SUFFOLK COUNTY FORMER CANINE KENNEL
GABRESKI AIRPORT, WESTHAMPTON BEACH, NY
SITE: #152079

PWGC Project No. DPW0701

REMEDIAL INVESTIGATION REPORT
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New York State Department of Environmental Conservation

Prepared for:
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1.0 INTRODUCTION

1.1 Purpose and Scope

P.W. Grosser Consulting, Inc. (PWGC) has prepared the following Remedial Investigation Report (RI) on behalf of the Suffolk County Department of Health Services (SCDHS) to document the investigation activities performed at the former Canine Kennel site located at the Francis S. Gabreski Airport in Westhampton Beach, New York (Suffolk County Tax Map Number 900-312-1-1) (**Figure 1**). The property is owned by Suffolk County and managed by the Department of Economic Development and Workforce Housing.

The scope of the investigation is detailed in the approved Remedial Investigation Work Plan (RIWP) prepared by PWGC in July 2007. PWGC performed the remedial investigation in accordance with the RIWP beginning in March 2008, and the results are summarized in this RI.

1.2 Site Location and Description

The area of concern is a section of disturbed ground, approximately 1.0 acre in size and irregular in shape (**Figure 2**). The site is located in a remote portion of the airport, south of a former canine kennel and just east of a boat storage yard near the eastern property line of the airport.

1.3 Site History

In 1943, the federal government built the airport for use as an Air Force base during World War II. After the war, it was given to Suffolk County. In 1951, the airport was reclaimed for the Korean War National Emergency. In 1960, the US Air Force leased the site for an Air Defense Command Base, which was deactivated in 1969, then released back to Suffolk County in 1970.

During deactivation activities (Spring 1970), the Suffolk County Air Force Base used the Canine Kennel Area to bury inert wastes, such as office furniture. The site was also used for the disposal of polychlorinated biphenyl (PCB) containing electrical distribution equipment such as transformers and capacitors.

In March 1984, the New York State Department of Environmental Conservation (NYSDEC) discovered the site in response to a complaint from a local citizen's group. At that time, the NYSDEC observed several half-buried capacitors leaking PCB oil within a ten-foot deep pit. In May 1984, nine soil samples were collected for laboratory analysis. Eight contained the PCB Aroclor-1254 in concentrations up to 1,700 milligrams per kilogram (mg/kg). A sketch of the area as recorded by the NYSDEC at that time is shown in **Figure 3**.

In January 1986, a NYSDEC contractor noted that the pit was only half as deep as previously stated, and that the capacitors were no longer visible. The area showed signs of recent earthwork activities and was devoid of vegetation.

1.4 Previous Investigations

In November 1996, Dvirka and Bartilucci Consulting Engineers (D & B) performed a preliminary site assessment. D & B determined regional groundwater flow direction to be towards the southeast, and installed and sampled one upgradient (GP-1) and five downgradient (GP-2 through GP-6) Geoprobe™ monitoring wells (**Figure 4**). Groundwater was encountered between 9 and 12 feet below grade. Two groundwater samples were obtained from each Geoprobe™ location, one at the water table interface and one at 15 feet below the water table. PCBs were below detection limits in each of the 12 samples analyzed. Traces of the pesticides 4,4'-DDD and 4,4'-DDT were detected in the upgradient well only. Based upon the groundwater results, D & B prepared a Preliminary Site Assessment (PSA) report (1998) that stated that PCBs previously detected in surface soils were not impacting local groundwater quality. The NYSDEC has also concluded that PCBs have not impacted local groundwater.

In July 2000, the NYSDEC performed additional soil sampling, see the attached report in **Appendix A**. Thirteen soil samples were collected at six locations at two depths (surface (0-4") and subsurface (2'-4') below grade) and one soil sample was removed from the end of a capacitor located at the site. The highest soil concentration found was 280,000 mg/kg adjacent to a capacitor. There was a "hot spot" identified near soil samples #1, 2 and 5, where the levels ranged from 1,900 mg/kg to 150,000 mg/kg at the surface and 120 mg/kg to 20,000 mg/kg at 2.5' to 3.5' below grade. Soil #3 and #4 contained PCBs levels of 3.9 mg/kg and 17 mg/kg at the surface, and less than 10 mg/kg at a depth of 2.5'. Concentrations of PCBs at soil sample #6 were less than 1.0 mg/kg. NYSDEC sampling results are summarized on **Table 1,** locations are provided on **Figure 4**. These samples were obtained from the same area previously sampled in May 1984.

The SCDHS Farmingville Office of Pollution Control in Farmingville, New York, performed an inspection of the site on May 15, 2003. This inspection noted the following:

- The area contained partially buried and unburied metal debris, such as rusted drums, car parts, and scrap metal. It was noted that this may interfere with any non-invasive exploratory instruments such as ground penetrating radar (GPR) and magnetometers.

- Pine tree re-growth was greater than expected. The area is thickly wooded in spots with trees about 10 to 12 feet high and an occasional sandy clearing.

2.0 FIELD INVESTIGATION

PWGC began the implementation of the RIWP in March 2008. As required, ten-day notification was provided to the NYSDEC before investigation activities began. Soil and groundwater sampling activities were completed on July 11, 2008.

2.1 Field Investigation and Technical Approach

The Scope of Work, as identified in the approved RIWP, included the following tasks:

1. Geophysical Investigation
2. Test Pit Excavation Activities
3. Surface and Subsurface Soil Sampling
4. Monitoring Well Installation
5. Groundwater Sampling

These tasks are discussed in detail in the following sections.

2.1.1 Geophysical Investigation

On March 6 and 7, 2008, PWGC and their subcontractor Advanced Geological Services (AGS) of Malverne, Pennsylvania mobilized to the site to perform the geophysical survey. The purpose of the geophysical survey was to identify disposal area boundaries and locate anomalies that would require further evaluation via test pits and soil sampling. Descriptions of the geophysical methods are described below. Geophysical Investigation Results are included in **Appendix B**. No anomalies were identified that required additional test pits to be included in the investigation.

2.1.1.1 Global Positioning System (GPS) Survey

Prior to determining the locations of the subsurface anomalies, AGS utilized a backpack mounted Trimble Global Positioning System (GPS) unit to map out the area of concern. The GPS was utilized in order to create a more accurate map depicting the locations and sizes of the identified subsurface anomalies.

2.1.1.2 Electromagnetic Survey

Following the GPS survey, AGS utilized a Geonics EM-31 (EM-31) terrain conductivity electromagnetic (EM) instrument (in lieu of the split box metal detector). The EM-31 uses the principle of electromagnetic induction to measure the variability of electrical conductivity of subsurface materials and the presence of buried metal objects. Significant contrasts in the electrical properties between non-indigenous materials and surrounding soil enable accurate delineation of buried waste materials, fill, and geologic features. The large EM response to metal makes this technique particularly well suited to identifying buried metal objects such as underground storage tanks (USTs), metallic wastes, buried drums, pipelines, reinforced building foundations, and other metal components of buried structures. It is, however, equally sensitive to metal objects on the ground surface.

The Geonics EM-31 terrain conductivity instrument was used to conduct the first phase of the investigation. The EM-31 was used to detect both ferrous and non-ferrous metals buried in the upper 10 feet of the subsurface. This corresponds to the approximate top of the groundwater table at the site and represents the approximate depth of excavation activities identified by the NYSDEC in 1984.

The geophysical survey determined that there was one large area of concern (approximately 6,000 square feet), illustrated in **Figure 5** as the geophysical extent of the excavation. The survey also identified buried capacitors in the vicinity of the capacitors on the surface. These capacitors were located just below the ground surface and were removed during test pit activities (discussed below) along with the surface capacitors. Additional metal debris was identified throughout the site. Most of the identified EM areas were associated with surficial metallic objects (e.g. fencing or rebar), with the exception of seven locations. These seven locations were further investigated using GPR. Six of the seven locations appeared to be small metallic objects located outside of the main disposal area. One anomaly, located north of the site boundary towards the former Canine Kennel and labeled "unidentified EM source" was not identifiable due to its location in a low background area. Based upon the results of the geophysical survey, no additional test pits or soil sample locations were added to the investigation.

2.1.2 Test Pit Excavation

From March 24 through 26, 2008, PWGC and their subcontractor, American Environmental Assessment Corporation (AEAC) of Wyandanch, New York, mobilized to the site to perform exploratory test pits and to remove suspected PCB containing equipment (capacitors), identified during a prior site visit and the geophysical survey.

Prior to performing the exploratory test pits, PWGC identified the locations of the suspect PCB-containing equipment to AEAC. During the excavation activities, AEAC, under the supervision of PWGC, removed any suspect PCB-containing equipment and placed the equipment into two 55-gallon drums. Drums were staged onsite until analytical results were received to determine proper handling and disposal.

A total of 11 test pits were excavated in areas of mounded soil, elongated raised areas, and depressions. With the exception of the northern portion of the site, the general topography is relatively flat. As illustrated in **Figure 6**, four test pits (TP-5, 9, 10 and 11) were located in the mounded areas on the north and east boundaries of the property. Test pits TP-6, 7 and 8 were located in the level portion of the site, and TP-1, 2, 3 and 4 were located within the excavated and filled area identified by the geophysical survey. Test pits were excavated to a minimum depth of 11 feet below ground surface (bgs), or until the groundwater table or native soil was encountered, whichever was shallower. Test Pits TP-10 and 11 were dug with a mini-excavator while the remaining test pits (TP-1 through 9) were dug with a backhoe/excavator. In order to prevent cross-contamination, excavated soils were staged on plastic sheeting at each excavation. Additionally, excavation equipment was properly decontaminated between test pits. Care was taken to limit the amount of trees that were damaged in excavating the test pits.

During excavation, PWGC documented soil types, changes in lithology, and wastes (if any) encountered in the test pits. PWGC utilized a Photoionization Detector (PID) to screen the soils from the excavations for volatile organic compounds (VOCs), which are commonly associated with petroleum products and industrial solvents. There were no elevated PID readings from the test pit locations. Soil samples were collected from test pits located in the area of excavation (i.e., filled area) identified during the geophysical survey (TP-1, 2 and 3). No sample was

collected from TP-4 since the test pit collapsed before a sample could be collected. Test pit logs were prepared for each test pit and are included as **Appendix C**. Below is a description of the activities performed at each of the test pits.

Test Pit 1 (TP-1):

TP-1 was installed in the southwest corner of the site within the filled area identified by the geophysical survey. Large pieces of metal debris were observed between 2.5 and 11 feet bgs. The debris consisted of old lockers and office furniture. Tan/brown native soil was identified at 11 feet bgs. A soil sample was collected from the base of the excavation utilizing the excavator bucket.

Test Pit 2 (TP-2):

TP-2 was installed in the southwest area of the site within the filled area identified by the geophysical survey. Large pieces of metal debris were observed between 2 feet and 6.5 feet bgs. The debris consisted of miscellaneous debris as well as office furniture and hot water heaters. Brown native soil was identified at 6.5 feet bgs and the excavation terminated at 7 feet bgs. A soil sample was collected from the base of the excavation utilizing the excavator bucket.

Test Pit 3 (TP-3):

TP-3 was installed in the western portion of the site within the filled area identified by the geophysical survey and within a depressed area approximately 3 feet deeper than the surrounding land. Large metal debris was consistently observed from 2 feet to 8.5 feet bgs. The debris consisted of office furniture, lockers, and possible hot water heaters. Also identified in this excavation were suspect wooden utility poles.

Tan/brown native soil was identified below the debris at 8.5 feet and the excavation terminated at 9 feet bgs. A soil sample was collected from the base of the excavation utilizing the excavator bucket.

The samples collected from the base of TP-1, TP-2 and TP-3 were placed in pre-cleaned, laboratory-supplied glassware provided by Chemtech of Mountainside, New Jersey. Samples were packed in coolers with ice and shipped to Chemtech under chain-of-custody seal to be analyzed for pesticides by United Stated Environmental Protection Agency (USEPA) Method 8081 and PCBs by USEPA Method 8082. After soil sample collection, each test pit was backfilled in the order in which the material was removed.

Test Pit 4 (TP-4):

TP-4 was installed in the western region of the site within the filled area identified by the geophysical survey, and in a depressed area similar to TP-3. Scattered metal debris was observed from 2 feet through 6.5 feet bgs. Two capacitors were found at 6.5 feet, removed, and properly contained in a 55-gallon drum. Once the capacitors were removed, the sidewalls of the excavation collapsed. PWGC and AEAC attempted to retrieve a soil sample from the base of the test pit, however, sample collection was not possible because the sidewalls continued to

collapse after repeated attempts. Once it was determined that a sample could not be collected, the remainder of the excavation was backfilled in the order in which the material was removed.

Test Pit 5 (TP-5):

TP-5 was installed in the northwest area of the site in a mounded area approximately 7 feet above natural grade. At 6feet bgs, brown native soil was identified. Excavation activities were terminated at 7.5 feet bgs. No metal debris was identified throughout the test pit. Due to the absence of metal debris, no soil sample was collected from this test pit. The test pit was backfilled in the order in which the material was removed.

Test Pit 6 (TP-6):

TP-6 was installed in the southern area of the site near the eastern edge of the former disposal area. Fine, well graded, beige and red/brown sand with gravel was observed throughout the test pit. No metal debris was identified. The pit extended to 11 feet bgs. Due to the absence of metal debris, no soil sample was collected from this test pit. The test pit was backfilled in the order in which the material was removed.

Test Pit 7 (TP-7):

TP-7 was installed in the central region of the site in a relatively level area. Well graded, red/brown and tan/brown sand with gravel was observed throughout the test pit. No metal debris was identified. The test pit extended to 11 feet bgs. Due to the absence of metal debris, no soil sample was collected from this test pit. The test pit was backfilled in the order in which the material was removed.

