels for drying protective clothing and equipment.

10.1.2 Disposal of Contaminated Materials

All materials and equipment used for decontamination must be disposed of properly. Clothing, tools, buckets, brushes and all cleaning solutions and spoils must be secured in drums or other containers and labeled correctly for transportation and disposal.

10.2 Decontamination Procedures - Site Specific

All soil sampling equipment will be decontaminated between each use as follows:

1. Liquinox wash
2. Tap water rinse
3. Methanol Rinse
4. De-ionized water rinse

Additional methods to ensure that no cross-contamination occurs, such as steam cleaning, will be employed as necessary.

Personnel decontamination is to take place at the safe perimeter boundary of the exclusion zone. Field personnel are to use detergent and water to wash rubber boots, tools, sample containers, etc. All disposable clothing is to be placed in a large plastic garbage bag or barrel. The decon-rinse solution and contaminated material should be left on-site for disposal. Figures 10-1 through 10-4 diagram step-by-step decontamination stations for each level of protection.

TABLE 10-1

MAXIMUM LAYOUT FOR LEVEL C DECONTAMINATION

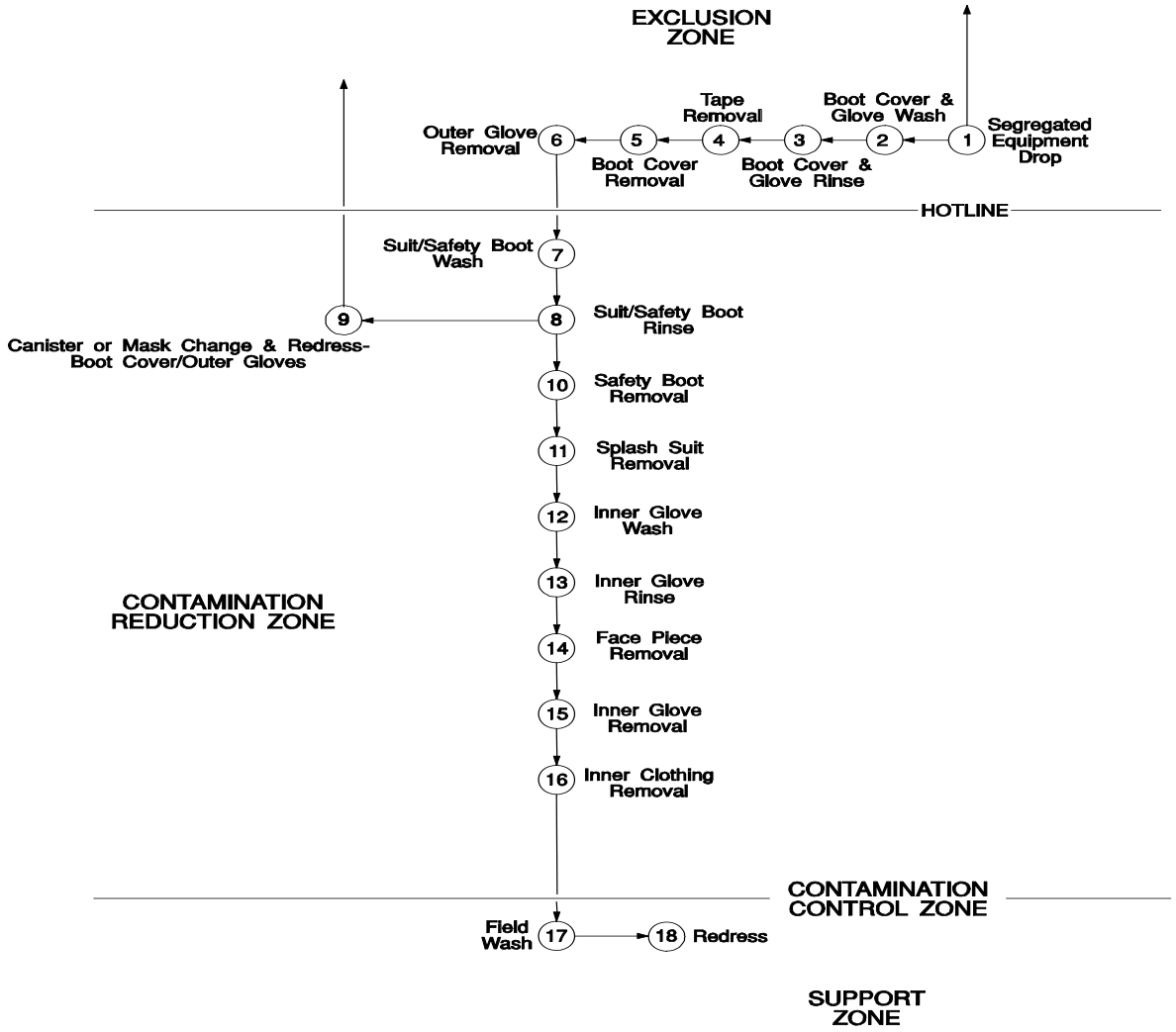


TABLE 10-2 MAXIMUM MEASURES FOR LEVEL C DECONTAMINATION		
Station 1:	Segregated Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
Station 2:	Boot Cover and Glove Wash	Scrub outer boot covers and gloves with decon solution or detergent/water.
Station 3:	Boot Cover and Glove Rinse	Rinse off decon solution from station 2 using copious amounts of water.
Station 4:	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
Station 5:	Boot Cover Removal	Remove boot covers and deposit in container with plastic liner.
Station 6:	Outer Glove Removal	Remove outer gloves and deposit in container with plastic liner.
Station 7:	Suit and Safety Boot Wash	Wash splash suit, gloves and safety boots. Scrub with long-handle scrub brush and decon solution.
Station 8:	Suit, Boot, and Glove Rinse	Rinse off decon solution using water. Repeat as many times as necessary.
Station 9:	Canister or Mask Change	If worker leaves exclusion zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot covers donned, and joints taped. Worker returns to duty.
Station 10:	Safety Boot Removal	Remove safety boots and deposit in container with plastic liner.
Station 11:	Splash Suit Removal	With the assistance of helper, remove splash suit. Deposit in container with plastic liner.
Station 12:	Inner Glove Wash	Wash inner gloves with decon solution.
Station 13:	Inner Glove Rinse	Rinse inner gloves with water.
Station 14:	Face Piece Removal	Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.
Station 15:	Inner Glove Removal	Remove inner gloves and deposit in container with liner.
Station 16:	Inner Clothing Removal	Remove clothing soaked with perspiration and place in lined container. Do not wear inner clothing off-site since there is a possibility that small amounts of contaminants might have been transferred in removing the fully encapsulating suit.
Station 17:	Field Wash	Shower if highly toxic, skin-corrosive or skin-absorbable materials are known or suspected to be present. Wash hands and face if shower is not available.
Station 18:	Redress	Put on clean clothes.

TABLE 10-3
MAXIMUM LAYOUT FOR LEVEL B DECONTAMINATION

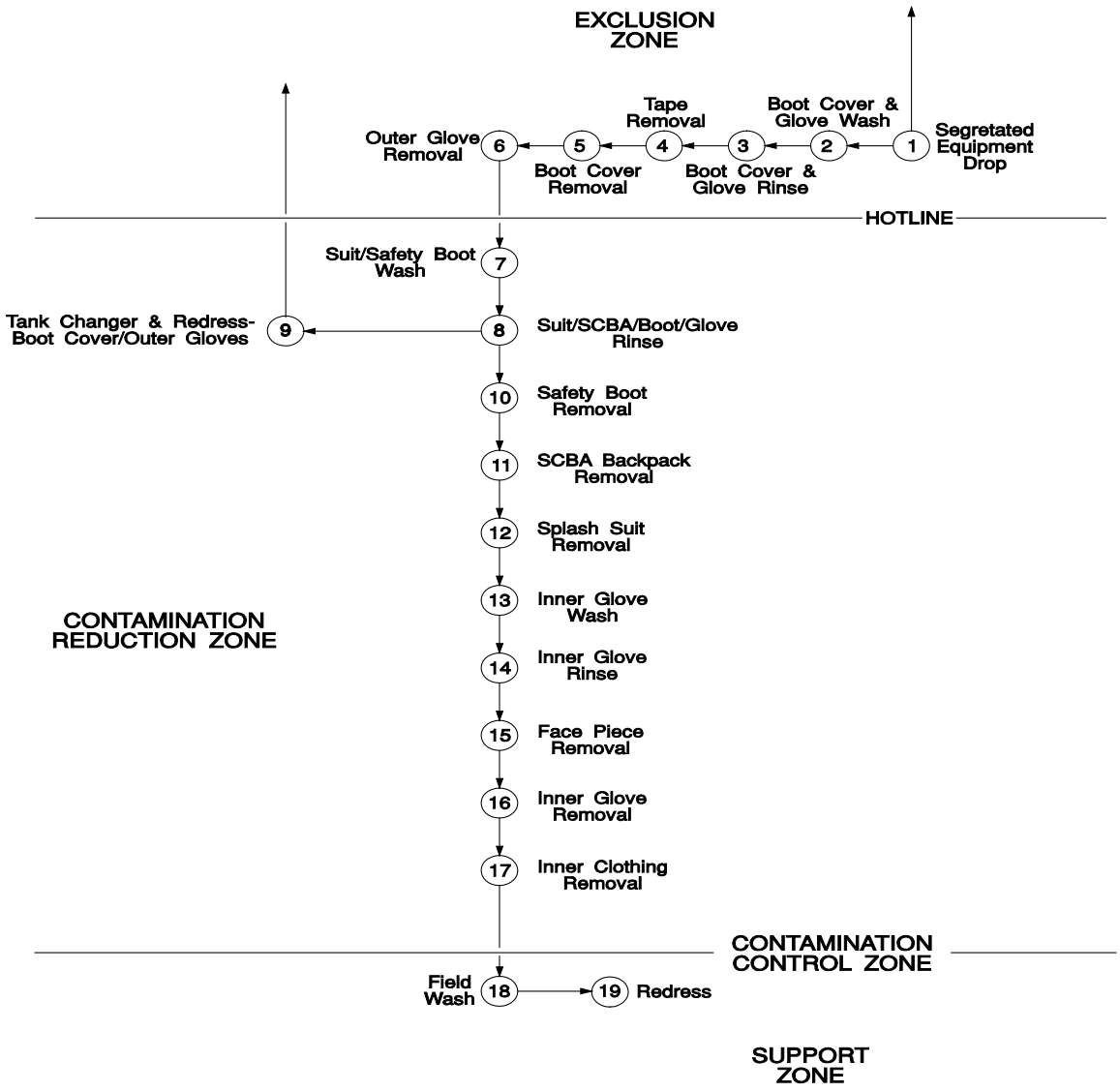


TABLE 10-4 MAXIMUM MEASURES FOR LEVEL B DECONTAMINATION		
Station 1:	Segregated Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. During hot weather operations, a cool down station may be set up within this area.
Station 2:	Boot Cover and Glove Wash	Scrub outer boot covers and gloves with decon solution or detergent/water.
Station 3:	Boot Cover and Glove Rinse	Rinse off decon solution from station 2 using copious amounts of water.
Station 4:	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
Station 5:	Boot Cover Removal	Remove boot covers and deposit in container with plastic liner.
Station 6:	Outer Glove Removal	Remove outer gloves and deposit in container with plastic liner.
Station 7:	Suit and Safety Boot Wash	Wash chemical resistant splash suit, SCBA, gloves and safety. Scrub with long-handle scrub brush and decon solution. Wrap SCBA regulator (if belt mounter type) with plastic to keep out water. Wash backpack assembly with sponges or cloths.
Station 8:	Suit, SCBA, Boot, and Glove Rinse	Rinse off decon solution using copious amounts of water.
Station 9:	Tank Change	If worker leaves exclusion zone to change air tank, this is the last step in the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boot covers donned, and joints taped. Worker returns to duty.
Station 10:	Safety Boot Removal	Remove safety boots and deposit in container with plastic liner.
Station 11:	SCBA Backpack Removal	While still wearing facepiece, remove backpack and place on table. Disconnect hose from regulator valve.
Station 12:	Splash Suit Removal	With assistance of helper, remove splash suit. Deposit in container with plastic liner.
Station 13:	Inner Glove Wash	Wash inner gloves with decon solution.
Station 14:	Inner Glove Rinse	Rinse inner gloves with water.
Station 15:	Face Piece Removal	Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.
Station 16:	Inner Glove Removal	Remove inner gloves and deposit in container with liner.
Station 17:	Inner Clothing Removal	Remove inner clothing. Place in container with liner. Do not wear inner clothing off-site since there is a possibility that small amounts of contaminants might have been transferred in removing the fully encapsulating suit.
Station 18:	Field Wash	Shower if highly toxic, skin-corrosive or skin-absorbable materials are known or suspected to be present. Wash hands and face if shower is not available.
Station 19:	Redress	Put on clean clothes.

11.0 THERMAL EXPOSURE

11.1 Overview

Adverse weather conditions are important considerations in planning and conducting site operations. Extremes in hot and cold weather can cause physical discomfort, loss of efficiency and personal injury.

11.2 Heat Stress

Heat stress can result when the protective clothing decreases natural body ventilation even when temperatures are moderate. Working under various levels of personal protection may require the wearing of low permeability disposable suits, gloves and boots. This clothing will prevent most natural body ventilation. Discomfort due to increased sweating and body temperature (heat stress) will be expected at the work site.

Recommendations to reduce heat stress follow:

- Drink plenty of fluids (to replace loss through sweating)