Test Pit 8 (TP-8):

TP-8 was installed in the central, level region of the site. Well-graded, brown and tan/brown sand with gravel was observed throughout the test pit. At approximately 7 feet bgs the sand became moist and at approximately 8 feet bgs, groundwater was observed seeping through the sidewalls of the excavation. Since groundwater was reached, the test pit was terminated at 8.5 feet bgs. No metal debris was identified in the test pit. Due to the absence of metal debris, no soil sample was collected from this test pit. The test pit was backfilled in the order in which the material was removed.

Test Pit 9 (TP-9):

TP-9 was installed at the north end of the site in a mounded area approximately 7 feet above natural grade. At approximately 1.5 feet below the top of the mound, a metal pipe was uncovered within the west side of the test pit. No other metal debris was observed throughout the test pit. Wood and asphalt debris were also observed between 1 foot and 2 feet below the top of the mound. At 5 feet below the top of the mound, tan native soil was reached and the test pit terminated at 5.5 feet bgs. Due to the absence of significant metal debris, no soil sample was collected from this test pit. The test pit was backfilled in the order in which the material was removed.

Test Pit 10 (TP-10):

TP-10 was installed along the eastern site boundary in a mounded area approximately 7 feet above natural grade. At approximately 5.5 feet bgs, small pockets of gray/black sand were observed. A PWGC hydrogeologist screened the soil with a PID. There was no response on the PID and the gray/black soil had no odor. Based on these observations it was concluded that the soil was native and not suspect, therefore, a soil sample was not collected. At approximately 6.5 feet below the top of the mound, fine, gray/white, native soil was identified and the test pit terminated at 7 feet bgs. No metal debris was identified throughout the test pit. Due to the absence of metal debris and lack of PID readings from the small pockets of gray/black soil, no soil samples were collected from this test pit. The test pit was backfilled in the order in which the material was removed.

Test Pit 11 (TP-11):

TP-11 was installed in the northeast area of the site in a mounded area approximately 7 feet above natural grade. At 6.5 feet below the top of the mound, fine, light gray/white native soil was identified and the test pit terminated at 7 feet bgs. No metal debris was observed throughout the test pit. Due to the absence of metal debris, no soil sample was collected from this test pit. The test pit was backfilled in the order in which the material was removed.

2.1.3 Soil Sampling

PWGC collected soil samples between March 24 and July 11, 2008. Sampling was performed in phases: as analytical results were received and evaluated, additional sample locations were identified until the horizontal and vertical extent of PCB and pesticide contamination was determined. Based upon previous sampling performed by the NYSDEC in 2000, initial sampling locations were biased towards locations suspected of being contaminated.

2.1.3.1 Initial Investigation

As illustrated in **Figure 6,** sampling grids were established at five locations (s-1 through S-5) previously sampled by the NYSDEC (i.e. Soil #1 through Soil #5). Delineation borings were spaced at 20-foot intervals extending north, east, south and west from the primary sample location. Where conditions allowed, PWGC installed two delineation borings in each compass direction from the primary boring; north (N1 & N2), south (S1 & S2), east (E1 & E2) and west (W1 & W2). Samples were collected at select intervals of 0-2 inches (A), 2.0-2.5 feet (B), and 4.0-4.5 feet (C), excluding locations where refusal occurred. In addition, soil samples were collected from five locations in areas not previously sampled (S-6 through S-10). In total, PWGC collected 115 samples from 45 locations.

PWGC encountered refusal at a total of eight sampling locations in the center of the S-1, S-2, and S-3 grids. Refusal was encountered at depths ranging from 1 to 3.5 feet bgs which correlates with the presence of buried metal debris identified in tests pits performed in this area (TP-3 & TP-4).

In addition, six surface soil samples were collected from beneath the capacitors/transformers upon their removal from the site. There were three areas where capacitors/transformers were removed. At the largest area, three samples were collected (CA1-1 to CA1-3), two at the next largest (CA2-1 and CA2-2), and one beneath a single transformer (CA3-1). Sampling locations are illustrated in **Figure 6**.

Soil samples were collected from each location using stainless steel sampling equipment. Prior to sampling, equipment was decontaminated using a laboratory-grade glassware detergent and tap water scrub to remove visual contamination; generous tap water rinse; followed by a distilled water rinse. Sampling equipment was decontaminated between each interval. Soil samples were classified using the Unified Soil Classification System (USCS) and screened in the field for the presence of VOCs using a PID. Samples were then placed in pre-cleaned, laboratory-supplied glassware provided by Chemtech of Mountainside, New Jersey. Samples were packed in coolers with ice and shipped to Chemtech under chain-of-custody seal.

All of the delineation soil samples were submitted to the laboratory, however not all of the samples were analyzed initially. Initially, the surface soil samples and the 2.0-2.5 feet samples (A and B locations) collected from the five central grid locations (S-1 through S-5) and the first 20-foot grid spacing boreholes were analyzed. Samples from the additional five single locations not previously sampled (S-6 through S-10) were also analyzed. These samples were analyzed for PCBs according to USEPA Method 8082 and chlorinated pesticides according to USEPA Method 8081. If a soil sample showed concentrations of total PCBs above 1.0 mg/kg, the next sample in the grid was analyzed. Additional samples were collected, as described in Section 2.1.3.2, until both the horizontal and vertical extent of contamination was determined.

2.1.3.2 Secondary Investigation

Based on results from the initial sampling round performed in March 2008, additional surface soil sampling locations were necessary. PWGC mobilized to the site on June 20, 2008 to collect surface soil samples S-11 through S-26 and on July 11, 2008 to collect surface soil samples S-27 through S-29. The additional sampling locations were located to the north, east, or west of previous locations to further delineate the horizontal extent of PCB-contaminated soil.

2.1.4 Groundwater Investigation

On April 17, 2008, PWGC and Miller Environmental Group (MEG) of Calverton, New York, mobilized to the site to install six groundwater monitoring wells **(Figure 6)**; one northwest of the site (regional upgradient direction) and five along the southeastern boundary (regional downgradient direction). Monitoring wells were installed to obtain groundwater quality data for the RI and for future groundwater monitoring, as necessary.

2.1.4.1 Monitoring Well Installation

A track mounted Geoprobe™ unit was utilized to install the monitoring wells due to the site's terrain limitations and to minimize damage to existing vegetation (given the site's location in the core pine barrens). The Geoprobe™ unit was equipped with 3.25-inch outside diameter (OD) probe rods and used standard Geoprobe™ direct-push methods for well installation.

Wells were constructed of 1-inch diameter, schedule 40 polyvinyl chloride (PVC) casing and screen. The screen sections were pre-packed by the manufacturer with 20/40 mesh sand (2.5-inch outside diameter). Wells were constructed with a 10-foot-section of 0.010-inch slot screen and solid PVC riser to grade. Screens were set 7 feet

into and 3 feet above the water table at the time of installation. A 2-foot-thick fine sand layer was installed above the pre-packed screen followed by a 2-foot-thick bentonite seal. Bentonite pellets were hydrated for 30 to 60 minutes. Above the bentonite layer, the annulus around the well was filled with a cement/bentonite grout. Wells were finished with a locking stick-up protective cover and a surrounding concrete surface pad (2 feet by 2 feet by 6-inches thick). The wells were permanently labeled with their individual well designations. Construction details are provided on the monitoring well construction logs included in **Appendix D**.

2.1.4.2 Monitoring Well Development

Monitoring wells were developed on April 18, 2008. Development water was monitored for organic vapors with a PID. In addition, the development water was observed for the presence of non-aqueous phase liquids (NAPLs) or sheens. Monitoring wells were developed by over-pumping to restore the hydraulic properties of the aquifer. Well development continued until the turbidity of the groundwater was less than or equal to 50 Nephelometric Turbidity Units (NTUs), or when pH, temperature, and conductivity measurements stabilized. Stabilization was considered achieved when three consecutive readings of these field parameters were within five percent of each other. Monitoring well development information is provided on the well development logs in **Appendix E**.

2.1.4.3 Groundwater Sampling

On April 25, 2008, PWGC mobilized to the site to perform groundwater sampling. Samples were collected from the six monitoring well locations (MW-1 through MW-6) shown in **Figure 6.** MW-1 is located up-gradient and MW-2, through MW-6 are located downgradient of the site.

In accordance with the Remedial Investigation Work Plan, samples were collected utilizing low-flow purging and sampling procedures outlined in the USEPA Standard Operating Procedures (SOP) No. 2007. Prior to sampling, groundwater levels were measured and groundwater elevations calculated to verify the direction of local groundwater flow, and one to two gallons of water were purged using a peristaltic pump to reduce sample turbidity **(Appendix F).** During purging, the groundwater parameters pH, temperature, turbidity, conductivity, and oxygen reduction potential (ORP) were monitored. Upon collection, groundwater samples were placed in pre-cleaned laboratory-supplied glassware and packed in a cooler on ice. Samples were submitted to Chemtech, a New York State Department of Health (NYSDOH) certified laboratory, for the analysis of pesticides and PCBs by USEPA Methods 8081and 8082, respectively.

2.2 Land Survey

On July 11, 2008, PWGC, and L.K. McLean Associates, P.C. (LKMA) mobilized to the site to perform a topographic survey of the site and locate key soil sampling, test pit and monitoring well locations. In addition, top of casing elevations were established for each of the monitoring wells. Survey data are included in **Table 2**.

2.3 Quality Assurance/Quality Control

As stated in the RIWP, the overall quality assurance/quality control (QA/QC) objective for the field investigation was to develop and implement procedures that provide data of known and documented quality. QA/QC characteristics for data include precision, accuracy, representativeness, completeness, and comparability. The

purpose of the QA/QC activities developed for this site was to verify the integrity of the work performed at the site to assure that the data collected are of the appropriate type and quality needed for the intended use.

The QA/QC program included the preparation and analysis of field QA/QC samples such as field blanks, field duplicates, and matrix spike duplicates. Third party data validation was performed on ten percent of the laboratory results of soil samples submitted for analysis (pesticides and PCBs).

2.3.1 QA/QC Samples

To assess the adequacy of sample collection and decontamination procedures performed in the field, QA/QC samples were collected and analyzed throughout the field sampling program. In general, QA/QC samples confirmed that the procedures performed in the field were consistent and acceptable. Reported detections in the equipment blanks did not impact the interpretation of sample data. As specified in the RIWP, QA/QC samples collected for laboratory analysis included equipment blanks (EB), blind/field duplicates (FD), matrix spike (MS), and matrix spike duplicates (MSD). The EB samples were collected daily for each sampling method that used non-disposable equipment such as the hand auger and well pump. FD and MS/MSD samples were submitted at a minimum of one each per twenty samples.

Type	Frequency
Equipment Blank	One per day per sample matrix
Blind/Field Duplicate	One per 20 samples per matrix
Matrix Spike/Matrix Spike Duplicate	One per 20 samples per matrix

During the project, a total of six equipment blanks were collected. Equipment blanks were collected by pouring laboratory-supplied deionized water over sampling equipment and collecting the water in the appropriate sample container(s). In order to evaluate the precision of the field sampling and laboratory analyses, PWGC collected six soil field duplicates and one groundwater field duplicate.

2.3.2 Data Validation

PWGC retained the services of Stone Environmental, Inc. (Stone), of Montpellier, Vermont to perform validation of pesticide and PCB data obtained during the RI. PWGC sent one data package (Sample Delivery Group (SDG) number Z-2180), representing 10% of the total soil samples analyzed, to Stone for validation. A copy of the Data Validation Report (DVR) is included as **Appendix G**.

Based upon the DVR, corrections were made to reported concentrations for Aroclor-1254 in samples 5A, FD-05, 5N1A, 5W1A, 5E1A, 5B, 1A, 1E1A, 1W1A, 1S1A, 5B, TP-2, TP-3 and Decon Water. The reported concentrations of Aroclor-1254 that exceeded the calibration range in the first run analysis of these samples were rejected and replaced with the more accurate results obtained from the subsequent more diluted analyses of those samples. Additionally, all non-detectable results obtained during the RI have been qualified as estimated (UJ) due to the lack of accurate calibration sensitivities.

2.3.3 Data Usability

Based upon the results of the validation of SDG Z-2180, PWGC has reported the diluted sample results for Aroclor-1254 for each soil sample for which a second dilution was reported. Rejected data did not impact the use or interpretation of the sample data for its intended purpose given that samples were diluted and reanalyzed when appropriate. The data obtained from the remedial investigation were sufficient to meet the data quality objectives (DQOs) established for the project as follows:

- Characterize the nature and extent of contamination at the site;
- Characterize the migration of contaminants and determine the impacts to off-site locations;
- Obtain sufficient data (i.e., greater than or equal to 90 percent complete) to determine the current and potential future human health and ecological risks at the site; and
- Obtain sufficient data (i.e., greater than or equal to 90 percent complete) to determine, through screening and evaluation, the most appropriate remedial alternatives to minimize continued risks to human health and/or the environment.

2.4 Standards, Criteria and Guidance Values

Based upon the site history and previous investigations the identified contaminants of concern (COCs) at the site are pesticides and PCBs.

Soil analytical results were compared to the restricted use soil cleanup objectives (RUSCOs) specified in Table 375-6.8(b) of the NYSDEC 6 NYCRR Part 375 Subparts 375-1 to 375-4 and 375-6 (Part 375, RUSCOs for the protection of public health). In the absence of an applicable clean-up objective under the Part 375 restricted use soil cleanup objectives, the recommended soil cleanup objectives (RSCOs) from NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046 were substituted.

Groundwater analytical results were compared to the NYSDEC Ambient Water Quality Standards and Guidance Values (AWQS) for Class GA groundwater, as specified in Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values on Groundwater Effluent Limitations, June 1998.

2.5 Analytical Results

Analytical results for soil samples are summarized in **Tables 3** through **11** and groundwater results are summarized in **Table 12**. Laboratory analytical reports are included as **Appendix H**.

Soil
No pesticides were reported above laboratory detection limits.

One PCB compound, Aroclor-1254, was detected in 59 soil samples at concentrations exceeding the RUSCO (1.0 mg/kg). The two highest detections of Aroclor-1254 were reported in samples from the capacitor areas (86,000 mg/kg in CA1-1, and 45,000 mg/kg in CA2-1). Elevated levels (greater than 10 mg/kg) of Aroclor-1254 were also detected in the third capacitor area (CA3-1) and in the vicinity of soil sampling locations S-1, 2, 5, 6, 8, 17, 19 through 24, 28 and 29. This contamination may be attributable to the capacitor areas which are in close

proximity to these sampling locations. Arcolor-1254 exceeded 1 mg/kg in soil sampling areas S-3, 4, 9, 10, 18, 25 through 27 and TP-2 (6.5 feet bgs) and TP-3 (8.5 feet bgs).

Of the 59 samples, 44 (including the surface capacitor locations) were collected from 0-2 inches (**Figure 7A**), 7 were from 2-2.5 feet bgs (**Figure 7B**), 6 were from 4-4.5 feet bgs (**Figure 7C**) and 2 were from test pits 6.5 and 8.5 feet bgs (**Figure 7C**).

Additionally, Aroclor-1260 was detected at concentrations below the RUSCO of 1.0 mg/kg in two soil samples; S-11 (0.072 mg/kg) and S-12 (0.044 mg/kg).

Groundwater

No pesticides or PCBs were detected at concentrations exceeding the method detection limit (MDL) in groundwater samples collected from the site.

2.6 Waste Management

Under the direction of PWGC, AEAC removed and properly disposed of the PCB-contaminated solids, liquids and debris discussed below.

2.6.1 Capacitor Remediation

Approximately 613 pounds (two 55-gallon drums) of PCB-contaminated solids, consisting primarily of capacitors with some soil, were removed from the site.

2.6.2 Investigative Derived Waste (IDW)

One 55-gallon drum of PCB-contaminated fluids (decontamination, development, and purge water), and one 55-gallon drum of PCB-contaminated plastic/personal protective equipment (PPE) were generated during the investigation.

2.6.3 Waste Transportation and Disposal

The 55-gallon drums of PCB-contaminated solids and IDW were transported by AEAC (USEPA ID # NYR00000044412) to Chemical Pollution Control (CPC), USEPA ID # NYD082785429, Bay Shore, New York. CPC bulked the waste and transported it to Veolia ES Technical in Deer Park, Texas where it was incinerated. Waste manifests are included in **Appendix I**.

3.0 HYDROGEOLOGIC ASSESSMENT AND PHYSICAL SETTING

The following section describes site topography, surrounding property use and regional and site geology/hydrogeology.

3.1 Site Topography

On February 22, 2007, PWGC performed a preliminary site inspection. The site is located approximately 20 to 30 feet above mean sea level. The site's topography has been disturbed, as detailed in **Figure 3**. Several areas of mounded/stockpiled soils are present on the north and east side of the site. Several depressions and mounds were observed within the central portion of the site. The entire western portion of the area is covered with metal debris, with several areas of concentrated metal. The approximate area of subsurface debris is shown in **Figure 5.** Several capacitors were identified during this preliminary site inspection. No recent disturbances were observed; small trees and shrubs have almost re-vegetated the entire area. Photographs of the site inspection are included in **Appendix J**.

Topography slopes gently away from the site, from the northwest to the southeast. No erosion of surface areas was noted and no drainage ditches or swales are present on the site. Precipitation recharges directly into the subsurface with no evidence of overland flow away from the site towards surface-water bodies.

The nearest surface-water bodies are North Pond and Old Ice Pond located approximately 1,200 feet to the east and 1,500 feet southeast, respectively on the Quogue Wildlife Refuge (**Figure 1**). Based upon site topography, overland flow to surface-water bodies is unlikely.

3.2 Surrounding Land Use

The site is located on the eastern edge of the Francis S. Gabreski Airport. The site adjacent to and west of the site is occupied by a boat storage facility. Further west are runways and support buildings for the airport, as well as the 106th Rescue Wing of the New York Air National Guard (NYANG). Immediately north and south of the site are undeveloped areas of the airport. The Quogue Wildlife Refuge is located approximately 1,200 feet to the east of the site.

The nearest residential properties are located approximately 0.5 miles to the east and south of the site **(Figure 8)**. These residential areas have municipal water service provided by the Suffolk County Water Authority (SCWA). Several SCWA municipal supply wells are located in the vicinity of the airport. Municipal supply wells are shown in **Figure 9**.

The airport is located within the Long Island Pine Barrens Region. The Pine Barrens are characterized as open, sunlit woodlands dominated by pitch pine and interspersed with white and scarlet oak trees. The nearby Quogue

Wildlife Refuge is characterized by dwarf pitch pines ranging from 3 to 6 feet tall. The airport itself is characterized by surrounding wooded areas consisting of 25-foot-tall pitch pines and scattered scrub oak.

3.3 Regional Geology / Hydrogeology

The geologic setting of Long Island is well documented and consists of crystalline bedrock composed of schist and gneiss overlain by layers of unconsolidated deposits. Immediately overlying the bedrock is the Raritan Formation, consisting of the Lloyd sand confined by the Raritan clay Member. The Lloyd sand is an aquifer and consists of discontinuous layers of gravel, sand, sandy and silty clay, and solid clay. The Raritan clay is a solid and silty clay with that is gray, red or white in color with few lenses of sand and gravel and abundant lignite and pyrite.

Above the Raritan Clay lies the Magothy Formation. The Magothy aquifer consists of layers of fine to coarse sand of moderate to high permeability, with inter-bedded lenses of silt and clay of low permeability resulting in areas of preferential horizontal flow. Therefore, this aquifer generally becomes more confined with depth. The Magothy Formation is overlain by the Upper Glacial deposits which contains the Upper Glacial aquifer. The Upper Glacial aquifer is the water-table aquifer at this location and is comprised of medium to coarse sand and gravel with occasional thin lenses of fine sand and brown clay. This aquifer extends from the water table to the top of the Magothy and, therefore, is hydraulically connected to the Magothy aquifer.

3.4 Site Geology / Hydrogeology

The aquifer of concern at the former Canine Kennel site is the Upper Glacial aquifer which is an unconsolidated mixture of sand and gravel. The Upper Glacial aquifer is approximately 100 feet at the site, and has an estimated average horizontal hydraulic conductivity (permeability) of 270 feet/day and a vertical hydraulic conductivity of 27 feet/day (Franke & Cohen, 1972).

Clay layers, such as the Gardiners clay and the "20-Foot-clay," where present, may act as local confining units, separating the Upper Glacial aquifer from the underlying Magothy aquifer which is the principal source of drinking water in Suffolk County.

Based on data collected during monitoring well installation, depth to groundwater ranged from approximately 9.5 to 14.5 feet bgs. No confining unit (clay) was present at the monitoring well locations. Regional groundwater flow at the site is to the southeast. Based upon the groundwater measurements obtained from the site monitoring wells on April 25, 2008, local groundwater flow direction was determined to be to the east-southeast (**Figure10**).

4.0 NATURE AND EXTENT OF CONTAMINATION

The following section describes the investigation techniques used to determine the nature and extent of contamination identified at the subject property.

4.1 Identification of Source Areas

Sampling conducted at the site indicates that the source of PCB contamination is the disturbed area (disposal area) located along the western portion of the site. PCB-containing equipment, historically reported to be disposed in this area, was identified and removed during the RI investigation. Both historical and RI soil sampling events at the site have detected PCB concentrations above NYSDEC RUSCO standards.

In one test pit (TP-4), located in the historical disposal area, suspect PCB-containing capacitors were identified at approximately 6.5 feet bgs. The amount of metal debris within this main disposal area (metal lockers, hot water heaters, scrap metal, etc.) prevented identification of individual metallic objects during the geophysical survey. Discovery of capacitors at the site both at and below grade indicates the potential for more PCB-containing equipment to be present.

4.2 Extent of PCB and Pesticide Contamination in Soil

Soil samples were collected at three depths during the RI Investigation; 0-2 inches, 2.0-2.5 feet bgs, and 4.0-4.5 feet bgs (excluding test pit samples). Soil samples were analyzed for both PCBs and pesticides. Pesticides were not detected in any of the soil samples.

Fifty-nine of the 143 samples collected contained concentrations of PCBs above the RUSCO of 1.0 mg/kg. **Figures 11A**, **11B**, and **11C** show the areal extent of PCBs greater than 1.0 mg/kg in the three sample horizons. The surface soil samples (**Figure 11A**) show the largest area of impact, with PCBs present across the western and central areas of the site. PCBs were also detected at concentrations greater than the RUSCO within the unpaved eastern portion of the adjacent boatyard. Impacts in the 2.0-2.5 feet depth horizon were limited to the western central area of the site and coincide with the main area of existing debris (**Figure 11B**). Three isolated areas of impact at depths of 4.0 feet bgs or greater were also identified. Two of these areas coincided with the main area of existing debris and the other (comprising of S-8 and S-10) was identified northeast of a capacitor area (**Figure 11C**).

Spread of PCBs within surface soils at the site is likely a result of physical processes including wind dispersion and localized surface runoff of PCB-contaminated soils. In addition, spread of PCBs to surface and subsurface soils may have occurred during disposal activities and movement of heavy equipment and soils during the early 1970s.

4.3 Groundwater Results

As presented in **Table 12**, pesticides and PCBs were not detected in the groundwater samples collected from the six on-site monitoring wells. Based upon the local groundwater flow direction, MW-1 is located hydraulically up-

gradient and MW-2 through MW-6 are located downgradient of the PCB-contaminated soil area. These results indicate that PCBs detected in site soils (Aroclor-1254 and Aroclor-1260) have not impacted the groundwater.

4.4 Qualitative Exposure Assessment

The following sections discuss the qualitative exposure assessments. The qualitative exposure assessments include an evaluation of contaminant sources, potential receptors and contaminant release and transport.

4.4.1 Human Health Exposure Assessment

Contaminant Source

Soil analytical results indicate that the soil at the site is contaminated with the PCB compound Aroclor-1254, which is present at levels ranging from below the RUSCO of 1.0 mg/kg to 86,000 mg/kg. Aroclor-1254 is a viscous, light yellow liquid. It contains approximately 21% $C_{12}H_6Cl_4$, 48% $C_{12}H_5Cl_5$, 23%$C_{12}H_4Cl_6$, and 6% $C_{12}H_3Cl_7$ with an average chlorine content. PCBs, including Aroclor-1254, are inert, thermally and physically stable, and have dielectric properties. In the environment, the behavior of PCB mixtures is directly correlated to the amount of chlorination. In general, as chlorination increases, sorption increases and transport and transformation decrease. Aroclor-1254 strongly sorbs to soil and remains immobile when leached with water (USAF, 1989).

Aroclor-1254 can have an adverse affect on human health and can be absorbed after oral, inhalation, or dermal exposure. Acute exposure symptoms may include headache, dizziness, nausea, diarrhea and skin and eye irritation. Chronic exposure may cause harm to the reproductive system, decreased motor activity and severe liver damage.

Potential Receptor Populations

The site is within the boundary of the Francis S. Gabreski Airport. The airport has no commercial flights and only supports private planes, as well as, the 106th Rescue Wing of the NYANG. The airport is a restricted area and, accordingly, there is no public use outside of the commercial/industrial planned development district located along the western portion of the airport adjacent to Old Riverhead Road (approximately 1 mile west of the site) and commercial activities associated with the adjacent boat storage facility west of the site.

The 305-acre Quogue Wildlife Refuge is located approximately 1,200 feet to the east of the Airport boundary. The Quogue Wildlife Refuge features a large network of walking and hiking trails and is extensively utilized for environmental education programs for the general public and school groups. The refuge conducts kayaking programs on Old Ice Pond. Only passive recreational and educational activities occur at the Refuge, and hunting, fishing, and the collection of biological specimens is prohibited. Since hunting and fishing are prohibited at both the Quogue Wildlife Refuge and Gabreski Airport, there are no direct pathways for site contaminants to become consumed by human populations. The nearest hunting and fishing opportunities are provided at the David Sarnoff Preserve, which is New York State land located approximately 2.75 miles northwest of the site, and the estuarine waters present at the head of Quantuck Creek, approximately 0.65 miles to the southeast of the site.

The nearest residential properties are located 0.5 miles east and southeast of the site. These residential properties are located on the opposite side of the Quantuck Creek watershed (**Figure 8**). These properties are served by municipal water through the SCWA. The SCWA's water supply wells are located more than 0.5 miles from the site; approximately 0.7 miles south and approximately 1.5 miles northeast (**Figure 9**).

Contaminant Release and Transport

PCBs are present in surface and subsurface soils at the site. PCBs were detected in surface soils immediately adjacent to the site's west property boundary (Boatyard) and in a small area to the east of the site. Spread of PCBs within the surface soils at the site is likely a result of physical processes including wind dispersion and localized surface runoff of PCB-contaminated soils. In addition, spread of PCB-contaminated soils may have occurred during disposal activities and movement of heavy equipment and soils during the early 1970s. Based upon site topography widespread dispersion of PCBs by overland flow is unlikely.

Groundwater samples collected from the downgradient monitoring wells did not contain detectable concentrations of PCBs. Therefore impacts to surface-water bodies located southeast of the site or to drinking water supplies south of the site are unlikely.

Points of Exposure

There are no plausible off-site (outside of the Airport Property) pathways for oral, inhalation, or dermal exposure to PCBs from the contamination identified at the site. The only possible on-site exposure pathway's are by ingestion or dermal exposure by a trespasser, an airport employee, or worker in the boatyard. Ingestion and dermal exposure would not likely be extensive given the intermittent nature of exposure (i.e. occupation of the boatyard by employees, removing boats in spring and storing in fall). PCBs would most likely be transferred from surfaces containing residual soil (an article of clothing or object such as equipment) that have come into contact with contaminated soil and not through direct ingestion of or contact with the contaminated soil.

4.4.2 Fish and Wildlife Resources Impact Analysis

On May 7, 2008, PWGC and a representative from Land Use Ecological Services Inc. of Riverhead, New York (Land Use), mobilized to the site to perform a Fish and Wildlife Resource Impact Assessment (FWRIA). An investigation of the ecological community within a 0.5-mile radius of the site was completed.