- Wear cotton undergarments to act as a wick to absorb moisture.
- Make adequate shelter available for taking rest breaks to cool off.

For extremely warm weather, follow these additional recommendations:

- Wear cooling devices to aid in ventilation (the additional weight may affect efficiency).
- Install portable showers or hose down facilities to cool clothing and body.
- Shift working hours to early morning and early evening, avoiding the hottest time of the day.
- Rotate crews wearing the protective clothing.

TABLE 11-1 Permissible Heat Exposure Threshold Limit Values (Degrees Fahrenheit)			
Work Rest Regimen	**WORK LOAD**		
	Light	**Moderate**	**Heavy**
Continuous Work	86	80	77
75% Work 25% Rest each hour	88	82	79
50% Work 50% Rest each hour	90	85	81
25% Work 75% Rest each hour	92	88	86

** outside temperature

Monitoring of personnel wearing personal protective equipment (PPE) should commence when ambient temperatures reach 70 degrees Fahrenheit or above. Frequency of monitoring can be found in Table 11-2, listed below.

TABLE 11-2 HEAT STRESS MONITORING FREQUENCY			
TEMPERATURES (^{0}F)	**LEVEL D**	**MODIFIED LEVEL**	**LEVEL C OR B**
>90^0	Every 45 minutes	Every 30 minutes	Every 20 minutes
85-90^0	Every 60 minutes	Every 45 minutes	Every 30 minutes
80-85^0	Every 90 minutes	Every 75 minutes	Every 60 minutes
75-80^0	Every 120 minutes	Every 105 minutes	Every 90 minutes

The site safety officer will conduct the following heat stress monitoring required for those individuals performing continuous work wearing PPE at temperatures greater than 70 degrees Fahrenheit.

- Heart rates (HR) should be measured by counting the radial pulse for 30 seconds as early as possible in the rest period. The HR at the beginning of the rest period should not exceed 110 beats per minute. If the HR exceeds 110 beats per minute the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period stays the same. The HR should be measured again at the end of the rest period to make sure that it has dropped to normal.
- Body temperatures should be measured orally with a clinical thermometer as early as possible in the rest period. Oral temperatures (OT) at the beginning of the rest period should not exceed 99□ Fahrenheit (F). If OT exceeds 99^{0}F, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period stays the same. PT should be measured again at the end of the rest period to make sure that it has dropped below 99^{0}F.

11.3 Cold Exposure

Cold exposure can occur in temperatures at or below freezing. If prolonged exposure to cold occurs without proper protection, the effects of cold exposure can happen in temperatures above freezing. Exposure to cold can cause severe injury (frostbite) or overall drop in body temperatures. Fingers, toes, ears are most susceptible to frostbite.

Both the outdoor temperature and the wind velocity play a part in cold injuries. Wind chill is used to describe the chilling effect of moving air in combination with low temperatures. Cold exposure can be a serious threat to outside crew that removes protective clothing and exposes perspiration soaked underclothing to the cool air. The water conducts heat 240 times faster than air rapidly cooling the body and wet clothing. Systemic hypothermia is caused by exposure to freezing or rapidly dropping temperatures.