Soil analytical results indicate that concentrations of Aroclor-1254 exceed its NYSDEC guidance value of 1.0 mg/kg for the protection of ecological resources (PER). Aroclor-1254 is known to bioaccumulate in both terrestrial and aquatic ecosystems. However, Land Use concluded that the PCBs present on site should not have significant adverse impacts to terrestrial or aquatic ecological resources due to the following factors.

- The spatial extent of contamination is approximately 1 acre, which is small relative to the home range of songbirds, raptors, and white-tailed deer expected to utilize the site.
- The organisms expected to be at the most risk of potential adverse impacts are small mammals (such as white-footed mice) that feed on soil invertebrates. Any potential adverse impacts are not expected to

be significant to the populations of these commonplace species, as impacts would only be expected to affect a small number of individuals.

- Adverse impacts to herbivores, such as white-tailed deer, are not expected due to the tendency of PCBs to sorb strongly to soils and not to be taken up by plants and translocated to foliage.
- Adverse impacts to the herbivorous larvae of protected lepidopterans are not expected due to the tendency of PCBs to sorb to soils and not to be taken up by plants and translocated to foliage.
- Adverse impacts to the aquatic ecological resources present in the Quogue Wildlife Refuge are not expected due to the absence of groundwater contamination at the site and the absence of surface-water flow due to the well-drained soils.
- No potential pathways terminating in human consumption of contaminants exist as there is no hunting or fishing authorized on the Gabreski Airport or Quogue Wildlife Refuge properties.

Based on the information gathered Land Use concluded that the contaminants at the site are not expected to have a significant adverse impact to ecological resources and that an ecological impact assessment is not warranted. The FWRIA is included in **Appendix K**.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following sections discuss the conclusions and recommendations based upon the results obtained during the Remedial Investigation.

5.1 Conclusions

PWGC performed a subsurface investigation at the former Canine Kennel site, Francis S. Gabreski Airport, Westhampton Beach, New York. The investigation consisted of a geophysical survey, soil and groundwater sampling, test pit excavations and the removal of identified capacitors suspected to contain PCBs. Based upon the site history and previous investigations, the identified Contaminants of Concern (COCs) were pesticides and PCB's.

The geophysical and test pit investigations confirmed that the area of disposal is limited to the western/central portion of the site adjacent to the fence line and boatyard.

Pesticides were not detected in the site soil samples. The PCB Aroclor-1254 was detected in soil samples ranging in depth from 0-2 inches bgs to approximately 8.5 feet bgs. Fifty-nine soil samples had concentrations of Aroclor-1254 above the RUSCO of 1.0 mg/kg ranging from 1.1 to 86,000 mg/kg (directly underneath one of the removed capacitors). The aerial extent of PCBs in soil is provided in **Figures 11A** through **11C**. The surface soil samples show the largest area of impact (across the western and central areas of the site). PCBs were also detected at concentrations greater than the RUSCO in surface soils within the unpaved eastern portion of the adjacent boatyard. Spread of PCBs within surface soils at the site is likely a result of physical processes, including localized surface runoff of PCB-contaminated soils from the on-site disposal area westward following the surface topography.

PCBs in the 2.0-2.5 feet depth samples were limited to the western central area of the site and coincide with the main area of existing debris and the former capacitor locations. Three isolated areas of impact at depths of 4.0 feet bgs or greater were also identified, two of which coincided with the main area of debris and the former capacitor locations. A third area was identified northeast of the capacitor locations. No pesticides were detected in soil samples collected at the site.

Pesticides and PCBs were not detected in the groundwater samples collected from upgradient and downgradient monitoring wells. These results indicate that PCBs identified in the sites soil samples (Aroclor-1254 and Aroclor-1260) have not impacted groundwater.

Approximately 613 pounds (two 55-gallon drums) of PCB-contaminated solids, consisting primarily of capacitors with some incidental soil were removed from the site and transported to a treatment facility for incineration.

A qualitative exposure assessment was completed for the site. Based upon the information collected during the RI, it was determined that there is no plausible off-site exposure scenario for the on-site soil contamination. The only possible on-site exposure pathway is by ingestion or dermal exposure by a trespasser, airport employee, or a worker in the boatyard. Ingestion and dermal exposure would not likely be extensive given the intermittent nature of exposure at the boatyard (i.e., occupation of the boatyard by employees, removing boats in spring and storing in fall). PCBs would most likely be transferred from surfaces containing residual soil (an article of clothing or object such as equipment) that have come into contact with contaminated soil and not through direct ingestion of or contact with the contaminated soil.

A FWRIA was completed at the site. Based on the information gathered, it was concluded that PCBs at the site are not expected to have a significant adverse impact to ecological resources and that an ecological impact assessment is not warranted.

5.2 Recommendations

Based upon the findings of this investigation, PWGC recommends that a Remedial Work Plan (RWP) with alternatives analysis, as described in the Brownfields Cleanup Program (BCP), be prepared. The RWP should include evaluation of alternatives that would meet different tracks as described in 6 NYCRR Part 375; Track 1- unrestricted use, Track 2 – restricted use with generic cleanup goals, Track 3 – restricted use with modified soil cleanup objectives, and/or Track 4 – restricted use with site-specific soil cleanup objectives. A no action alternative should also be evaluated.

PWGC recommends implementation of an Interim Remedial Measure (IRM) to address off-site and on-site PCB soil contamination. The IRM would include removal of approximately 6 inches of PCB-contaminated soils from the unpaved portion of the boatyard and extending the asphalt paving to the fence line. The IRM would include additional soil sampling prior to implementation to ensure all unpaved areas with PCBs greater than 1.0 mg/kg are identified. In addition, PWGC recommends that the IRM include on-site soil removal (up to one foot) from those areas with concentrations of PCBs in excess of 1,000 mg/kg (former capacitor locations). PWGC recommends preparation of an IRM Work Plan and submittal of the Work Plan to the NYSDEC for approval.

6.0 REFERENCES

- *Dvirka and Bartilucci Consulting Engineers (D & B) Investigation Report; November 1996.*
- *Franke, O.L. and Cohen, Philip, Regional Rates of Ground-Water Movement on Long Island, New York, United States Geological Survey Professional Paper 800C; 1972.*
- *New York State Department of Environmental Conservation (NYSDEC), 6 NYCRR Part 375 Subparts 375-1 to 375- 4 & 375-6; Restricted Use Soil Cleanup Objectives (RUSCOs) for the Protection of Public Health—Residential, December 2006.*
- *NYSDEC, Suffolk County Airport – Canine Kennel, Site #152079 Soil Sampling; July 13, 2000.*
- *NYSDEC, Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values; June 1998.*
- *NYSDEC, Technical and Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives (RSCOs); January 1994.*
- *NYSDEC, Draft Brownfield Cleanup Program Guide; May 2004.*
- *P.W. Grosser Consulting, Inc. (PWGC), Remedial Investigation Work Plan and Health and Safety Plan; July 2007.*
- *Suffolk County Department of Health Services (SCDHS), Office of Pollution Control Site inspection; May 2005.*
- *U.S. Air Force, The Installation Restoration Program Toxicology Guide, Volume 3. Aerospace Medical Division, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio. 1989.*

TABLES

TABLE 1
NYSDEC SOIL SAMPLING DATA
SITE #152079
Soil Sampling July 13, 2000

PCB/Pesticide Summary - results in µg/Kg

Sample Location	Sample Depth	Sample ID	Dieldrin	4,4'-DDE	Aroclor-1254	Arclor-1260
Soil #1	0-4"	1118-01	1,900	2,000	150,000[1]	ND[2]
Soil #1	3'	1118-02	250	270	20,000	ND
Soil #2	0-3"	1118-07	N/A[3]	N/A	38,000	910
Soil #2	1'	1118-08	N/A	N/A	930	24
Soil #3	0-3"	1118-05	N/A	N/A	3.9	0.47
Soil #3	2.5'	1118-06	N/A	N/A	0.19	ND
Soil #4	0-3"	1118-09	N/A	N/A	17	0.57
Soil #4	2.5'	1118-10	N/A	N/A	0.25	ND
Soil #5	0-4"	1118-03	N/A	N/A	1,900	ND
Soil #5	3.5'	1118-04	N/A	N/A	120	ND
Soil #6	0-4"	1118-11	N/A	N/A	0.092	ND
Soil #6	3'	1118-12	N/A	N/A	0.23	ND
Soil inside end of capacitor at Soil #1	Waste sample	1118-13	N/A	N/A	280,000	3,800

Notes:

[1] Shaded block indicates sample above the regulatory limit of 50 ppm (50,000 µg/Kg)

[2] Compound not detected at method detection limit.

[3] Not analyzed

ppm - parts per million

mg/kg - milligrams per kilogram

TABLE 2
GROUNDWATER / MONITORING WELL
SURVEY DATA

Former Canine Kennel - Westhampton Beach, New York

Monitoring Well	Depth to Water	Depth to Bottom	Monitoring Well Casing Elevation	Groundwater Elevation	Ground Elevation
MW-1	14.49	17.00	24.91	10.42	22.39
MW-2	16.50	19.00	26.75	10.25	23.15
MW-3	14.16	18.00	23.97	9.81	21.81
MW-4	14.39	18.00	24.16	9.77	21.18
MW-5	12.69	17.00	22.50	9.81	19.36
MW-6	12.18	17.00	22.03	9.85	19.96

TABLE 3
SOIL ANALYTICAL RESULTS FOR S-1
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	1A (0-2")	1B (2-2.5')	1C (4-4.5')	1N1A (0-2")	1N1B (2-2.5')	1N1C (4-4.5')	1N2A (0-2")	1N2B (2-2.5')	1E1A (0-2")	1E1B (2-2.5')	1S1A (0-2")	1S1B (2-2.5')	1S2A (0-2")	1S2B (2-2.5')	1W1A (0-2")	1W1B (2-2.5')	1W1C (4-4.5')	1W2A (0-2")	1W2B (2-2.5')
Pesticides 8081 - mg/kg																											
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00017 UJ	0.00017 UJ	NR	0.00015 UJ	NR	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	NR	0.00015 UJ	0.00014 UJ	NR	0.00015 UJ	NR
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00022 UJ	0.00021 UJ	NR	0.00019 UJ	NR	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	NR	0.00019 UJ	0.00018 UJ	NR	0.00019 UJ	NR
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00022 UJ	0.00021 UJ	NR	0.00019 UJ	NR	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	NR	0.00019 UJ	0.00018 UJ	NR	0.00019 UJ	NR
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00019 UJ	0.00019 UJ	NR	0.00017 UJ	NR	0.00019 UJ	0.00018 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	NR	0.00017 UJ	0.00016 UJ	NR	0.00017 UJ	NR
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00018 UJ	0.00018 UJ	NR	0.00016 UJ	NR	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	NR	0.00016 UJ	0.00015 UJ	NR	0.00016 UJ	NR
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00019 UJ	0.00019 UJ	NR	0.00017 UJ	NR	0.00019 UJ	0.00018 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	NR	0.00017 UJ	0.00016 UJ	NR	0.00017 UJ	NR
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00023 UJ	0.00023 UJ	NR	0.0002 UJ	NR	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	NR	0.0002 UJ	0.0002 UJ	NR	0.0002 UJ	NR
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00023 UJ	0.00023 UJ	NR	0.0002 UJ	NR	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	NR	0.0002 UJ	0.0002 UJ	NR	0.0002 UJ	NR
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00023 UJ	0.00023 UJ	NR	0.0002 UJ	NR	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	NR	0.0002 UJ	0.0002 UJ	NR	0.0002 UJ	NR
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00023 UJ	0.00023 UJ	NR	0.0002 UJ	NR	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	NR	0.0002 UJ	0.0002 UJ	NR	0.0002 UJ	NR
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.0006 UJ	0.0006 UJ	0.00059 UJ	0.00069 UJ	0.00068 UJ	NR	0.0006 UJ	NR	0.00069 UJ	0.00064 UJ	0.00064 UJ	0.00062 UJ	0.00061 UJ	NR	0.00059 UJ	0.00059 UJ	NR	0.0006 UJ	NR
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00024 UJ	0.00024 UJ	NR	0.00021 UJ	NR	0.00024 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00021 UJ	NR	0.00021 UJ	0.00021 UJ	NR	0.00021 UJ	NR
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00033 UJ	0.00032 UJ	NR	0.00028 UJ	NR	0.00033 UJ	0.0003 UJ	0.0003 UJ	0.00029 UJ	0.00029 UJ	NR	0.00028 UJ	0.00028 UJ	NR	0.00028 UJ	NR
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00028 UJ	0.00027 UJ	NR	0.00024 UJ	NR	0.00028 UJ	0.00026 UJ	0.00026 UJ	0.00025 UJ	0.00025 UJ	NR	0.00024 UJ	0.00024 UJ	NR	0.00024 UJ	NR
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00019 UJ	0.00019 UJ	NR	0.00017 UJ	NR	0.00019 UJ	0.00018 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	NR	0.00017 UJ	0.00016 UJ	NR	0.00017 UJ	NR
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00026 UJ	0.00025 UJ	NR	0.00022 UJ	NR	0.00026 UJ	0.00024 UJ	0.00024 UJ	0.00023 UJ	0.00023 UJ	NR	0.00022 UJ	0.00022 UJ	NR	0.00022 UJ	NR
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.00049 UJ	0.00049 UJ	0.00049 UJ	0.00057 UJ	0.00056 UJ	NR	0.00049 UJ	NR	0.00057 UJ	0.00053 UJ	0.00053 UJ	0.00051 UJ	0.00051 UJ	NR	0.00049 UJ	0.00048 UJ	NR	0.00049 UJ	NR
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00024 UJ	0.00024 UJ	NR	0.00021 UJ	NR	0.00024 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00021 UJ	NR	0.00021 UJ	0.00021 UJ	NR	0.00021 UJ	NR
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00023 UJ	0.00023 UJ	NR	0.0002 UJ	NR	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	NR	0.0002 UJ	0.0002 UJ	NR	0.0002 UJ	NR
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00022 UJ	0.00021 UJ	NR	0.00019 UJ	NR	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	NR	0.00019 UJ	0.00018 UJ	NR	0.00019 UJ	NR
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0038 UJ	0.0038 UJ	0.0037 UJ	0.0044 UJ	0.0043 UJ	NR	0.0038 UJ	NR	0.0044 UJ	0.004 UJ	0.004 UJ	0.0039 UJ	0.0038 UJ	NR	0.0037 UJ	0.0037 UJ	NR	0.0038 UJ	NR
PCBs 8082 - mg/kg																											
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.0040 UJ	2 UJ	0.19 UJ	2.3 UJ	22 UJ	0.019 UJ	0.039 UJ	0.019 UJ	0.0046 UJ	0.0042 UJ	0.0042 UJ	0.02 UJ	0.04 UJ	0.0085 UJ	0.0039 UJ	0.0038 UJ	0.023 UJ	0.2 UJ	0.0038 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.0049 UJ	2 UJ	0.21 UJ	2.8 UJ	27 UJ	0.024 UJ	0.048 UJ	0.023 UJ	0.0056 UJ	0.0051 UJ	0.0051 UJ	0.025 UJ	0.049 UJ	0.01 UJ	0.0048 UJ	0.0047 UJ	0.028 UJ	0.24 UJ	0.0047 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.0051 UJ	3 UJ	0.25 UJ	2.9 UJ	28 UJ	0.025 UJ	0.050 UJ	0.024 UJ	0.0058 UJ	0.0054 UJ	0.0054 UJ	0.026 UJ	0.051 UJ	0.011 UJ	0.005 UJ	0.0049 UJ	0.029 UJ	0.25 UJ	0.0049 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.0022 UJ	1 UJ	0.11 UJ	1.3 UJ	12 UJ	0.011 UJ	0.022 UJ	0.010 UJ	0.0026 UJ	0.0024 UJ	0.0024 UJ	0.011 UJ	0.023 UJ	0.0048 UJ	0.0022 UJ	0.0022 UJ	0.013 UJ	0.11 UJ	0.0022 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.0049 UJ	2 UJ	0.24 UJ	2.8 UJ	27 UJ	0.024 UJ	0.048 UJ	0.023 UJ	0.0056 UJ	0.0052 UJ	0.0052 UJ	0.025 UJ	0.05 UJ	0.01 UJ	0.0048 UJ	0.0047 UJ	0.028 UJ	0.24 UJ	0.0047 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	**1.1 D**	**130**	**14 D**	**42**	**1,800 DP**	0.11 D	**3.4 DP**	0.76 D	**2.5 D**	0.17 P	**7.6 D**	**1.7 D**	**2.7 DP**	0.55 DP	**2.3 D**	0.1	**1.1 D**	**9.9 DP**	0.094
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.0040 UJ	2 UJ	0.19 UJ	2.3 UJ	22 UJ	0.019 UJ	0.039 UJ	0.019 UJ	0.0045 UJ	0.0042 UJ	0.0042 UJ	0.02 UJ	0.04 UJ	0.0085 UJ	0.0039 UJ	0.0038 UJ	0.023 UJ	0.2 UJ	0.0038 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
NR - Not Run
U - The compound was not detected at the indicated concentration.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 4
SOIL ANALYTICAL RESULTS FOR S-2
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	2A (0-2")	2B (2-2.5')	2C (4-4.5')	2N1A (0-2")	2E1A (0-2")	2E1B (2-2.5')	2E2A (0-2")	2E2B (2-2.5')	2E2C (4-4.5')	2S1A (0-2")	2S1B (2-2.5')	2S2A (0-2")	2W1A (0-2")	2W2A (0-2")	2W2B (2-2.5')	2W2C (4-4.5')	FD-04 (2W2C)
Pesticides 8081 - mg/kg																									
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00019 UJ	0.00016 UJ	0.00014 UJ	0.00014 UJ	0.00015 UJ
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00025 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00025 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00022 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.0002 UJ	0.00017 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00022 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00026 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00026 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00026 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00026 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.0006 UJ	0.0006 UJ	0.0006 UJ	0.00061 UJ	0.00062 UJ	0.00059 UJ	0.00062 UJ	0.00059 UJ	0.00059 UJ	0.00062 UJ	0.0006 UJ	0.0006 UJ	0.00078 UJ	0.00064 UJ	0.00058 UJ	0.00059 UJ	0.00059 UJ
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00027 UJ	0.00022 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00029 UJ	0.00028 UJ	0.00029 UJ	0.00029 UJ	0.00029 UJ	0.00028 UJ	0.0003 UJ	0.00028 UJ	0.00028 UJ	0.00029 UJ	0.00028 UJ	0.00028 UJ	0.00037 UJ	0.0003 UJ	0.00027 UJ	0.00028 UJ	0.00028 UJ
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00025 UJ	0.00025 UJ	0.00024 UJ	0.00025 UJ	0.00024 UJ	0.00024 UJ	0.00025 UJ	0.00024 UJ	0.00024 UJ	0.00031 UJ	0.00026 UJ	0.00023 UJ	0.00024 UJ	0.00024 UJ
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00022 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00023 UJ	0.00023 UJ	0.00022 UJ	0.00023 UJ	0.00022 UJ	0.00022 UJ	0.00023 UJ	0.00022 UJ	0.00022 UJ	0.00029 UJ	0.00024 UJ	0.00021 UJ	0.00022 UJ	0.00022 UJ
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.0005 UJ	0.00049 UJ	0.0005 UJ	0.0005 UJ	0.00051 UJ	0.00049 UJ	0.00052 UJ	0.00049 UJ	0.00049 UJ	0.00051 UJ	0.00049 UJ	0.00049 UJ	0.00064 UJ	0.00053 UJ	0.00048 UJ	0.00048 UJ	0.00049 UJ
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00027 UJ	0.00022 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00026 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00025 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0038 UJ	0.0038 UJ	0.0038 UJ	0.0038 UJ	0.039 UJ	0.037 UJ	0.039 UJ	0.037 UJ	0.037 UJ	0.039 UJ	0.038 UJ	0.038 UJ	0.049 UJ	0.004 UJ	0.0036 UJ	0.037 UJ	0.037 UJ
PCBs 8082 - mg/kg																									
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.02 UJ	0.0039 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.0039 UJ	0.0082 UJ	0.0039 UJ	0.0039 UJ	0.02 UJ	0.0039 UJ	0.02 UJ	0.51 UJ	2.1 UJ	0.019 UJ	0.019 UJ	0.039 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.024 UJ	0.0048 UJ	0.024 UJ	0.025 UJ	0.025 UJ	0.0048 UJ	0.01 UJ	0.0048 UJ	0.0047 UJ	0.025 UJ	0.0048 UJ	0.024 UJ	0.62 UJ	2.6 UJ	0.023 UJ	0.024 UJ	0.048 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.025 UJ	0.005 UJ	0.025 UJ	0.026 UJ	0.026 UJ	0.005 UJ	0.011 UJ	0.005 UJ	0.005 UJ	0.026 UJ	0.005 UJ	0.025 UJ	0.65 UJ	2.7 UJ	0.024 UJ	0.025 UJ	0.05 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.011 UJ	0.0022 UJ	0.011 UJ	0.011 UJ	0.011 UJ	0.0022 UJ	0.0046 UJ	0.0022 UJ	0.0022 UJ	0.011 UJ	0.0022 UJ	0.011 UJ	0.29 UJ	1.2 UJ	0.011 UJ	0.011 UJ	0.022 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.024 UJ	0.0048 UJ	0.024 UJ	0.025 UJ	0.025 UJ	0.0048 UJ	0.01 UJ	0.0048 UJ	0.0048 UJ	0.025 UJ	0.0048 UJ	0.024 UJ	0.63 UJ	2.6 UJ	0.023 UJ	0.024 UJ	0.048 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	0.76 D	0.06	0.77 D	0.69	**1.3 DP**	0.58 D	0.45 D	0.0049 UJ	0.0049 UJ	0.6	0.089	0.66 D	**19 DP**	**150**	0.66 D	0.99 D	**1.3 P**
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.02 UJ	0.0039 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.0039 UJ	0.0082 UJ	0.0039 UJ	0.0039 UJ	0.02 UJ	0.0039 UJ	0.02 UJ	0.51 UJ	2.1 UJ	0.019 UJ	0.019 UJ	0.039 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
U - The compound was not detected at the indicated concentration.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 5
SOIL ANALYTICAL RESULTS FOR S-3
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	3A (0-2")	3B (2-2.5')	3C (4-4.5')	3N1A (0-2")	3N1B (2-2.5')	3N1C (4-4.5')	3N2A (0-2")	3N2B (2-2.5')	3E1A (0-2")	3E1B (2-2.5')	3E1C (4-4.5')	3E2A (0-2")	3E2B (2-2.5')	3E2C (4-4.5')	3S1A (0-2")	3S1B (2-2.5')	3S1C (4-4.5')	3S2A (0-2")	3S2B (2-2.5')	3S2C (4-4.5')	3W1A (0-2")	3W1B (2-2.5')	3W1C (4-4.5')	FD-01 (3W1C)
Pesticides 8081 - mg/kg																																
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00019 UJ	0.00014 UJ	0.00014 UJ	0.00015 UJ	0.00014 UJ	0.00014 UJ	0.00015 UJ	0.00015 UJ	0.00021 UJ	0.00015 UJ	0.00014 UJ	0.00016 UJ	0.00014 UJ	0.00015 UJ	0.0002 UJ	0.00015 UJ	0.00015 UJ	0.00019 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00014 UJ	0.00014 UJ	0.00014 UJ
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00025 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00018 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00028 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00025 UJ	0.00019 UJ	0.00019 UJ	0.00024 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00025 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00018 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00028 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00025 UJ	0.00019 UJ	0.00019 UJ	0.00024 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00022 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00025 UJ	0.00017 UJ	0.00016 UJ	0.00018 UJ	0.00016 UJ	0.00017 UJ	0.00022 UJ	0.00017 UJ	0.00017 UJ	0.00021 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00021 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00016 UJ	0.00023 UJ	0.00016 UJ	0.00015 UJ	0.00017 UJ	0.00015 UJ	0.00016 UJ	0.00021 UJ	0.00016 UJ	0.00016 UJ	0.0002 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00022 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00025 UJ	0.00017 UJ	0.00016 UJ	0.00018 UJ	0.00016 UJ	0.00017 UJ	0.00022 UJ	0.00017 UJ	0.00017 UJ	0.00021 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.00026 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00029 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00027 UJ	0.0002 UJ	0.0002 UJ	0.00025 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00026 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00029 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00027 UJ	0.0002 UJ	0.0002 UJ	0.00025 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.00026 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00029 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00027 UJ	0.0002 UJ	0.0002 UJ	0.00025 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.00026 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00029 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00027 UJ	0.0002 UJ	0.0002 UJ	0.00025 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.00078 UJ	0.00059 UJ	0.00059 UJ	0.0006 UJ	0.00058 UJ	0.00058 UJ	0.0006 UJ	0.0006 UJ	0.00087 UJ	0.00059 UJ	0.00059 UJ	0.00065 UJ	0.00059 UJ	0.00059 UJ	0.0008 UJ	0.00059 UJ	0.00059 UJ	0.00076 UJ	0.0006 UJ	0.00059 UJ	0.00063 UJ	0.00058 UJ	0.00059 UJ	0.00059 UJ
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00027 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.00031 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00028 UJ	0.00021 UJ	0.00021 UJ	0.00027 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00037 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00027 UJ	0.00027 UJ	0.00028 UJ	0.00029 UJ	0.00041 UJ	0.00028 UJ	0.00028 UJ	0.00031 UJ	0.00028 UJ	0.00028 UJ	0.00038 UJ	0.00028 UJ	0.00028 UJ	0.00036 UJ	0.00028 UJ	0.00028 UJ	0.0003 UJ	0.00027 UJ	0.00028 UJ	0.00028 UJ
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00031 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00023 UJ	0.00023 UJ	0.00024 UJ	0.00024 UJ	0.00035 UJ	0.00024 UJ	0.00024 UJ	0.00026 UJ	0.00024 UJ	0.00024 UJ	0.00032 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00025 UJ	0.00023 UJ	0.00024 UJ	0.00024 UJ
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00022 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00025 UJ	0.00017 UJ	0.00016 UJ	0.00018 UJ	0.00016 UJ	0.00017 UJ	0.00022 UJ	0.00017 UJ	0.00017 UJ	0.00021 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00029 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00022 UJ	0.00032 UJ	0.00022 UJ	0.00022 UJ	0.00024 UJ	0.00022 UJ	0.00022 UJ	0.00029 UJ	0.00022 UJ	0.00022 UJ	0.00028 UJ	0.00022 UJ	0.00022 UJ	0.00023 UJ	0.00021 UJ	0.00022 UJ	0.00022 UJ
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.00064 UJ	0.00048 UJ	0.00048 UJ	0.00049 UJ	0.00048 UJ	0.00048 UJ	0.00049 UJ	0.0005 UJ	0.00072 UJ	0.00049 UJ	0.00048 UJ	0.00053 UJ	0.00048 UJ	0.00049 UJ	0.00066 UJ	0.00049 UJ	0.00049 UJ	0.00062 UJ	0.00049 UJ	0.00049 UJ	0.00052 UJ	0.00048 UJ	0.00048 UJ	0.00048 UJ
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00027 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.00031 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00028 UJ	0.00021 UJ	0.00021 UJ	0.00027 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.00026 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00029 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00027 UJ	0.0002 UJ	0.0002 UJ	0.00025 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00025 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00018 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00028 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00025 UJ	0.00019 UJ	0.00019 UJ	0.00024 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0049 UJ	0.0037 UJ	0.0037 UJ	0.0038 UJ	0.0036 UJ	0.0036 UJ	0.0038 UJ	0.0038 UJ	0.0055 UJ	0.0037 UJ	0.0037 UJ	0.0041 UJ	0.0037 UJ	0.0037 UJ	0.005 UJ	0.0037 UJ	0.0037 UJ	0.0048 UJ	0.0038 UJ	0.0037 UJ	0.0039 UJ	0.0036 UJ	0.0037 UJ	0.0037 UJ
PCBs 8082 - mg/kg																																
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.026 UJ	0.0039 UJ	0.0038 UJ	0.0039 UJ	0.0038 UJ	0.0038 UJ	0.02 UJ	0.004 UJ	0.0057 UJ	0.0039 UJ	0.0038 UJ	0.0042 UJ	0.0038 UJ	0.0039 UJ	0.0053 UJ	0.0039 UJ	0.0039 UJ	0.005 UJ	0.0039 UJ	0.0039 UJ	0.0041 UJ	0.0038 UJ	0.0038 UJ	0.0038 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.031 UJ	0.0047 UJ	0.0047 UJ	0.0048 UJ	0.0046 UJ	0.0047 UJ	0.024 UJ	0.0048 UJ	0.007 UJ	0.0048 UJ	0.0047 UJ	0.0052 UJ	0.0047 UJ	0.0048 UJ	0.0064 UJ	0.0047 UJ	0.0048 UJ	0.0061 UJ	0.0048 UJ	0.0048 UJ	0.005 UJ	0.0046 UJ	0.0047 UJ	0.0047 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.033 UJ	0.0049 UJ	0.0049 UJ	0.005 UJ	0.0049 UJ	0.0049 UJ	0.025 UJ	0.0051 UJ	0.0074 UJ	0.005 UJ	0.0049 UJ	0.0054 UJ	0.0049 UJ	0.005 UJ	0.0067 UJ	0.005 UJ	0.005 UJ	0.0064 UJ	0.005 UJ	0.005 UJ	0.0053 UJ	0.0049 UJ	0.0049 UJ	0.0049 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0..014 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.0021 UJ	0.0021 UJ	0.011 UJ	0.0022 UJ	0.0032 UJ	0.0022 UJ	0.0022 UJ	0.0024 UJ	0.0022 UJ	0.0022 UJ	0.0029 UJ	0.0022 UJ	0.0022 UJ	0.0028 UJ	0.0022 UJ	0.0022 UJ	0.0023 UJ	0.0021 UJ	0.0022 UJ	0.0022 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.031 UJ	0.0047 UJ	0.0047 UJ	0.0048 UJ	0.0047 UJ	0.0047 UJ	0.024 UJ	0.0049 UJ	0.0071 UJ	0.0048 UJ	0.0047 UJ	0.0052 UJ	0.0047 UJ	0.0048 UJ	0.0065 UJ	0.0048 UJ	0.0048 UJ	0.0061 UJ	0.0048 UJ	0.0048 UJ	0.0051 UJ	0.0047 UJ	0.0047 UJ	0.0047 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	**1.4 D**	0.02 J	0.038	0.34	0.046	0.0033	0.65 D	0.83 D	**1.120 EP**	0.068	0.037 P	0.22	0.0048 UJ	0.005 UJ	0.57 EP	0.035	0.1 P	0.4 P	0.0049 UJ	0.0049 UJ	**3.2 EP**	0.043	0.039	0.0048 UJ
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.025 UJ	0.0038 UJ	0.0038 UJ	0.0039 UJ	0.0038 UJ	0.0038 UJ	0.02 UJ	0.004 UJ	0.0057 UJ	0.0039 UJ	0.0038 UJ	0.0042 UJ	0.0038 UJ	0.0039 UJ	0.0052 UJ	0.0039 UJ	0.0039 UJ	0.005 UJ	0.0039 UJ	0.0039 UJ	0.0041 UJ	0.0038 UJ	0.0038 UJ	0.0038 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater. The concentration given is an approximate value.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
E (Inorganics) - The reported value is estimated because of the presence of interference.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 6
SOIL ANALYTICAL RESULTS FOR S-4
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	4A (0-2")	4B (2-2.5')	4C (4-4.5')	4N1A (0-2")	FD-03 (4N1A)	4N1B (2-2.5')	4N1C (4-4.5')	4N2A (0-2")	4N2B (2-2.5')	4N2C (4-4.5')	4E1A (0-2")	4E1B (2-2.5')	4E1C (4-4.5')	4E2A (0-2")	4E2B (2-2.5')	4E2C (4-4.5')	4S1A (0-2")	4S1B (2-2.5')	4S1C (4-4.5')	4S2A (0-2")	4S2B (2-2.5')	4S2C (4-4.5')	4W1A (0-2")	4W1B (2-2.5')	4W1C (4-4.5')	4W2A (0-2")	4W2B (2-2.5')	4W2C (4-4.5')
Pesticides 8081 - mg/kg																																				
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00014 UJ	0.00015 UJ	0.00015 UJ	0.00034 UJ	0.00014 UJ	0.00014 UJ	0.00015 UJ	0.00029 UJ	0.00015 UJ	0.00014 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	0.00023 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00014 UJ	0.00015 UJ	0.00015 UJ	0.00014 UJ	0.00015 UJ	0.00015 UJ
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00044 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00038 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0003 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00044 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00038 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0003 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00039 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00034 UJ	0.00017 UJ	0.00016 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00027 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00015 UJ	0.00016 UJ	0.00016 UJ	0.00037 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00032 UJ	0.00016 UJ	0.00015 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00025 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00015 UJ	0.00016 UJ	0.00016 UJ	0.00015 UJ	0.00016 UJ	0.00016 UJ
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00039 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00034 UJ	0.00017 UJ	0.00016 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00027 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00046 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0004 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00032 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00046 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0004 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00032 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00046 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0004 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00032 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00046 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0004 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00032 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.00059 UJ	0.00059 UJ	0.00059 UJ	0.0014 UJ	0.00059 UJ	0.00059 UJ	0.00061 UJ	0.0012 UJ	0.0006 UJ	0.00059 UJ	0.00065 UJ	0.00061 UJ	0.00059 UJ	0.0009 UJ	0.00061 UJ	0.00059 UJ	0.00061 UJ	0.0006 UJ	0.00061 UJ	0.00065 UJ	0.0006 UJ	0.00059 UJ	0.0006 UJ	0.00057 UJ	0.0006 UJ	0.0006 UJ	0.00059 UJ	0.0006 UJ	0.0006 UJ
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00049 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00042 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00033 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00066 UJ	0.00028 UJ	0.00028 UJ	0.00029 JU	0.00057 UJ	0.00028 UJ	0.00028 UJ	0.00031 UJ	0.00029 UJ	0.00028 UJ	0.00045 UJ	0.00029 UJ	0.00028 UJ	0.00029 UJ	0.00028 UJ	0.00029 UJ	0.00031 UJ	0.00028 UJ	0.00028 UJ	0.00029 UJ	0.00027 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00056 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00048 UJ	0.00024 UJ	0.00024 UJ	0.00026 UJ	0.00025 UJ	0.00024 UJ	0.00038 UJ	0.00025 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00025 UJ	0.00026 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00023 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00039 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00034 UJ	0.00017 UJ	0.00016 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00027 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00051 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00044 UJ	0.00022 UJ	0.00022 UJ	0.00024 UJ	0.00023 UJ	0.00022 UJ	0.00035 UJ	0.00023 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00023 UJ	0.00024 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00021 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.00048 UJ	0.00049 UJ	0.00049 UJ	0.0011 JU	0.00048 UJ	0.00048 UJ	0.0005 UJ	0.00099 UJ	0.00049 UJ	0.00048 UJ	0.00053 UJ	0.0005 UJ	0.00049 UJ	0.00078 UJ	0.0005 UJ	0.00049 UJ	0.0005 UJ	0.00049 UJ	0.0005 UJ	0.00053 UJ	0.00049 UJ	0.00049 UJ	0.0005 UJ	0.00047 UJ	0.00049 UJ	0.00049 UJ	0.00048 UJ	0.00049 UJ	0.00049 UJ
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00049 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00042 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00033 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00046 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0004 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.00032 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00044 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00038 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0003 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0037 UJ	0.0037 UJ	0.0037 UJ	0.0087 UJ	0.0037 UJ	0.0037 UJ	0.0038 UJ	0.0075 UJ	0.0038 UJ	0.0037 UJ	0.0041 UJ	0.0038 UJ	0.0037 UJ	0.006 UJ	0.0038 UJ	0.0037 UJ	0.0038 UJ	0.0038 UJ	0.0041 UJ	0.0038 UJ	0.0037 UJ	0.0038 UJ	0.0036 UJ	0.0038 UJ	0.0038 UJ	0.0037 UJ	0.0038 UJ	0.0038 UJ
PCBs 8082 - mg/kg																																				
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.0039 UJ	0.0039 UJ	0.0039 UJ	0.23 UJ	0.0038 UJ	0.0038 UJ	0.004 UJ	0.2 UJ	0.0039 UJ	0.0038 UJ	0.0042 UJ	0.004 UJ	0.0039 UJ	0.031 UJ	0.004 UJ	0.0039 UJ	0.004 UJ	0.0039 UJ	0.004 UJ	0.0042 UJ	0.0039 UJ	0.0039 UJ	0.004 UJ	0.0037 UJ	0.0039 UJ	0.0039 UJ	0.0038 UJ	0.0039 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.0047 UJ	0.0047 UJ	0.0047 UJ	0.28 UJ	0.0047 UJ	0.0047 UJ	0.0049 UJ	0.24 UJ	0.0048 UJ	0.0047 UJ	0.0052 UJ	0.0049 UJ	0.0047 UJ	0.038 UJ	0.0049 UJ	0.0047 UJ	0.0049 UJ	0.0048 UJ	0.0049 UJ	0.0052 UJ	0.0048 UJ	0.0048 UJ	0.0048 UJ	0.0046 UJ	0.0048 UJ	0.0048 UJ	0.0047 UJ	0.0048 UJ	0.0048 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.0049 UJ	0.005 UJ	0.005 UJ	0.29 UJ	0.0049 UJ	0.0049 UJ	0.0051 UJ	0.25 UJ	0.005 UJ	0.0049 UJ	0.0054 UJ	0.0051 UJ	0.005 UJ	0.04 UJ	0.0051 UJ	0.005 UJ	0.0051 UJ	0.005 UJ	0.0051 UJ	0.0054 UJ	0.005 UJ	0.005 UJ	0.0051 UJ	0.0048 UJ	0.005 UJ	0.005 UJ	0.0049 UJ	0.005 UJ	0.005 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.13 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.11 UJ	0.0022 UJ	0.0022 UJ	0.0024 UJ	0.0023 UJ	0.0022 UJ	0.017 UJ	0.0023 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.0023 UJ	0.0024 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.0021 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.0022 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.0047 UJ	0.0048 UJ	0.0048 UJ	0.28 UJ	0.0047 UJ	0.0047 UJ	0.0049 UJ	0.24 UJ	0.0048 UJ	0.0047 UJ	0.0052 UJ	0.0049 UJ	0.0048 UJ	0.038 UJ	0.0049 UJ	0.0048 UJ	0.0049 UJ	0.0048 UJ	0.005 UJ	0.0052 UJ	0.0048 UJ	0.0048 JU	0.0049 UJ	0.0046 UJ	0.0048 UJ	0.0048 UJ	0.0047 UJ	0.0048 UJ	0.0048 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	0.069	0.0049 UJ	0.0049 UJ	**9.8 D**	0.0048 UJ	0.085	0.036	**9.1 D**	0.0049 UJ	0.0048 UJ	0.26 P	0.005 UJ	0.005 UJ	**1.16 D**	0.08	0.028	0.14 P	0.0049 UJ	0.005 UJ	0.19	0.018 J	0.0049 UJ	0.037 P	0.0047 UJ	0.0049 UJ	0.062	0.021 J	0.0049 UJ
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.0038 UJ	0.0039 UJ	0.0039 UJ	0.23 UJ	0.0038 UJ	0.0038 UJ	0.004 UJ	0.2 UJ	0.0039 UJ	0.0038 UJ	0.0042 UJ	0.004 UJ	0.0039 UJ	0.031 UJ	0.004 UJ	0.0039 UJ	0.004 UJ	0.0039 UJ	0.004 UJ	0.0042 UJ	0.0039 UJ	0.0039 UJ	0.004 UJ	0.0037 UJ	0.0039 UJ	0.0039 UJ	0.0038 UJ	0.0039 UJ	