Its symptoms are usually seen in five stages:

- Shivering.
- Apathy listlessness, sleepiness and rapid body cooling.
- Unconsciousness, glassy stare, slow pulse and respiratory rates.
- Freezing of the extremities (most sensitive to freezing first are the fingers, toes and ears)
- Death.

Recommended actions to avoid suffering the effects of cold exposure:

- Wear cotton undergarments to absorb perspiration from the body.
- Wear additional layers of light clothing as needed for warmth. The layering effect holds in air, trapping body heat and some layers could be removed as the temperature rises during the workday.
- Pay close attention to body signals and feelings, especially on high surface area to volume ratios of the body - ears, fingers, toes and take the appropriate action to correct any problem indications (such as break from work activity and move to rest area to warm up, add additional clothing).
- Install a windbreak at the drill site to break the cold winds from blowing directly at the drilling crew.
- Maintain good eating and drinking habits enabling the body to operate at top capacity.
- Provide a sheltered rest breaks area to retreat to for resting and warming up.

TABLE 11-3
WIND CHILL INDEX

Wind (mph)	Temperature (^{0}F)																	
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
	60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

Frostbite in 30 Minutes **Frostbite in 10 Minutes** **Frostbite in 5 Minutes**

12.0 EMERGENCY INFORMATION

12.1 Emergency Situation

All hazardous waste site activities present a potential risk to on site personnel. During routine operations, establishing good work practices, staying alert, and using proper personal protective equipment minimizes risk. Unpredictable events such as physical injury, chemical exposure, or fire may occur and must be anticipated.

Emergency conditions are considered to exist if:

- Any member of the field crew is involved in an accident or experiences any adverse effects or symptoms of exposure while on site; or
- A condition is discovered that suggests the existence of a situation more hazardous than anticipated.

12.2 Emergency Procedures

12.2.1 Overview

The following emergency procedures should be followed:

Notify all key personnel and agencies in the event of an emergency A list of the applicable emergency telephone numbers should be available at the site; several are provided in Table 12-1. This list should be posted conspicuously at the site.

- Personnel on site should use the "buddy" system (teams).
- Buddies should pre-arrange hand signals or other means of emergency signals for communications in case of being out of hearing range.
- Visual contact should be maintained between "teams" on site with other field personnel remaining in close proximity in order to assist each other in case of emergencies.
- In the event that any member of the field crew experiences any adverse effects or symptoms of exposure while on the scene, the entire work crew should immediately halt work and act according to the instructions provided by the Project Manager or site Health and Safety Officer.
- The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated should result in the evacuation of the on site personnel and re-evaluation of the hazard and the level of protection required.
- In the event that an accident occurs, the HSO and Project Manager (if different) is to complete an Accident Report Form. Follow-up actions will include an evaluation and correction of the conditions that caused the accident.

12.2.2 Personal Injury

In case of personal injury at the site, the following procedures should be followed:

- Any on site personnel trained in first aid can administer treatment to an injured worker.
- The victim should be transported to the nearest hospital or medical center. If necessary, an ambulance should be called to transport the victim.

12.2.3 Contact With Electricity

If a drill rig makes contact with electrical wires, it may or may not be insulated from the ground by the tires of the carrier. Under either circumstance the human body, if it simultaneously comes in contact with the drill rig and the ground, will provide a conductor of the electricity to the ground. Death or serious injury can be the result. If a drill rig or a drill rig carrier makes contact with overhead or underground electrical lines:

- Under most circumstances, the operator and other personnel on the seat of the vehicle should remain seated and not leave the vehicle. Do not move or touch any part, particularly a metallic part, of the vehicle or the drill rig.
- If using a drill rig and it is determined that the rig should be vacated, then all personnel should jump clear and as far as possible from the drill. Do not step off - jump off, and do not hang on to the vehicle or any part of the drill when jumping clear.
- If you are on the ground, stay away from the vehicle and the drill rig, do not let others get near the vehicle and the drill rig and seek assistance from local emergency personnel such as the police or a fire department.
- When an individual is injured and in contact with the power lines, attempt rescue with extreme caution. If a rescue is attempted, use a long, dry unpainted piece of wood or a long, dry, clean rope. Keep as far away from the victim as possible and do not touch the victim until he is completely clear of the electrical lines.
- When the victim is completely clear of the electrical source and is unconscious and a heart beat (pulse) cannot be detected, begin cardiopulmonary resuscitation (CPR) immediately.

12.2.4 Chemical Exposure

If a member of the field crew is exposed to chemicals, the procedures outlined below should be followed:

- Another crewmember (buddy) should remove the individual from the immediate area of contamination.
- Precautions should be taken to avoid exposure of other individuals to the chemicals.
- If the chemical is on the individual's clothing, first rinse the clothing if possible, and then the clothing should be removed if it is safe to do so.
- If the chemical has contacted the skin, the skin should be washed with copious amounts of water, for at least 15 minutes.
- In case of eye contact, an emergency eyewash should be used. Eyes should be washed for at least 15 minutes.
- If necessary, the victim should be transported to the nearest hospital or medical center. The nature of the injury may require that an ambulance should be called to transport the victim.
- The HSO and/or the Project Manager must report all chemical exposure incidents in writing on an Accident Report Form.

12.3 Site Specific Information

A list of phone numbers for agencies and key personnel for each specific project will be available on site. This list is for use in the event of an emergency and should be conspicuously posted. Directions to the nearest hospital will be included.

Table 12-1 lists the emergency information for this site.