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value to this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater. The concentration given is an approximate value.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 7
SOIL ANALYTICAL RESULTS FOR S-5
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	5A (0-2")	FD-05 (5A)	5B (2-2.5')	5N1A (0-2")	5N1B (2-2.5')	5E1A (0-2")	5E1B (2-2.5')	5E2A (0-2")	5S1A (0-2")	5S1B (2-2.5')	5S1C (4-4.5')	5S2A (0-2")	5S2B (2-2.5')	5W1A (0-2")	5W1B (2-2.5')	5W1C (4-4.5')
Pesticides 8081 - mg/kg																								
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00015 UJ	0.00029 UJ	0.00016 UJ	0.00016 UJ	NR	0.00016 UJ	NR	0.00015 UJ	0.00015 UJ	NR
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00037 UJ	0.0002 UJ	0.00021 UJ	NR	0.0002 UJ	NR	0.00019 UJ	0.00019 UJ	NR
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00037 UJ	0.0002 UJ	0.00021 UJ	NR	0.0002 UJ	NR	0.00019 UJ	0.00019 UJ	NR
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00033 UJ	0.00018 UJ	0.00019 UJ	NR	0.00018 UJ	NR	0.00017 UJ	0.00017 UJ	NR
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00031 UJ	0.00017 UJ	0.00018 UJ	NR	0.00017 UJ	NR	0.00016 UJ	0.00016 UJ	NR
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00033 UJ	0.00018 UJ	0.00019 UJ	NR	0.00018 UJ	NR	0.00017 UJ	0.00017 UJ	NR
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0004 UJ	0.00021 UJ	0.00022 UJ	NR	0.00022 UJ	NR	0.0002 UJ	0.0002 UJ	NR
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0004 UJ	0.00021 UJ	0.00022 UJ	NR	0.00022 UJ	NR	0.0002 UJ	0.0002 UJ	NR
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0004 UJ	0.00021 UJ	0.00022 UJ	NR	0.00022 UJ	NR	0.0002 UJ	0.0002 UJ	NR
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0004 UJ	0.00021 UJ	0.00022 UJ	NR	0.00022 UJ	NR	0.0002 UJ	0.0002 UJ	NR
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.00061 UJ	0.00063 UJ	0.00062 UJ	0.0006 UJ	0.00059 UJ	0.00064 UJ	0.00059 UJ	0.0012 UJ	0.00064 UJ	0.00067 UJ	NR	0.00065 UJ	NR	0.0006 UJ	0.00059 UJ	NR
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00021 UJ	0.00022 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00042 UJ	0.00022 UJ	0.00023 UJ	NR	0.00023 UJ	NR	0.00021 UJ	0.00021 UJ	NR
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00029 UJ	0.0003 UJ	0.00029 UJ	0.00029 UJ	0.00028 UJ	0.0003 UJ	0.00028 UJ	0.00056 UJ	0.0003 UJ	0.00032 UJ	NR	0.00031 UJ	NR	0.00028 UJ	0.00028 UJ	NR
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00025 UJ	0.00025 UJ	0.00025 UJ	0.00024 UJ	0.00024 UJ	0.00026 UJ	0.00024 UJ	0.00048 UJ	0.00026 UJ	0.00027 UJ	NR	0.00026 UJ	NR	0.00024 UJ	0.00024 UJ	NR
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00033 UJ	0.00018 UJ	0.00019 UJ	NR	0.00018 UJ	NR	0.00017 UJ	0.00017 UJ	NR
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00023 UJ	0.00023 UJ	0.00023 UJ	0.00022 UJ	0.00022 UJ	0.00024 UJ	0.00022 UJ	0.00044 UJ	0.00024 UJ	0.00025 UJ	NR	0.00024 UJ	NR	0.00022 UJ	0.00022 UJ	NR
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.0005 UJ	0.00052 UJ	0.00051 UJ	0.0005 UJ	0.00049 UJ	0.00053 UJ	0.00049 UJ	0.00098 UJ	0.00053 UJ	0.00055 UJ	NR	0.00053 UJ	NR	0.00049 UJ	0.00049 UJ	NR
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00021 UJ	0.00022 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00042 UJ	0.00022 UJ	0.00023 UJ	NR	0.00023 UJ	NR	0.00021 UJ	0.00021 UJ	NR
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.0002 UJ	0.00021 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0004 UJ	0.00021 UJ	0.00022 UJ	NR	0.00022 UJ	NR	0.0002 UJ	0.0002 UJ	NR
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00019 UJ	0.0002 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00037 UJ	0.0002 UJ	0.00021 UJ	NR	0.0002 UJ	NR	0.00019 UJ	0.00019 UJ	NR
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0038 UJ	0.0039 UJ	0.0039 UJ	0.0038 UJ	0.0037 UJ	0.004 UJ	0.0037 UJ	0.0074 UJ	0.004 UJ	0.0042 UJ	NR	0.0041 UJ	NR	0.0038 UJ	0.00037 UJ	NR
PCBs 8082 - mg/kg																								
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.004 UJ	0.0041 UJ	2 UJ	0.004 UJ	75 UJ	0.0042 UJ	0.019 UJ	0.0039 UJ	0.84 UJ	0.088 UJ	0.09 UJ	0.021 UJ	0.0039 UJ	0.0039 UJ	0.019 UJ	40 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.0049 UJ	0.0050 UJ	2.5 UJ	0.0048 UJ	91 UJ	0.0051 UJ	0.024 UJ	0.0048 UJ	1 UJ	0.11 UJ	0.11 UJ	0.026 UJ	0.0048 UJ	0.0048 UJ	0.024 UJ	49 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.0051 UJ	0.0053 UJ	2.6 UJ	0.0051 UJ	96 UJ	0.0054 UJ	0.025 UJ	0.005 UJ	1.1 UJ	0.11 UJ	0.12 UJ	0.027 UJ	0.005 UJ	0.005 UJ	0.025 UJ	51 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.0023 UJ	0.0023 UJ	1.1 UJ	0.0022 UJ	42 UJ	0.0024 UJ	0.011 UJ	0.0022 UJ	0.47 UJ	0.049 UJ	0.05 UJ	0.012 UJ	0.0022 UJ	0.0022 UJ	0.011 UJ	23 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.0049 UJ	0.0051 UJ	2.5 UJ	0.0049 UJ	92 UJ	0.0052 UJ	0.024 UJ	0.0048 UJ	1 UJ	0.11 UJ	0.11 UJ	0.026 UJ	0.0048 UJ	0.0048 UJ	0.024 UJ	49 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	**5**	**3.5**	**350 D**	**39**	**4,200**	**1.9**	0.93 D	0.19	**53**	**4.2 DP**	**4.1 D**	**1.2 DP**	0.21	**1.2**	**1.1 D**	**2,100 D**
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.004 UJ	0.0041 UJ	2 UJ	0.004 UJ	75 UJ	0.0042 UJ	0.19 UJ	0.0039 UJ	0.84 UJ	0.088 UJ	0.09 UJ	0.021 UJ	0.0039 UJ	0.0039 UJ	0.019 UJ	40 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
NR - Not Run
U - The compound was not detected at the indicated concentration.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 8
SOIL ANALYTICAL RESULTS FOR S-6 through S-10
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	6A (0-2")	6B (2-2.5')	6C (4-4.5')	7A (0-2")	7B (2-2.5')	7C (4-4.5')	FD-02 (7C)	8A (0-2")	8B (2-2.5')	8C (4-4.5')	9A (0-2")	9B (2-2.5')	9C (4-4.5')	10A (0-2")	10B (2-2.5')	10C (4-4.5')
Pesticides 8081 - mg/kg																								
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00017 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ	0.00014 UJ	0.00014 UJ	0.00015 UJ	0.00015 UJ	0.00015 UJ
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00022 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00022 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.0002 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00016 UJ	0.00016 UJ
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.0002 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.00023 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00023 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.00023 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.00023 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.0007 UJ	0.00059 UJ	0.00059 UJ	0.00065 UJ	0.00059 UJ	0.00059 UJ	0.00059 UJ	0.0006 UJ	0.0006 UJ	0.0006 UJ	0.00063 UJ	0.00059 UJ	0.00059 UJ	0.00059 UJ	0.0006 UJ	0.00059 UJ
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00025 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00033 UJ	0.00028 UJ	0.00028 UJ	0.00031 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.0003 UJ	0.00028 UJ	0.00028 UJ	0.00028 UJ	0.00029 UJ	0.00028 UJ
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00028 UJ	0.00024 UJ	0.00024 UJ	0.00026 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00025 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ	0.00024 UJ
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.0002 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ	0.00018 UJ	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00017 UJ	0.00017 UJ
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00026 UJ	0.00022 UJ	0.00022 UJ	0.00024 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00023 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ	0.00022 UJ
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.00058 UJ	0.00049 UJ	0.00049 UJ	0.00053 UJ	0.00049 UJ	0.00049 UJ	0.00049 UJ	0.00049 UJ	0.00049 UJ	0.0005 UJ	0.00052 UJ	0.00048 UJ	0.00048 UJ	0.00049 UJ	0.0005 UJ	0.00049 UJ
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00025 UJ	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ	0.00021 UJ
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.00023 UJ	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ	0.0002 UJ
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00022 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ	0.0002 UJ	0.00019 UJ	0.00018 UJ	0.00019 UJ	0.00019 UJ	0.00019 UJ
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0044 UJ	0.0037 UJ	0.0037 UJ	0.0041 UJ	0.0037 UJ	0.0037 UJ	0.0037 UJ	0.0038 UJ	0.0038 UJ	0.0038 UJ	0.0039 UJ	0.0037 UJ	0.0037 UJ	0.0037 UJ	0.0038 UJ	0.0037 UJ
PCBs 8082 - mg/kg																								
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.0046 UJ	0.0039 UJ	0.0039 UJ	0.0042 UJ	0.0039 UJ	0.0039 UJ	0.0039 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.0041 UJ	0.0038 UJ	0.0038 UJ	0.019 UJ	0.004 UJ	0.078 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.0056 UJ	0.0048 UJ	0.0048 UJ	0.0052 UJ	0.0047 UJ	0.0048 UJ	0.0047 UJ	0.024 UJ	0.024 UJ	0.24 UJ	0.005 UJ	0.0047 UJ	0.0047 UJ	0.024 UJ	0.0048 UJ	0.095 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.0059 UJ	0.005 UJ	0.005 UJ	0.0054 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.0053 UJ	0.0049 UJ	0.0049 UJ	0.025 UJ	0.0051 UJ	0.1 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.0026 UJ	0.0022 UJ	0.0022 UJ	0.0024 UJ	0.002 UJ	0.0022 UJ	0.0022 UJ	0.011 UJ	0.011 UJ	0.011 UJ	0.0023 UJ	0.0022 UJ	0.0022 UJ	0.011 UJ	0.0022 UJ	0.044 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.0057 UJ	0.0048 UJ	0.0048 UJ	0.0052 UJ	0.0048 UJ	0.0048 UJ	0.0048 UJ	0.024 UJ	0.024 UJ	0.024 UJ	0.0051 UJ	0.0047 UJ	0.0047 UJ	0.024 UJ	0.0049 UJ	0.096 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	0.21	0.0049 UJ	0.0049 UJ	0.35 P	0.0049 UJ	0.12	0.0049 UJ	0.6	0.82	**15 D**	**1.2 EP**	0.0048 UJ	0.0048 UJ	**1.6 DP**	0.315	**4.9 D**
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.0046 UJ	0.0039 UJ	0.0039 UJ	0.0042 UJ	0.0039 UJ	0.0039 UJ	0.0039 UJ	0.02 UJ	0.02 UJ	0.2 UJ	0.0041 UJ	0.0038 UJ	0.0038 UJ	0.019 UJ	0.004 UJ	0.078 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
NA - Not Sampled
NR - Not Run
NS - No standard
U - The compound was not detected at the indicated concentration.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
E (Inorganics) - The reported value is estimated because of the presence of interference.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 9
SOIL ANALYTICAL RESULTS FOR TEST PIT LOCATIONS
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	TP-1 11.0'	TP-2 6.5'	TP-3 8.5'
Pesticides 8081 - mg/kg											
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00014 UJ	0.00015 UJ	0.00015 UJ
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00019 UJ	0.00019 UJ	0.00019 UJ
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00019 UJ	0.00019 UJ	0.00019 UJ
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00016 UJ	0.00017 UJ	0.00017 UJ
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00015 UJ	0.00016 UJ	0.00016 UJ
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00016 UJ	0.00017 UJ	0.00017 UJ
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.0002 UJ	0.0002 UJ	0.0002 UJ
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.0002 UJ	0.0002 UJ	0.0002 UJ
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.0002 UJ	0.0002 UJ	0.0002 UJ
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.0002 UJ	0.0002 UJ	0.0002 UJ
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.00059 UJ	0.00059 UJ	0.0006 UJ
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00021 UJ	0.00021 UJ	0.00021 UJ
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00028 UJ	0.00028 UJ	0.00028 UJ
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00024 UJ	0.00024 UJ	0.00024 UJ
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00016 UJ	0.00017 UJ	0.00017 UJ
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00022 UJ	0.00022 UJ	0.00022 UJ
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.00048 UJ	0.00049 UJ	0.00049 UJ
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00021 UJ	0.00021 UJ	0.00021 UJ
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.0002 UJ	0.0002 UJ	0.0002 UJ
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00019 UJ	0.00019 UJ	0.00019 UJ
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0037 UJ	0.0037 UJ	0.0038 UJ
PCBs 8082 - mg/kg											
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.019 UJ	0.0039 UJ	0.0039 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.023 UJ	0.0048 UJ	0.0048 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.025 UJ	0.005 UJ	0.005 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.011 UJ	0.0022 UJ	0.0022 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.024 UJ	0.0048 UJ	0.0048 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	0.58 D	**1.6 D**	**5.4 D**
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.019 UJ	0.0039 UJ	0.0039 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
U - The compound was not detected at the indicated concentration.