TABLE 12-1
EMERGENCY INFORMATION

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

12.3.1 Map and Directions to Nearest Health Facility

Site Location: 3131-3221 Long Beach Road, Oceanside, NY 11572

Nearest Hospital Name: South Nassau Hospital

Hospital Location: 1 Healthy Way, Oceanside, NY 11572

Hospital Telephone: (516) 632-3000

Directions to the Hospital:

1. From the parking lot, turn right onto Long Beach Road, heading north.
2. Proceed approximately 0.8 miles and turn right onto Foxhurst Road.
3. Proceed approximately 0.3 miles and turn left onto Oceanside Road.
4. Proceed approximately 0.5 miles and turn right onto Oswald Court.

Total Distance: 1.6 miles

Total Estimated Time: 5 minutes

12.3.2 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 2.5.1a). The list will also be posted prominently at the site and made readily available to all personnel at all times.


HOSPITAL
SITE
Merrick Rd
New York Ave
Jackson St
Bedell St
Smith St
S Park Ave
Robertson Rd
Vincent Pl
Shellbank Pl
Reid Ave
Woodland Ave
Driscoll Ave
Cleveland Ave
Weeks Ave
Aldred Ave
Chester St
Charles St
Dacosta Ave
Waterview Rd
Dover Rd
Pearl St
Henry St
Tirose Ave
Merle Ave
Davison Ave
Pine St
Bellevue Ave
Amos Ave
Elizabeth Ave
Madison Ave
Fairview Ave
Allen Ave
Hull St
Marshall St
Christopher St
Surrey Pl
Clive Ave
Rebecca Ln
Harold St
Frederick St
Knight St
Waukena Ave
Woodward St
Poplar St
Soper St
Anchor Ave
W Windsor Pkwy
Windsor Pkwy
Perkins Ave
Weidner Ave
Evans Ave
Cypress Ave
Arrow St
Arch St
Lake St
Forest St
Hoke Ave
Merrifield Ave
Bayside Ave
Montgomery Ave
Moore Ave
W Cortland Ave
Vermont Ave
W Waukena Ave
Thompson Ave
Niles St
Lawson Blvd
Nassau Rd
Perry Ave
Neptune Ave
Skillman Ave
Fulton Ave
Oceanside Rd
Tinker Dr
5th St
4th St
3rd St
2nd St
1st St
© 2013 Google
3152 ft

13.0 REFERENCES

1. American Conference of Governmental Industrial Hygienists, *Threshold Limit Values and Biological Exposure Indices for 1988-1989,* Cincinnati, Ohio, 1988.
2. DOT/USCG, *Chemical Hazard Response Information System (CHRIS),* COMDTINST M16465. 12A, 1984
3. National Institute for Occupational Safety and Health, *NIOSH Pocket Guide to Chemical Hazards,* Fifth Printing, DHHS (NIOSH)) Publication No. 85-114.
4. NIOSH/OSHA/USCG/EPA, *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities,* DHHS (NIOSH) Publication No. 85-115.
5. *Patty's Industrial Hygiene and Toxicology,* 3rd edition, John Wiley & Sons, New York, 1985.
6. Sax, N. Irving, *Dangerous Properties of Industrial Materials,* 6th edition, Van Nostrand Reinhold Company, New York, 1984.
7. EPA Region II; *Generic Health and Safety Plan.* Part 7.

APPENDIX A

MSA PID CALIBRATION DATA
PID ORGANIC VAPOR ANALYZER

OPERATION/CALIBRATION

1. Periodic calibration is required to compensate for PID output changes due to inlet filter restriction, lamp window cleanliness, sample pump wear and other factors.
2. During calibration the Photon Gas Detector's PID is first exposed to Zero Gas. A small signal is generated, and this zero signal is stored by the microprocessor.
3. In High Sensitivity operation, the microprocessor subtracts the zero signal from the PID signal, and multiplies the difference by 1000. This number is then displayed.
4. When one of the three Cal Memories is selected, the Photon Gas Detector's PID is next exposed to Span Gas. This span signal is stored. The microprocessor subtracts the zero signal from the span signal and divides the difference by the user entered Span Gas concentration. The resulting sensitivity is stored in the selected Cal Memory with the zero signal. In operation, the microprocessor first subtracts the zero signal from the PID signal, then divides the difference by the sensitivity. This number is then displayed.

APPENDIX B

DYNAMATION AGM 502/502R
GAS DETECTION INSTRUMENT CALIBRATION DATA

DYNAMATION AGM 502/502R
OPERATION/CALIBRATION

1. Place the calibration connector over the grill area of the instrument. Be sure that the connector edges are fitted over the grill area and are firmly resting on the top of the instrument case.
2. Connect the tubing from the calibration connector to the calibration gas.
3. Slide the calibration connector switch to the "cal" position (far right). The message on the instrument should read FLOW GAS.
4. Open the gas valve far enough so that the flowmeter reads 1.0 cu. ft./hr.
5. The unit will begin calibration. Upon completion the instrument will read CAL FINISHED, REMOVE GAS.
6. Disconnect the calibration connector from the instrument.
7. Instrument is now operational.

APPENDIX E
SOIL VAPOR/INDOOR AIR QUALITY SAMPLE FORM

SOIL VAPOR SAMPLING FORM

Date: _____ Time: _____

Weather Conditions: _____

Temperature: _____ Humidity: _____

Wind Magnitude: _____ Wind Direction: _____

Barometric Pressure: _____ Falling/Rising

Sampling Team: _____

Sample Location: _____

Site Condition:

(i.e. any adjacent questionable facilities, vent pipe, tanks, etc. and what type of basements are present)

_____

_____

_____

_____

Sampling Depth: _____ feet below grade

Sealed at Surface: YES NO

Purge Rate: _____ must be less than 0.2 L/min

Purge Time: _____

note: Assuming 0.17" I.D. tubing, purge 15 sec. for every 10' of tubing

Helium Rate at Enclosure: _____

Helium Rate from Sample Tubing: _____

Is this rate <20% of the rate at the enclosure? YES NO

If the Helium readings have a greater ratio than 20%, the seals should be rechecked and the tracer gas should be reapplied.

Once the tracer gas screening procedures are completed and no short-circuiting is determined to be present at the location, the sampling may proceed.

Is the Summa Canister Certified Clean and within the proper holding time? YES NO

Starting Pressure: _____ in. of Hg

Starting Time: _____

Ending Time: _____ Date: _____

Ending Pressure: _____ in. of Hg Date: _____

Summa Canister Identification # _____

Flow Regulator Identification # _____

Flow Regulator Calibration Time: _____ hr

Sample ID # _____ Sample Time: _____

Analysis: _____

_____

_____

APPENDIX F
SITE-WIDE INSPECTION FORM

SITE INSPECTION FORM

Date: _____

Inspector: _____

Weather Conditions: _____

Observations	Yes	No	Comments
1. Has the site usage changed since the previous inspection?			
2. Are any new structures present on-site?			
3. Has the usage of any retail spaces changed since the previous inspection?			
4. Have any structures been demolished since the previous inspection?			
5. Is there any evidence of recent excavation activities on-site? (i.e. disturbed earth, patched pavement, etc.)			
6. Are any modifications evident within the Environmental Easement designated area?			
7. Is there any contaminant related surface staining present?			
8. Are there any contaminant related odors present?			
9. Are the stormwater drains in need of repair?			
10. Are the ground water monitoring wells in need of repair?			
11. Is the sub-slab depressurization system operational?			
12. Are the sub-slab depressurization system checklists up-to-date?			
13. Is the soil vapor/indoor air quality monitoring sampling events up-to-date?			
14. Has there been any changes to the neighboring properties?			

APPENDIX G
QUALITY ASSURANCE PROJECT PLAN

Reliance Environmental, Inc

130 E. Chestnut Street, Lancaster, PA 17602 (888) 735-2008
Lancaster, PA – Sarasota, FL

QUALITY ASSURANCE PROJECT PLAN

OCEANSIDE PLAZA
NASSAU COUNTY, NEW YORK
NYSDEC Site Number: C130158

Prepared for:
Oceanside Plaza Associates, LLC
151 Irving Place
Woodmere, New York 11598

Prepared by:
Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster, PA 17602
(888) 735-2008

JULY 2013

TABLE OF CONTENTS

1.0 PROJECT SCOPE AND GOALS

This Quality Assurance Project Plan (QAPP) has been prepared to ensure that any soil, ground water or vapor sampling procedures associated with the Site Management Plan activities are completed in accordance with the New York State Department of Environmental Protection (NYSDEC) regulations. The site characterization activities, to be conducted at the Oceanside Plaza facility located at 3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York, are in response to the discovery of a historic release of chlorinated compounds originating from the dry cleaning facility presently known as the Jef-El Cleaners.

Soil, ground water and soil vapor investigation and remediation activities may be performed at the subject site, as needed. Contamination originates at the dry cleaner facility in the approximate center of the mall building. Activities may include soil excavation/backfilling, ground water well installations and soil vapor port installations.

2.0 PROJECT ORGANIZATION AND RESPONSIBILITY

This section identifies key individuals and the line of authority for conducting the remedial action. This section also identifies personnel responsible for Quality Assurance to ensure the collection of valid monitoring data and the routine assessment of measurement systems for precision and accuracy. The following sections identify specific responsibilities of key individuals during the life of the project.

2.1 Certified Laboratories

The certified laboratories utilized for the remedial action monitoring are as follows:

Lancaster Laboratories, Inc.
P.O. Box 12425
2425 New Holland Pike
Lancaster, PA 17605-2425
Phone Number: (717) 656-2300
ELAP #: 10670

TestAmerica Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403
Phone Number: (802) 660-1990
ELAP #: 10391

2.2 Project Personnel

The project personnel responsibilities for the remedial actions are as follows:

Project Manager
Michael P. Raffoni, P.G.
Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster, PA 17602
Phone Number: (717) 735-9508

Quality Assurance Officer
Mark E. Zunich
Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster, PA 17602
Phone Number: (717) 735-9508

2.3 Data Usability Summary Report

In accordance with Appendix 2B of the NYSDEC Technical Guidance for Site Investigation and Remediation (DRAFT DER-10), a Data Usability Summary Report will be prepared and submitted to the DER Project Manager for review.

Data Validator/Environmental Technical Consultant
Judy V. Harry
Data Validation Services
P. O. Box 208
120 Cobble Creek Rd.
North Creek, NY 12853
Phone Number: (717) 626-3900

3.0 SAMPLING PROCEDURES/EQUIPMENT DECONTAMINATION

This section contains a discussion of sampling procedures to be used for the remedial action monitoring. The use of appropriate sampling procedures will improve representativeness of the data acquired during the investigation. The section includes a discussion of:

- Pre-sampling orientation of the sample collection crew,
- Description of sampling techniques or guidelines used to select sampling sites,
- Sampling methods with procedures outlined for each sample matrix,
- Sample handling procedures with descriptions of the sample containers, procedures, reagents, etc., used for sample collection, preservation, transport, and storage,
- Sampling equipment decontamination procedures to avoid sample contamination,
- Field documentation procedures, and
- Custody procedures for sample shipment.