TABLE 10
SOIL ANALYTICAL RESULTS FOR CAPACITOR LOCATIONS
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	CA1-1	CA1-2	CA1-3	CA2-1	CA2-2	CA3-1
Pesticides 8081 - mg/kg														
alpha-BHC	0.11	0.02	0.097	0.48	3.4	6.8	0.04 (g)	0.02	0.00015 UJ	0.00015 UJ	0.00016 UJ	0.00015 UJ	0.00014 UJ	0.00015 UJ
beta-BHC	0.2	0.036	0.072	0.36	3	14	0.6	0.09	0.00019 UJ	0.00019 UJ	0.00021 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ
delta-BHC	0.3	0.04	100 (a)	100 (a)	500 (h)	1,000 (i)	0.04 (g)	0.25	0.00019 UJ	0.00019 UJ	0.00021 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ
gamma-BHC	0.06	0.1	0.28	1.3	9.2	23	6	0.1	0.00017 UJ	0.00017 UJ	0.00019 UJ	0.00018 UJ	0.00016 UJ	0.00017 UJ
Heptachlor	0.1	0.042	0.42	2.1	15	29	0.14	0.38	0.00016 UJ	0.00016 UJ	0.00017 UJ	0.00016 UJ	0.00015 UJ	0.00016 UJ
Aldrin	0.041	0.005 (c)	0.019	0.097	0.68	1.4	0.14	0.19	0.00017 UJ	0.00017 UJ	0.00019 UJ	0.00018 UJ	0.00016 UJ	0.00017 UJ
Heptachlor epoxide	0.02	NS	NS	NS	NS	NS	NS	NS	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ
Endosulfan I	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ
Dieldrin	0.044	0.005 (c)	0.039	0.2	1.4	2.8	0.006	0.1	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ
4,4-DDE	2	0.0033 (b)	1.8	8.9	62	120	0.0033 (e)	17	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ
Endrin	0.1	0.014	2.2	11	89	410	0.014	0.06	0.00061 UJ	0.00061 UJ	0.00066 UJ	0.00063 UJ	0.00059 UJ	0.00061 UJ
Endosulfan II	0.9	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	102	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ
4,4-DDD	3	0.0033 (b)	2.6	13	92	180	0.0033 (e)	14	0.00029 UJ	0.00029 UJ	0.00031 UJ	0.0003 UJ	0.00028 UJ	0.00029 UJ
Endosulfan Sulfate	1	2.4	4.8 (d)	24 (d)	200 (d)	920 (d)	NS	1,000 (i)	0.00025 UJ	0.00025 UJ	0.00027 UJ	0.00025 UJ	0.00024 UJ	0.00025 UJ
4,4-DDT	2	0.0033 (b)	1.7	7.9	47	94	0.0033 (e)	136	0.00017 UJ	0.00017 UJ	0.00019 UJ	0.00018 UJ	0.00016 UJ	0.00017 UJ
Methoxychlor	10	NS	NS	NS	NS	NS	NS	NS	0.00023 UJ	0.00022 UJ	0.00024 UJ	0.00023 UJ	0.00022 UJ	0.00023 UJ
Endrin ketone	NS	NS	NS	NS	NS	NS	NS	NS	0.0005 UJ	0.0005 UJ	0.00055 UJ	0.00052 UJ	0.00048 UJ	0.0005 UJ
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS	0.00021 UJ	0.00021 UJ	0.00023 UJ	0.00022 UJ	0.00021 UJ	0.00021 UJ
alpha-Chlordane	0.54	0.094	0.91	4.2	24	47	1.3	2.9	0.0002 UJ	0.0002 UJ	0.00022 UJ	0.00021 UJ	0.0002 UJ	0.0002 UJ
gamma-Chlordane	NS	NS	NS	NS	NS	NS	NS	NS	0.00019 UJ	0.00019 UJ	0.00021 UJ	0.0002 UJ	0.00019 UJ	0.00019 UJ
Toxaphene	NS	NS	NS	NS	NS	NS	NS	NS	0.0038 UJ	0.0038 UJ	0.0042 UJ	0.0039 UJ	0.0037 UJ	0.0038 UJ
PCBs 8082 - mg/kg														
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	1,600 UJ	0.2 UJ	4.3 UJ	820 UJ	0.77 UJ	20 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	2,000 UJ	0.24 UJ	5.3 UJ	1,000 UJ	0.94 UJ	25 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	2,100 UJ	0.26 UJ	5.6 UJ	1,100 UJ	0.99 UJ	26 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	9,000 UJ	0.11 UJ	2.4 UJ	460 UJ	0.43 UJ	11 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	2,000 UJ	0.25 UJ	5.3 UJ	1,000 UJ	0.95 UJ	25 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	**86,000 D**	**220 E**	**110**	**45,000 D**	**36 DP**	**1,300 D**
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	1,600 UJ	0.2 UJ	4.3 UJ	820 UJ	0.77 UJ	20 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
SCO - Soil cleanup objective
CRQL - Contract required quantitation limit
TSD - Technical Support Document
(a) The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
(b) For constituents where the calculated SCO was lower than the CRQL the CRQL is used as the Track 1 SCO value.
(c) For constituents where the calculated SCO was lower than the rual soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 CO value fo this use of the site.
(d) SCO is the sum of endosilfan I, endosulfan II and endosulfan sulfate.
(e) For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value
(f) Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8b with "NS". Where such contaminants appear in Table 375-6.8a, the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.
(g) This SCOs is derived from data on mixed isomer of BHC
(h) The SCOs for the commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
(i) The SCOs for the industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
U - The compound was not detected at the indicated concentration.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
E (Organics) - Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
E (Inorganics) - The reported value is estimated because of the presence of interference.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 11
SOIL ANALYTICAL RESULTS FOR S-11 through S-29
PCBS
EPA METHOD 8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Recommended Soil Cleanup Objective (1)	Unrestricted Use (2)	Residential (3)	Restricted Residential (3)	Commercial (3)	Industrial (3)	Protection of Ecological Resources (3)	Protection of Groundwater (3)	11A 0-2"	12A 0-2"	FD-06 0-2"	13A 0-2"	14A 0-2"	15A 0-2"	16A 0-2"	17A 0-2"	18A 0-2"	19A 0-2"	20A 0-2"	21A 0-2"	22A 0-2"	23A 0-2"	24A 0-2"	25A 0-2"	26A 0-2"	27A 0-2"	28A 0-2"	29A 0-2"
PCBs 8082 - mg/kg																												
Aroclor-1016	1*	0.1**	1	1	1	25	1	3.2	0.0043 UJ	0.0039 UJ	0.0039 UJ	0.0083 UJ	0.0038 UJ	0.0038 UJ	0.0076 UJ	9.7 UJ	0.04 UJ	0.16 UJ	4.1 UJ	2 UJ	0.41 UJ	98 UJ	0.86 UJ	0.02 UJ	0.022 UJ	0.038 UJ	0.77 UJ	0.19 UJ
Aroclor-1221	1*	0.1**	1	1	1	25	1	3.2	0.0052 UJ	0.0048 UJ	0.0048 UJ	0.001 UJ	0.0047 UJ	0.0047 UJ	0.0093 UJ	12 UJ	0.049 UJ	0.2 UJ	5 UJ	2.4 UJ	0.5 UJ	120 UJ	1.1 UJ	0.024 UJ	0.027 UJ	0.046 UJ	0.94 UJ	0.23 UJ
Aroclor-1232	1*	0.1**	1	1	1	25	1	3.2	0.0055 UJ	0.005 UJ	0.005 UJ	0.0011 UJ	0.0049 UJ	0.0049 UJ	0.0097 UJ	12 UJ	0.051 UJ	0.21 UJ	5.3 UJ	2.5 UJ	0.52 UJ	130 UJ	1.1 UJ	0.025 UJ	0.029 UJ	0.049 UJ	0.99 UJ	0.25 UJ
Aroclor-1242	1*	0.1**	1	1	1	25	1	3.2	0.0024 UJ	0.0022 UJ	0.0022 UJ	0.0047 UJ	0.0022 UJ	0.0022 UJ	0.0043 UJ	5.4 UJ	0.022 UJ	0.09 UJ	2.3 UJ	1.1 UJ	0.23 UJ	55 UJ	0.48 UJ	0.011 UJ	0.013 UJ	0.021 UJ	0.43 UJ	0.11 UJ
Aroclor-1248	1*	0.1**	1	1	1	25	1	3.2	0.0053 UJ	0.0048 UJ	0.0048 UJ	0.001 UJ	0.0047 UJ	0.0047 UJ	0.0094 UJ	12 UJ	0.049 UJ	0.2 UJ	5.1 UJ	2.4 UJ	0.5 UJ	120 UJ	1.1 UJ	0.024 UJ	0.028 UJ	0.047 UJ	0.95 UJ	0.24 UJ
Aroclor-1254	1*	0.1**	1	1	1	25	1	3.2	0.0054 UJ	0.0049 UJ	0.215	0.78 D	0.0048 UJ	0.0048 UJ	0.575 D	**510 DP**	**2.2 D**	**10 DP**	**22 D**	**97 DP**	**21 D**	**4,400 D**	**61 DP**	**1.2 DP**	**1.7 DP**	**1.1 D**	**44 D**	**12 D**
Aroclor-1260	1*	0.1**	1	1	1	25	1	3.2	0.072 P	0.044 P	0.0039 UJ	0.0083 UJ	0.0038 UJ	0.0038 UJ	0.0076 UJ	9.7 UJ	0.04 UJ	0.16 UJ	4.1 UJ	2 UJ	0.41 UJ	98 UJ	0.86 UJ	0.02 UJ	0.022 UJ	0.038 UJ	0.77 UJ	0.19 UJ