3.1 Pre-Sampling Orientation

A pre-sampling orientation meeting will be conducted to inform the sample collection crew of site health and safety and sampling methods to be used during the investigation. This will help the sample crew to familiarize themselves with the overall scope of the study, the sampling procedures, and the methodology for the use of the sampling equipment.

The objectives of the meeting, in particular, will be to familiarize the sampling crew with the following:

- Sample material characteristics, sampling equipment, and safety procedures,
- Location and number of sampling and/or monitoring points,
- Equipment operation and calibration procedures,
- Sample collection procedures and frequency,
- Sample preservation, storage, and shipping,
- Documentation and record keeping procedures, and
- Decontamination materials and equipment decontamination procedures.

3.2 Sampling Procedures

The following subsections will describe the soil and groundwater sampling techniques to be utilized in the remedial action monitoring.

3.2.1 Soil Sampling

Soil samples will be collected by either advancing a clean stainless steel sample tube with an acetate sleeve into a borehole utilizing a Geoprobe hydraulic system and direct push technologies, or via split spoon (augur rig), or via stainless steal sample spoons. The sample is then removed from the sampler and placed directly into a laboratory supplied glass sample container.

3.2.2 Groundwater Sampling

All monitoring wells on site will be purged a minimum of three well volumes, utilizing an electric submersible pump outfitted with clean, new, vinyl tubing. Upon completion of the purging, the wells will be sampled using a new, clean, disposable bailer. Field measurements will be collected utilizing a Horiba multi-meter and flow cell (or similar), throughout the purging and sampling activities.

All ground water points, installed utilizing a Geoprobe, will be purged a minimum of three well volumes, utilizing a peristaltic pump outfitted with clean, new, vinyl tubing. Upon completion of the purging, the points will be sampled using a new, clean, disposable bailer. Field measurements will be collected utilizing a Horiba multi-meter and flow cell (or similar), throughout the purging and sampling activities.

3.2.3 Indoor Air Quality Sampling

All indoor air quality sampling will include 8-hour IAQ testing with “perc badges” for employees and will be conducted in accordance with the regulations outlined in the New York State Department of Health – Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Public Comment Draft – February 2005) Section 2.7.3.

To ensure the collection of valid laboratory analytical results, appropriate QA/QC protocols will be followed in accordance with the New York State Department of Health – Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Public Comment Draft – February 2005) Section 2.8.

3.2.4 Sub-Slab Vapor Quality Sampling

All sub-slab vapor quality sampling will include the installation of temporary sampling points and will be conducted in accordance with the regulations outlined in the New York State Department of Health – Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Public Comment Draft – February 2005) Section 2.7.2.

To ensure the collection of valid laboratory analytical results, appropriate QA/QC protocols will be followed in accordance with the New York State Department of Health – Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Public Comment Draft – February 2005) Section 2.8.

3.3 Equipment Decontamination Procedures

3.3.1 Soil Sampling

After each soil sampling location all sample equipment that will be reutilized will be decontaminated using the following sequence:

1) Alquinox/Liquinox wash,
2) tap water rinse,
3) deionized water rinse,
4) methanol rinse,
5) air dry.

3.3.2 Groundwater Sampling

Between each use the tubing used on the submersible/peristaltic pump will be changed and properly disposed. The submersible pump exterior will be washed with an Alquinox/Liquinox wash, followed by a tap water rinse and air dried. The submersible pump interior will be cleaned by pumping an Alquinox/Liquinox wash though the pump followed by tap water. In addition, sampling will proceed from the least known contaminated location to the location with the greatest known contamination, if possible.

4.0 ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE

TABLE 1			
Matrix Type	Soil	Water	Air
Frequency of Samples	As required	Quarterly	As required
Number of Field Blanks	One per day	One per day	NA
Number of Trip Blanks	None	One per sample shipment	One per shipment.
Analytical Parameters	VOC	VOC	Tetrachloroethene and expected degradation products.
Analytical Methods*	SW-846 Method 8260B	SW-846 Method 8260B	NYSDOH Method 311-9 and/or USEPA Method TO-15
Number of Matrix Spikes	One duplicate for up to every twenty samples collected.	One duplicate for up to every twenty samples collected.	One duplicate for up to every twenty samples collected.
Number of Matrix Spike Duplicate Samples	One duplicate for up to every twenty samples collected.	One duplicate for up to every twenty samples collected.	One duplicate for up to every twenty samples collected.
Number of Duplicate Samples	One duplicate for up to every ten samples collected.	One duplicate for up to every ten samples collected.	One duplicate for up to every ten samples collected.
Split Samples	Two per day.	Two per day.	One per round of testing.
Performance Evaluation Samples	Annually.	Annually.	Annually.
Sample Preservation	Ice	HCL, Ice	As directed by laboratory.
Sample Container Volume	2 x 40 ml.	3 x 40 ml.	Varies
Sample Container Type	Glass	Glass	Canisters and/or badges.
Sample Holding Time	7 days	10 days	As directed by laboratory QAQC.
Data Deliverables	Category B	Category B	Category B

NA - Not Applicable
VOCs - Volatile organic compounds
All laboratory data packages will be “Category B.”
* - Analytical methods are consistent with Exhibit I of the June 2000 Analytical Services Protocol.

5.0 SITE SPECIFIC SAMPLING METHODS

5.1 Sample Documentation

A sample numbering system will be used to identify each sample. This numbering system will provide a tracking procedure to allow retrieval of information about a particular sample and assure that each sample is uniquely numbered. The sample identification numbers will be composed of four components:

1. A two or three letter designation to identify the project client for which the sample is collected (for this project it will be BK).
2. A designation to identify the project site for which the sample is collected (for this project it will be O).
3. A code to identify its type as follows:
   - SB – soil boring
   - MW - monitoring well
   - E – excavation
   - SV – soil vapor
   - IAQ – indoor air quality
   - AMB – ambient air
4. A designation to indicate the specific monitoring well/soil boring/soil vapor port sampling location.

Sample labels will contain sufficient information to uniquely identify the sample in the absence of other documentation. The labels will include:

- Unique sample number,
- Sample location (and depth, if applicable),
- Sampling date and time,
- Individual collecting the sample, and
- Preservation method employed (if applicable).

The sample label will always be directly affixed to the sample container and will always be completed using indelible ink.

All the necessary information for sampling will be recorded on field sampling data sheets and/or in a field sampling log book. This information will include sample type(s) taken, sample identification number, project name, project location, sample collection date, analyses requested, sample container(s), preservative(s), label identification (if applicable), all field measurements, casing volume calculations, sampling location, well identification, starting time for well evacuation pumping, ending time for well evacuation pumping, pumping volume, general well condition, weather, time of sampling, field samplers' names (with identification of leader), and comments.

Pertinent observations, such as statements pertaining to any problems encountered, will be noted in the field log book. A sample analysis request form and a chain-of-custody form will be completed before transport or shipment. A complete description of sample custody is discussed in the next subsection.

5.2 Chain-of-Custody Procedures

As part of standard operating procedures, a chain-of-custody will be maintained for routine control of sample exchange. The chain of custody includes a field log book, a sample label, a sample analysis request form, and a chain-of-custody record. The sample custody will be maintained for both field sampling and laboratory operations.

After completing all field documentation procedures, the ice chest containing the samples will be addressed, identified, and placarded as appropriate. The ice chest will be hand-carried or shipped to the designated laboratory under proper custody documentation procedures. After transfer of custody to the laboratory personnel the samples are generally stored in a refrigerator or other cold storage unit.

5.3 Field Operations

Prior to sampling, all personnel involved will be instructed as to the chain-of-custody procedures. The following custody procedures will be followed in the field as applicable:

- A chain-of-custody record will be initiated in the field for the samples. A copy of this record will accompany the samples.
- Each time responsibility for custody of the sample changes, the new custodian will sign and date the record.
- The custody of individual sample containers will be documented by recording each container identification on an appropriate chain-of-custody form.
- The following documentation will supplement the chain-of-custody records:
  - Sample label on each sample, and
  - Field collection report.
- In the event that the sample is shipped by a carrier service, the package will be properly placarded as necessary, and sent by registered mail with return receipt requested. All documentation, such as freight bills, post office receipts, Bills of Lading and other receipts, will be retained as part of the documentation.

5.4 Laboratory Operations

The following custody procedures will be followed:

- The laboratory will inspect the samples upon receipt and note any damage in the laboratory log book.
- The laboratory will acknowledge receipt of the samples on the chain-of-custody form.
- The laboratory will assign a unique laboratory number to each sample.

- The laboratory custodian will distribute samples to the appropriate analyst for storage and analysis.
- Upon completion of the laboratory analysis, the analyst or the custodian will send the analytical results along with a copy of the chain-of-custody forms to the Project Manager.
- All documentation by the laboratory will be made in ink. If an error is made, a line will be drawn through the error and the revision will be entered.

5.5 Laboratory Sample Storage Procedures

Environmental samples are stored in a refrigerated room continuously checked for temperature and humidity. Bar coding of the samples is used to maintain records of retrieval time, return time, and analysts handling the sample.

APPENDIX H
SUB-SLAB DEPRESSURIZATION SYSTEM INSPECTION CHECKLISTS

SUB-SLAB DEPRESSURIZATION SYSTEM

INSPECTION CHECKLIST

Date: _____ **Completed By:** _____

Description	Status			Action Taken/Comments
	OK	Action Required	N/A	
A. Aboveground Piping				
1. Inspection of the aboveground piping for cracks, leaks and support issues.				
2. Inspection of the vacuum/pressure gauges and flowmeters for proper operation.				
B. Electrical				
1. Inspection of the electrical control panel – closed and secure.				
C. Blower Enclosure				
1. Inspection of the exhaust fan, thermostat and louver.				
D. 60-Gallon Knock-Out Tank				
1. Inspection of the vacuum filter.				
2. Inspection of the dilution valve.				
3. Inspection of the knock-out tank for water.				
E. Vapor Phase Carbon Units				
1. Inspection of the pressure gauges.				
2. Inspection of the piping and fittings for any leaks.				

SUB-SLAB DEPRESSURIZATION SYSTEM

NON-ROUTINE MAINTENANCE FORM

Date: _____ **Completed By:** _____

Date	Description of Work	Cause	Completed By

SUB-SLAB DEPRESSURIZATION SYSTEM

OPERATING LOG

Source of Reading	Units	Values	Comments
Vacuum at Suction Piping (inside store)	Inches of Water		
VS-DCF (front of dry cleaner store)	Inches of Water		
VS-MRE (middle of dry cleaner store)	Inches of Water		
VS-DCF (rear of dry cleaner store)	Inches of Water		
VS-Book (inside bookstore)	Inches of Water		
VS-VAC (inside wine store)	Inches of Water		
VS-Fence (exterior soil vapor port behind dry cleaner)	Inches of Water		
Knock-Out Tank Vacuum	Inches of Water		
Blower Inlet Vacuum	Inches of Water		
Blower Discharge Pressure	Inches of Water		
Blower Effluent PID reading	PPMV		
VPGAC Unit Effluent PID Reading	PPMV		

Is the System operating within the acceptable conditions? _____
If no, was the condition corrected and how? _____
_____

Form Completed By: _____ Signature: _____ Date & Time: _____