Notes:
All concentrations are in mg/kg
(1) NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memorandum (TAGM) #4046, 12/00
(2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use Soil Cleanup Objectives Table 375-6.8a 12/06
(3) NYSDEC 6 NYCRR Environmental Remediation Programs Part Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06
*-NYSDEC recommended soil cleanup objectives for PCBs are 1.0 mg/kg for surface soils and 10 mg/kg for subsurface soils.
** - NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives for total PCBs is 0.1 mg/kg
U - The compound was not detected at the indicated concentration.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
Bold/highlighted - indicated exceedance of the NYSDEC Cleanup Objective for residential use

TABLE 12
GROUNDWATER ANALYTICAL RESULTS
PESTICIDES / PCBS
EPA METHOD 8081/8082

Former Canine Kennel - Westhampton Beach, New York

Compound	NYSDEC Groundwater Standards**	MW-1	Dup-01	MW-2	MW-3	MW-4	MW-5	MW-6
Pesticides and PCB's by 8081/8082 - ug/L								
alpha-BHC	0.01	0.0066 UJ	0.0063 UJ	0.0065 UJ	0.0066 UJ	0.0063 UJ	0.0097 UJ	0.0063 UJ
beta-BHC	0.04	0.0074 UJ	0.007 UJ	0.0072 UJ	0.0073 UJ	0.007 UJ	0.0108 UJ	0.007 UJ
delta-BHC	0.04	0.0526 UJ	0.05 UJ	0.0516 UJ	0.0521 UJ	0.05 UJ	0.0769 UJ	0.05 UJ
gamma-BHC	0.05	0.0075 UJ	0.0071 UJ	0.0073 UJ	0.0074 UJ	0.0071 UJ	0.0109 UJ	0.0071 UJ
Heptachlor	0.04	0.0239 UJ	0.0227 UJ	0.0234 UJ	0.0236 UJ	0.0227 UJ	0.0349 UJ	0.0227 UJ
Aldrin	ND	0.0315 UJ	0.0299 UJ	0.0308 UJ	0.0312 UJ	0.0299 UJ	0.046 UJ	0.0299 UJ
Heptachlor epoxide	0.03	0.0127 UJ	0.0121 UJ	0.0125 UJ	0.0126 UJ	0.0121 UJ	0.0186 UJ	0.0121 UJ
Endosulfan I	NS	0.008 UJ	0.0076 UJ	0.0078 UJ	0.0079 UJ	0.0076 UJ	0.0117 UJ	0.0076 UJ
Dieldrin	0.004	0.0077 UJ	0.0073 UJ	0.0076 UJ	0.0076 UJ	0.0073 UJ	0.0113 UJ	0.0073 UJ
4,4-DDE	0.2	0.0075 UJ	0.0072 UJ	0.0074 UJ	0.0075 UJ	0.0072 UJ	0.011 UJ	0.0072 UJ
Endrin	ND	0.0073 UJ	0.0069 UJ	0.0071 UJ	0.0072 UJ	0.0069 UJ	0.0106 UJ	0.0069 UJ
Endosulfan II	NS	0.0076 UJ	0.0073 UJ	0.0075 UJ	0.0076 UJ	0.0073 UJ	0.0112 UJ	0.0073 UJ
4,4-DDD	0.3	0.0074 UJ	0.007 UJ	0.0072 UJ	0.0073 UJ	0.007 UJ	0.0108 UJ	0.007 UJ
Endosulfan Sulfate	NS	0.0091 UJ	0.0086 UJ	0.0089 UJ	0.009 UJ	0.0086 UJ	0.0133 UJ	0.0086 UJ
4,4-DDT	0.2	0.0067 UJ	0.0064 UJ	0.0066 UJ	0.0067 UJ	0.0064 UJ	0.0099 UJ	0.0064 UJ
Methoxychlor	35	0.0075 UJ	0.0072 UJ	0.0074 UJ	0.0074 UJ	0.0072 UJ	0.011 UJ	0.0072 UJ
Endrin ketone	5	0.0082 UJ	0.0078 UJ	0.008 UJ	0.0081 UJ	0.0078 UJ	0.012 UJ	0.0078 UJ
Endrin aldehyde	5	0.0093 UJ	0.0088 UJ	0.0091 UJ	0.0092 UJ	0.0088 UJ	0.0136 UJ	0.0088 UJ
alpha-Chlordane	0.05	0.008 UJ	0.0076 UJ	0.0078 UJ	0.0079 UJ	0.0076 UJ	0.0117 UJ	0.0076 UJ
gamma-Chlordane	0.05	0.0082 UJ	0.0078 UJ	0.008 UJ	0.0081 UJ	0.0078 UJ	0.012 UJ	0.0078 UJ
Toxaphene	0.06	0.0947 UJ	0.09 UJ	0.0928 UJ	0.0938 UJ	0.09 UJ	0.1385 UJ	0.09 UJ
PCBs 8082 ug/L								
Aroclor-1016	0.09*	0.149 UJ	0.142 UJ	0.146 UJ	0.148 UJ	0.142 UJ	0.218 UJ	0.142 UJ
Aroclor-1221	0.09*	0.119 UJ	0.113 UJ	0.116 UJ	0.118 UJ	0.113 UJ	0.174 UJ	0.113 UJ
Aroclor-1232	0.09*	0.121 UJ	0.115 UJ	0.119 UJ	0.12 UJ	0.115 UJ	0.177 UJ	0.115 UJ
Aroclor-1242	0.09*	0.077 UJ	0.073 UJ	0.075 UJ	0.076 UJ	0.073 UJ	0.112 UJ	0.073 UJ
Aroclor-1248	0.09*	0.106 UJ	0.101 UJ	0.104 UJ	0.105 UJ	0.101 UJ	0.155 UJ	0.101 UJ
Aroclor-1254	0.09*	0.146 UJ	0.139 UJ	0.143 UJ	0.145 UJ	0.139 UJ	0.214 UJ	0.139 UJ
Aroclor-1260	0.09*	0.094 UJ	0.089 UJ	0.092 UJ	0.093 UJ	0.089 UJ	0.14 UJ	0.089 UJ

Notes:
** - NYSDEC Ambient Water Quality Standards and Guidance Values 6/1998 for Class GA Groundwater.
ND - Non-detectable
* - Guidance Value
NS - No Standard
U - Analyte not detected
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard