SECOND FIVE-YEAR REVIEW REPORT FOR CLAREMONT POLYCHEMICAL CORPORATION SUPERFUND SITE OLD BETHPAGE, TOWN OF OYSTER BAY, NASSAU COUNTY, NEW YORK

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3/4/2014
Date

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Executive Summary

This is second five-year review for the Claremont Polychemical Corp., Superfund site, located in Old Bethpage, Town of Oyster Bay, and Nassau County, New York. The assessment of this five-year review is that the implemented remedy is functioning as intended by the decision documents and is protective of human health and the environment.

Five-Year Review Summary Form

Site Name: Claremont Polychemical Corporation		
EPA ID: NYD002044584		
Region: 2	State: NY	City/County: Nassau

NPL Status: Final	
Multiple OUs? Yes	Has the site achieved construction completion? Yes

Lead agency: EPA If "Other Federal Agency" was selected above, enter Agency name:
Author name (Federal or State Project Manager): Maria Jon
Author affiliation: EPA
Review period: September 25, 2008 – January 15, 2014
Date of site inspection: July 18, 2013
Type of review: Statutory
Review number: 2
Triggering action date: September 25, 2008
Due date (five years after triggering action date): September 25, 2013

OU(s) without Issues/Recommendations Identified in the Five-Year Review:
OU 2, OU 4, and OU 5
Issues and Recommendations Identified in the Five-Year Review: None

Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date
N/A	N/A	N/A	N/A	

Operable Unit: OU 2	Protectiveness Determination: Protective	Addendum Due Date (if applicable):
Protectiveness Statement: The implemented remedy for OU 2 (Treatment of soil under the former Process Building) is protective of human health and the environment.		
Operable Unit: OU 4	Protectiveness Determination: Protective	Addendum Due Date (if applicable):
Protectiveness Statement: The implemented remedy for OU 4 (treatment of groundwater underneath the former Claremont Polychemical Corporation (CPC)) is protective of human health and the environment.		
Operable Unit: OU 5	Protectiveness Determination: Protective	Addendum Due Date (if applicable):
Protectiveness Statement: The implemented remedy for OU 5 (treatment of groundwater off the former CPC) is protective of human health and the environment.		

For sites that have achieved construction completion, enter a sitewide protectiveness determination and statement.
Protectiveness Determination: Protective Addendum Due Date(if applicable):
Protectiveness Statement: The implemented remedies are protective of human health and the environment.

Five-Year Review Report

I. Introduction

This five-year review for the Claremont Polychemical Corporation (CPC) Superfund site, located in the hamlet of Old Bethpage, Town of Oyster Bay, Nassau County, New York, was conducted by the United States Environmental Protection Agency (EPA). The five-year review was conducted pursuant to Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. §9601-9675 and 40 CFR 300.430(f)(4)(ii), and in accordance with the Comprehensive Five-Year Review Guidance, OSWER Directive 9355.7-03B-P (June 2001). The purpose of a five-year review is to assure that implemented remedies protect public health and the environment and function as intended by the decision documents. This report will become part of the site file.

This is the second five-year review for the CPC Superfund site. The site has two Records of Decision (RODs) signed in September 1989 and September 1990, and two Explanations of Significant Differences (ESDs) signed in September 2000 and April 2003. While the RODs provided for unlimited use and unrestricted exposure, the April 2003 ESD recognized that after implementation of the actions described in the April 2003 ESD, the Site would achieve construction completion; however, some contaminants would remain in soil under a concrete slab upon which the former CPC Process Building (Process Building) had been constructed. Because these contaminants remained, the EPA decision documents required that the use of the site be restricted, institutional controls be imposed upon the former CPC property and that "statutory" five-year reviews be conducted as long as the contaminants remained on-site. The 2003 ESD triggered the first five-year review. In accordance with the Section 1.3.3 of the five-year review guidance, a subsequent five-year review is triggered by the signature date of the last review, September 25, 2008.

Below is a description of the operable units (OUs) and remedial actions completed at the CPC site.

OU 1

OU 1 consisted of the treatment and removal of wastes in underground storage tanks. Under this action, 14 underground storage tanks and their contents were removed and shipped off-site for treatment and disposal. Cleanup levels achieved for the OU 1 remedial action allowed for unlimited use and unrestricted exposure; therefore, the OU 1 remedy is not subject to this review and does not require further evaluation in this report.

OU 2

This remedial action addressed the wastes stabilized during the September 1988 removal action. This action included compatibility testing, bulking/consolidation and treatment/disposal of wastes in deteriorated containers, aboveground tanks, and treatment basins. Upon completion of this remedial action, stabilized wastes were removed and contaminant levels in these on-site areas were reduced to levels that permit unlimited use and unrestricted exposure.

In April 2003, the EPA issued an ESD to include additional remedial actions for OU 2 and to address contaminated soil under the former Process Building. These remedial actions were:

> Removal of miscellaneous construction debris.
> Operation of a soil vapor extraction system (SVE).
> Institutional controls (e.g., requiring the current and future owners to maintain the integrity of the Process Building's concrete floor so long as cadmium-contaminated soil remained underneath it, restricting the use of the CPC Property to commercial/light industrial uses, and prohibiting the occupation of buildings on the CPC Property without vapor sampling and mitigation, if necessary).
> Sampling, cleaning and closing of septic systems.

Environmental Protection Easements and a Declaration of Covenants and Restrictions were recorded in the Nassau County Clerk's office on October 31, 2007. Because contaminants remain at OU 2 above levels that do not allow for unlimited use and unrestricted exposure to the CPC Property, this OU is subject to this five year review.

OU 3

OU 3 addressed the treatment of soil contaminated with tetrachloroethene (PCE) located in the former "spill area" east of the former Process Building via low-temperature enhanced volatilization (LTEV). Approximately 8,800 tons of soils contaminated with PCE were excavated, treated to health-based standards and backfilled on the Site. The OU 3 remedy achieved soil standards which allow for unrestricted use and unlimited exposure; therefore, the OU 3 remedy is not subject to this review and does not require further evaluation in this report.

OU 4

OU 4 addressed the contaminated groundwater underneath the CPC Property. The remedy consists of the extraction and treatment of the contaminated groundwater underneath the CPC Property via metals precipitation, air stripping and carbon adsorption, and re-injection of the treated water into the ground. This remedy is on-going and subject to this five-year review.

OU 5

OU 5 addressed the contaminated groundwater beyond the CPC Property. The remedy consists of the extraction and treatment of the contaminated groundwater that has migrated beyond the CPC Property boundary via air stripping and re-injection of the treated water into the ground. This remedy is on-going and subject to this five-year review.

OU 6

OU 6 addressed the decontamination of the former Process Building. This remedy consisted of decontamination of the Process Building via vacuuming and dusting of the contaminated surfaces and removing the asbestos insulation for off-site treatment and disposal. All hazardous substances, asbestos containing materials, and salvageable materials were removed from this building and disposed properly off-site prior to building decontamination. The Process Building's walls and interior surfaces were pressure washed. The OU 6 remedy achieved health based standards which allow for unrestricted use and unlimited exposure; therefore, the OU 6 remedy is not subject to this review and does not require further evaluation in this report.

Site Chronology

Table 4, attached, summarizes the site-related events from discovery to the present.

III. Background

Site Location

The CPC Superfund site is primarily located on a 9.5-acre parcel of land in the industrial section of Old Bethpage, Nassau County, New York (Figure 1).

The CPC Property which comprises most of the site is located at 501 Winding Road and contained a large one-story building, covering approximately 35,000 square feet (the former CPC Process Building) and a smaller groundwater treatment building constructed on behalf of EPA as part of the OU 4 remedy.

Properties adjacent to the CPC property upon which several extraction and injection wells and associated piping are located, which are part of the OU 4 remedy, are: the Bethpage State Park and a public golf course located to the south and southeast of the CPC site. The State University of New York-Farmingdale Campus is located to the east, a commercial and light industrial area is located to the north, and the Oyster Bay Solid Waste Disposal Complex (OBSWDC) is immediately west of the CPC site across Winding Road. The OBSWDC includes the Old Bethpage Landfill Superfund site (OBL Site) which is on the National Priorities List Superfund site with the Town of Oyster Bay (TOB) as the responsible party. The Nassau County Firemen's Training Center (FTC), includes a New York State Inactive Hazardous Waste site, is located approximately 500

feet south of the OBL site. The OBL site has a groundwater extraction and treatment system in operation. The FTC also built and operated a groundwater extraction and treatment system. The FTC site system suspended operations in 2013 pending notice from NYSDEC that cleanup objectives at the FTC site have been achieved.

The golf course also has a number of pump/irrigation wells, which are used for watering its fairways. The closest residences are approximately one-half mile from the CPC site and are immediately west of the OBL.

Site Geology/Hydrology

Historical investigations in the immediate area surrounding the Site have encountered four main geologic units, which are in descending order as follows: approximately 20 feet of Upper Glacial/Manetto Gravel deposits (Pleistocene), approximately 750 feet of the Magothy Formation (Upper Cretaceous), 150 feet of the Raritan Clay member (Upper Cretaceous Series), and approximately 250 feet of Loyd Sand member (Upper Cretaceous Series.)

At the CPC site, the Upper Glacial/Manetto Gravel is absent and the Magothy Formation is the uppermost geologic unit and aquifer of concern. The Magothy is the major aquifer within the designated Nassau-Suffolk sole source aquifer system supplying potable drinking water to the majority of the population of Long Island. Fill materials overlie the Magothy Formation in a sporadic pattern across the north and east portions of the CPC site and, when present, measure approximately two to six feet in thickness. Local water supply wells in the Magothy Formation are typically screened within the intermediate and lower portions of the aquifer to intercept the coarse, gravel-rich intervals.

Site-specific subsurface investigations from a variety of soil borings and monitoring/injection/extraction well installations to a maximum depth of 250 feet below ground surface have identified "well-stratified fine to medium sand with silt lenses, abundant peat laminae, and discontinuous sand layers" (Ebasco, 1990). Borings in the northern portion of the CPC site also encountered numerous interbedded silt and clay horizons. A comparison of site boring logs with municipal supply well logs to the north suggest that the site is located within a transitional area between the predominately sandy southern portion of the Magothy Formation and an interbedded clayey-sand portion to the north. As stated previously, the Magothy Formation is the uppermost water-bearing unit at the CPC site. It is an unconfined aquifer and the water table is typically encountered between 65 to 95 feet below ground surface. Previous investigations have shown that while the Magothy Aquifer has bodies of silt and clay within it, they are lenticular and discontinuous. Since vertical hydraulic barriers are not present locally, unit saturated thickness is assumed to be 650 to 700 feet. Groundwater flow is generally to the south-southeast.

Land and Resource Use

The CPC Property is currently zoned exclusively for light industrial/commercial land use. Land uses within one mile of the CPC site are: recreational (Bethpage State Park to the

south and southwest); institutional (State University Agricultural and Technical Institute to the east, Nassau County Firemen Training Center to the southwest; recreational (Old Bethpage Village to the north); commercial and industrial (to the north); residential (to the west and northwest); and solid waste disposal (to the west). The CPC Property itself was sold in 2007and the new owner is leasing part of the Property to a trucking company for highway and landscaping equipment storage.

History of Contamination

The CPC was a former manufacturer of pigments for plastics and inks, coated metal flakes, and vinyl stabilizers that operated from 1966 to 1980. During its operation, CPC disposed of liquid waste in three leaching basins and deposited solid wastes and treatment sludges in drums or in old, aboveground metal tanks. The principal wastes generated were organic solvents, resins and wash wastes (mineral spirits). The CPC Property occupies approximately 9.5 acres on which a 35,000 square-foot one-story, concrete building was located in the center of the Property. A solvent recovery system (steam distillation), two pigment dust collectors, a hidden pit in the concrete floor through which hazardous substances were disposed of into the soil, and a sump were located inside the Process Building. To the west of the building, there were five concrete treatment basins, each with a capacity of 5,000 gallons. Six aboveground tanks were located east of the Process Building. Other features included an underground tank farm, construction and demolition debris, dry wells and a water supply well.

The property upon which CPC operated was owned by two different owners, Winding Road Properties (WRP) and Winding Road Estates (WRE). WRP filed for bankruptcy in 1983 in the Bankruptcy Court for the Eastern District of New York (Case Number 883-80081-346). WRE did not file for bankruptcy at that time. The U.S. Attorney's Office participated in the bankruptcy on behalf of EPA and filed a proof of claim with the Court on or about April 3, 1989 in an attempt to recover EPA's response costs. The bankruptcy was not fully pursued and the case was dismissed by the Bankruptcy Court by an order dated October 7, 1996. As a result of the dismissal of the bankruptcy case, no change in the ownership of the CPC Property occurred. Neither CPC, WRP, nor WRE participated in the cleanup activities or performed any maintenance or upkeep activities on the CPC Property from 1983 until they conveyed the CPC Property in 2007 under Bankruptcy Court order. As a result, the former Process Building deteriorated and became unsafe.

WRP and WRE filed for bankruptcy again on September 24, 2005, in the same Court. Because the EPA had filed liens on the CPC Property pursuant to CERCLA for its response costs, the EPA was a creditor in the bankruptcy case. To resolve the bankruptcy case, the Court ordered that: 1) the CPC Property be sold at auction; 2) the establishment of environmental covenants and/or easements (deed restrictions) on the CPC Property to a) protect EPA's remedial cleanup equipment; b) to require the maintenance of a concrete slab to minimize direct human exposure to cadmium-contaminated soil remaining at the CPC Property; c) to restrict to use of the CPC Property to commercial/light industrial uses; d) not to allow the occupation of buildings on the Property without vapor sampling and mitigation, if necessary; and e) to make the former Process Building safe for EPA to

conduct its response actions. The Court ordered the CPC Property to be sold pursuant to an auction. Old Beth II, LLC became the new owner of the CPC Property on September 28, 2007. EPA's deed restrictions were imposed on the Property when the deed was recorded on October 31, 2007. The new owner has taken steps to remedy the unsafe conditions including demolition of the former Process Building (but not the slab), and has resulted in portions of the property being put back into productive use. These recent events are discussed in more detail below.

Initial Response

In 1979, the Nassau County Department of Health (NCDH) found 2,000-3,000 drums of inks, resins, and organic solvents throughout the site during a series of inspections. Inspectors identified releases associated with damaged or mishandled drums in several areas including one larger release located east of the plant building (referred to as the "spill area"). CPC sorted and removed the drums in 1980.

In October1980, the NYSDEC ordered CPC to commence clean-up activities at the site. CPC did not perform the clean-up activities required by NYSDEC and CPC ceased operations at the site in 1980. The site was proposed for inclusion on the National Priorities List (NPL) in October 1984 and was added to the NPL in June 1986. EPA initiated a remedial investigation and feasibility study (RI/FS) in March 1988 to characterize the contamination present at the site, as well as evaluate alternatives designed to address this contamination. EPA sampled surface and subsurface soil, groundwater, the contents of the underground storage tanks and surrounding soil, and the Process Building.

Removal Action

The RI field investigations identified several imminent hazards at the site. In September 1988, EPA's Response and Prevention Branch initiated a removal action to stabilize and isolate the leaking containers in the Process Building and all other hazardous materials at the CPC site. This was completed in January 1989. The removal action was limited to site stabilization measures. Disposal of these materials was called for in the 1989 ROD discussed below.

Basis for Taking Action

The RI report was released to the public in August 1990. The RI findings indicated that on-site soils were contaminated with PCE located in the former "spill area," which constituted a potential threat to groundwater resources. Fifteen underground tanks holding liquid and sludge wastes were also identified at the site. Contents of the tanks were mainly the volatile organic compounds (VOCs) 2-butanone, toluene and xylene. Heavy metals (e.g., copper, zinc) were found to be present in dust accumulated throughout the Process Building. In addition, the shallow groundwater was found to be contaminated with PCE, 1,2-dichloroethene (DCE), trichloroethene (TCE), 1,1,1-trichloroethane, ethylbenzene, 1,1-dichloroethane, methylene chloride, xylenes and vinyl

chloride in excess of federal Maximum Contaminant Levels (MCLs) and/or New York State Drinking Water Standards. The risks associated with these contaminants were ingestion of contaminated groundwater and exposure to contaminated soil to future on-site industrial workers.

IV. Remedial Actions

Remedy Selection

The EPA issued two RODs selecting remedies for the CPC site and two ESDs which modified these remedies.

The first ROD, was signed on September 22, 1989. This remedy addressed the wastes stabilized during the September 1988 removal action.

> OU2 - Compatibility testing, bulking/consolidation and treatment/disposal of wastes in deteriorated containers, aboveground tanks, and treatment basins.

The second ROD, signed on September 28, 1990, addressed the comprehensive remedy for the remainder of the site.

> OU 1 - Treatment and removal of wastes in underground storage tanks
> OU 3 - Treatment of PCE-contaminated soils via LTEV
> OU 4 - Treatment of the CPC on-Property contaminated groundwater
> OU 5 - Treatment of the CPC off-Property contaminated groundwater
> OU 6 - Decontamination of the former Process Building.

During the implementation of the second ROD it became apparent that three of the OBL site groundwater recovery wells were capturing the CPC off-Property groundwater plume. EPA then decided to modify the selected remedy for OU 5. On September 29, 2000, EPA issued an ESD that stated that the OBL site's groundwater treatment facility would be used to remediate the CPC off-Property groundwater plume, in lieu of constructing a new treatment system. The OBL Superfund site groundwater treatment system is owned and operated by the TOB.

In October 2000, after removing debris and decontaminating the interior of the former Process Building, the EPA discovered a hidden pit in the floor, approximately 20 inches in diameter and two feet deep, which led to a soil gas investigation beneath the Process Building. The soil gas survey identified highly elevated levels of

PCE (550,000 micrograms per cubic meter ($\mu g/m^3$)),
TCE (620,000 $\mu g/m^3$),
Toluene (22,000 $\mu g/m^3$), and
Xylene (5,300 $\mu g/m^3$).

The pit's soil was sampled and found to be contaminated with VOCs (PCE, TCE, toluene and xylene) and cadmium. In August 2002, in response to these findings, EPA initiated a pilot study to address the VOCs in the soil underneath the Process Building using an SVE system.

In April 2003, EPA issued a second ESD to document further modifications to the 1990 ROD. This ESD included actions to treat the VOCs in the soil under the former Process Building by operating an SVE system and maintaining the integrity of the Process Building's floor over time to prevent direct human exposure to cadmium-contaminated soil. The later action was to be accomplished by establishing institutional controls to ensure that the Process Building's concrete floor remained undisturbed, and future uses of the Property were to be limited to commercial/light industrial uses. In addition, the ESD also required the removal of approximately 30,000 cubic yards of industrial/ commercial demolition and construction debris located on the northern portion of the property and the decommissioning of five concrete-lined pits, which CPC used as wastewater treatment basins.

Remedial Action Implementation

Implementation of both RODs by EPA's Removal Action Branch began in August 1991 and September 1989, respectively. During implementation of the OU 1 action, 14 underground storage tanks were removed and 12,644 gallons of liquid waste and approximately 1,400 gallons of flammable liquid were shipped off-site for treatment and disposal. During the implementation of the 1989 ROD, the contents of approximately 547 drums containing flammable liquids were consolidated into 123 drums and shipped off-site for incineration; 16,200 gallons of wastewater from the aboveground tanks were transported off-site for disposal; 10,050 gallons of copper/zinc sludge from the treatment basins were shipped off-site to a metals reclamation facility; and 371 empty fiber steel drums were shipped to a recycling facility.

In September 1990, the EPA entered into an Interagency Agreement (IAG) with the U.S. Army Corps of Engineers (USACE) to design the OU 3 LTEV soils treatment system, the OU 4 CPC on-property groundwater treatment system, and the OU 6 building decontamination. The design work for these remedial components was completed in February 1995. In September 1995, EPA entered into a second IAG with the USACE for oversight of the construction activities at the Site. The USACE awarded a contract to URS Corporation in September 1995 to implement these remedial actions.

Soil excavation and treatment work (OU 3) was completed in December 1996. Approximately 8,800 tons of PCE-contaminated soil were excavated, treated and backfilled on the CPC Property. During excavation, free-product dense non-aqueous phase liquid (DNAPL) and light non-aqueous phase liquid (LNAPL) were uncovered in the subsurface soil at approximately 9 feet below grade. Laboratory analyses detected PCE at 9,600,000 micrograms per kilogram (ug/kg) and toluene at 2,900,000 ug/kg. Further vertical excavation in the area revealed that the NAPL was contained in an approximate 1-foot layer of soil atop a localized clay lense, which appeared to be

preventing further migration. Soil was excavated to a total depth of about 25-feet below grade. Post-excavation sampling was conducted to confirm that the specified soil treatment goal of 200 ug/kg for PCE was met.

The groundwater portion of the remedy was implemented in two phases. For the first phase, or OU4, three extraction wells were installed on the property boundary to capture the groundwater plume on the CPC Property. Construction began in 1997. The pump-and-treat system consists of an extraction system, above-ground treatment (designed to treat metals, organic contaminants and provide final pH adjustment), and a reinjection system. The treatment plant maximum capacity is 550,000 gallons per day. Three extraction wells (EXT-1, EXT-2, and EXT-3) were installed approximately 150 feet apart downgradient of the CPC Property's boundary to capture the groundwater plume on the CPC Property. The groundwater from the extraction wells is pumped to the OU 4 groundwater treatment plant. After treatment, the groundwater is re-injected into an injection well and gallery system. Full-scale operation of the OU 4 groundwater remedial system began in February 2000.

The second phase, OU 5, was designed to address the groundwater contamination beyond the CPC Property boundary. The goal of the OU 5 remedy is to capture, treat, and discharge treated groundwater from sources on the CPC Property that have migrated downgradient of the CPC Property. The primary constituent of concern is PCE. As noted above, a study revealed that three of the OBL site groundwater recovery wells previously installed to control landfill related groundwater impacts, were also capturing the CPC off-Property groundwater plume. As a result, EPA modified the OU 5 remedy to document that the OBL system would be used to address the off-property plume. The EPA entered into an agreement with NYSDEC and NYSDEC entered into a municipal agreement with the TOB, whereby EPA contributed approximately 60 percent of the total annual operating cost of the groundwater and treatment system to NYSDEC and NYSDEC provided this funding to TOB. In December 2006, after funding 10 years of LTRA, the responsibility for the continued operation and maintenance of the remediation system for this plume was transferred from EPA to NYSDEC.

Decontamination of the CPC Process Building, OU 6, began in July 1998 and was completed in December 1998. The decontamination consisted of power washing the walls and Building's interior structures to remove heavy metal contamination. All hazardous substances, asbestos-containing material, and salvageable material were removed from the building prior to building decontamination. Approximately 32 tons of mixed debris, 2,000 linear feet of asbestos material and 187 cubic feet of asbestos tank coatings were transported off-site to approved disposal facilities. In addition, 90 cubic yards of steel piping went to a recycling facility.

The subslab VOC contamination that led to 2003 ESD (discussed above) was discovered while decontaminating the Process Building (OU 6). EPA determined that using an SVE system would be the best way to address the soil contamination. The SVE pilot system was designed in September 2001 and implemented by EPA's Removal Action Branch in August 2002. The SVE system operated at an extraction rate of approximately 500 to

600 cubic feet per minute. While operating, more than 1,200 pounds of VOCs were removed by the SVE system. Because the former Process Building had not been maintained, its condition deteriorated to the point where, in 2006, EPA suspended operations of the SVE system due to unsafe conditions in the building. The current status of the SVE system is discussed below, under "Progress Since the Last Review."

As required by the April 2003 ESD, the removal of construction debris and decommissioning of treatment basins were completed in September 2003 by Science Applications International Corporation (SAIC) under a contract with the USACE. A large debris pile, consisting of soil, concrete, wood and other construction material covered an approximate 300 by 300 foot area in the northern portion of the CPC Property. The debris pile was irregular in shape and in some areas was 22 feet above grade. Approximately 300 tires were segregated from the debris and disposed off-site; 20,654 cubic yards of soil were processed and screened, stockpiled on-site while debris was excavated, and processed soil was regraded onto the excavated area following the debris removal; 423 tons of miscellaneous debris were removed and transported to a solid waste disposal facility; 6,992 tons of concrete and 170 tons of scrap metal were transported to a recycling facility; and 454 tons of cadmium-contaminated soil and 128 tons of cadmium-contaminated debris were disposed of at a permitted hazardous waste facility. In addition, two drums of sludge were removed from the wastewater treatment basins and transported off-site for disposal.

Institutional Controls Implementation

On October 31, 2007, Environmental Protection Easements and a Declaration of Covenants and Restrictions were filed with the Nassau County Clerk's office covering the CPC Property. Two easements were filed because the CPC Property is composed of more than one parcel of property. The Easements and Declaration of Covenants and Restrictions limit the use of the CPC Property to light industrial or commercial purposes, grant the EPA a permanent easement and covenant to provide a right of access over the property for purposes of implementing, monitoring and facilitating the response action, prohibits the residential use of this property as long as hazardous substances remain on the property, restricts the extraction consumption, exposure, and use of the groundwater (except as approved by EPA); prohibits the installation of groundwater wells (except as approved by EPA), prohibits the disturbance of the concrete slab underneath the former Process Building and requires its integrity to be maintained; requires EPA's prior written approval before cadmium-contaminated soil underneath the Process Building can be removed; prohibits interference with or disturbance of the operation of the groundwater treatment system; prohibits the occupation of buildings on the CPC Property without vapor sampling and mitigation, if necessary; and provide EPA with a right of access to the CPC Property to inspect, sample, and monitor the groundwater treatment system, install additional equipment, wells and piping, and inspect the CPC Property for other enumerated reasons. These items complete the institutional controls requirement of the April 2003 ESD.

Operation, Maintenance and Monitoring

EPA retained a long-term response action (LTRA) subcontractor, SAIC, to operate the OU 4 groundwater treatment facility for the first 10 years of operation. In May 2011, after 10 years of LTRA operations, responsibility for the operation and maintenance of the OU 4 system was transferred from EPA to NYSDEC. NYSDEC engaged a contractor, HRP Engineering, in May 2011 to operate the treatment plant and perform monitoring and well maintenance. Quarterly monitoring of the site is conducted by NYSDEC's contractor. Monitoring points consist of the three extraction wells, four re-injection wells, 43 monitoring wells (21 wells on the CPC Property and 22 wells off the CPC Property), influent and effluent streams to and from the air stripper. The effluent from the air stripper is sampled monthly and the extraction wells, re-injection wells and monitoring wells are sampled on a quarterly basis. Sampling parameters include PCE, DCE, TCE, ethylbenzene, xylenes, vinyl chloride, arsenic, chromium, lead, manganese, chlorides, iron, TDS, TSS, pH and alkalinity. Total extraction, treatment and discharge are approximately 550,000 gallons per day.

The CPC off-Property groundwater remedy (OU 5) is being treated by the OBL groundwater treatment plant in accordance with an EPA ESD issued in September 2000. The NYSDEC is lead agency for the OBL site. The OBL treatment facility is operated by the TOB. Groundwater sampling is conducted by the TOB's environmental consultant, Lockwood, Kessler & Bartlett (LKB). A system of five recovery wells pumps approximately 1.5 million gallons per day to control off-site groundwater contamination from the OBL. Recovery wells RW-3, RW-4, and RW-5 recover groundwater downgradient of the CPC Superfund site for treatment at the OBL treatment facility. The treated water is discharged into a series of Town-owned recharge basins in accordance with State Pollution Discharge Elimination System (SPDES) requirements. The groundwater monitoring network for CPC OU 5 currently consists of eight monitoring wells, three extraction wells and one discharge basin operated by the TOB. Monthly and quarterly water-level measurements and groundwater quality sampling are conducted on the monitoring wells. The groundwater samples are analyzed for VOCs and metals. Also, monthly SPDES monitoring of groundwater treatment plant discharges is performed and air stripper influent/effluent sample pairs are collected and analyzed for VOCs.

Progress Since the Last Review

The first five-year review was completed in September 2008. The following were the protectiveness determinations made by the first five-year review:

The implemented remedy for OU 4 (CPC on-Property groundwater) protects human health and the environment by controlling exposure pathways that could result in unacceptable risks.

The implemented remedy for OU 5 (CPC off-Property groundwater) protects human health and the environment by controlling exposure pathways that could result in unacceptable risks.

The implemented remedy for OU 2 (treatment of soil under the former Process Building) protects human health and the environment because current exposure pathways that could result in unacceptable risks are under control. However, in order for the remedy to be protective in the long-term, investigations are needed to assess, and possibly address, any risks associated with newly identified septic systems located on the CPC Property near the Process Building.

The five-year review also identified two other actions that had not yet been completed. 1) EPA had not continued the remediation of the soil under the Process Building's concrete slab because the new owner of the CPC Property had not addressed the unsafe conditions in the former Process Building as required by the contract for the sale of the CPC Property, and 2) EPA had not investigated two previously unidentified septic systems located near the Building. A discussion of the resolution of these two recommendations is set forth below and summarized in Table 7.

EPA suspended operation of the SVE system in 2006 due to unsafe conditions in the Process Building. Because neither CPC, WRP, nor WRE maintained the Process Building since at least 1983, substantial leaks in its roof led to severe ponding, water damage, and caused portions of the roof to collapse. As discussed above, the CPC Property was sold in 2007, and as part of the contract for sale the EPA required the new owner to remedy the unsafe conditions. After receiving a demolition permit from the Town of Oyster Bay, on March 22, 2013, the new property owner commenced demolition of the former Process Building. The demolition was completed on April 29, 2013. The SVE system was removed in order to complete the building demolition. In May 2013, the EPA collected soil samples from beneath the Process Building's concrete slab to confirm if the soil cleanup goals established in the 2003 ESD had been achieved. Soil samples were collected at different depths ranging from surface soil to 49 feet below ground surface, from 25 borings. Analysis of the sampling results revealed that there were still VOCs above the soil cleanup goals established by the April 2003 ESD for the soil under the slab at four soil boring locations. Since the SVE system was removed to facilitate the Building's demolition, the EPA is evaluating options to address the residual VOC soil contamination below the slab at these locations.

The new owner is leasing part of the CPC Property to a trucking company to store highway construction and/or repair and landscaping equipment. These activities should not result in unacceptable exposure to Site-related contaminants, given that the Process Building's slab is still in place.

After purchasing the CPC Property, the new owner discovered two previously unidentified septic systems near the CPC Building and informed EPA. In April and May 2009, the EPA investigated and removed water and sludge material within the two septic tanks. The tanks were subsequently backfilled with clean fill and sealed with concrete.

Additionally, the sanitary leaching pools associated with the septic systems were backfilled and sealed with concrete. Proper closure of the septic systems was conducted by the EPA in accordance with the Nassau County and EPA requirements.

VI. Five-Year Review Process

Administrative Components

The five-year review team consisted of Cecilia Echols, Community Involvement Coordinator (CIC), Charles Nace, Risk Assessor, Robert Alvey, Hydrogeologist, and Maria Jon, Remedial Project Manager (RPM).

Community Involvement

The EPA CIC for the CPC site, Cecilia Echols, developed a website for the site. Once the five-year review is completed, the CIC will link the second five-year review report to the website and place the report in the local information repository.

Document Review

See attached Table 6.

Data Review

Discharges from both treatment plants are currently operating under an equivalency permits from the NYSDEC. All analyzed parameters have been below permit limits.

OU 4, CPC On-Property Groundwater Remedy

Review of quarterly groundwater monitoring data and the distribution of contaminants found in the groundwater indicate that PCE and TCE were detected at the greatest frequency and with the highest concentrations. Other VOCs were detected at varying frequencies and at low concentrations, in many cases below drinking water standards. These VOCs include DCE from non-detect to 8.1 micrograms per liter (ug/l) (groundwater standard of 5 ug/l) and 1,1,1-trichloroethane from less than 1 to 8.9 ug/l (groundwater standard of 5 ug/l). In addition, 1,4-dioxane, a chemical compound usually associated with TCA, is being sampled as part of the groundwater sampling program at the site and it has not been detected. Groundwater sampling conducted at the site for metals were below the drinking water and groundwater standards. Attached Figure 2 depicts the location of monitoring wells and extraction wells.

Analytical trends of VOCs from each of the three OU 4 recovery wells (EXT-1, EXT-2 and EXT-3) and shallow monitoring wells (SW-1, EW-1A and EW-4C) are depicted in attached Charts 1a, 1b, 1c, 6a, 6b, and 6c. These monitoring wells are located downgradient of the CPC Property and upgradient from the recovery wells. There has been a distinct decline in the amount of Claremont related VOCs in these six wells.

Samples taken during the October 2012 sampling event from EXT-3 reveal a slightly elevated trend of TCE concentrations and are an order of magnitude higher (approximately 100 ug/l during the October 2012 sampling event) than would be anticipated if TCE was being formed as a breakdown product from PCE. The source of the TCE contamination is being investigated.

Previously, the highest historical detection of PCE in the groundwater was in the downgradient shallow monitoring well SW-1 at 7,100 ug/l in August 2001, which exceeded the groundwater quality standard of 5 ug/l. During the past five years, the range of maximum PCE concentrations measured at SW-1 monitoring well was 23 to 110 ug/l.

VOCs were not detected above applicable water quality standards in EXT-1 during this reporting period. TCE (6.0 ug/l) and PCE (17.0 ug/l) were detected in EXT-2. TCE was detected at concentrations ranging from 5.3 to 100 ug/l; PCE ranging from 5.9 to 8.7 ug/l in EXT-3.

The current groundwater extraction system is capturing the plume generated from on-site sources, and the CPC on-site plume does not extend beyond the OU 4 recovery system. In all instances, VOC levels have substantially declined over the past 13 years.

High concentrations of TCE were detected upgradient and on the northeast side of the CPC property boundary in monitoring well EW-7C. TCE at a concentration range of 440 to710 ug/l was detected in well EW-7C (at a depth of 207 feet bgs) during this reporting period. These high concentrations of TCE in monitoring well EW-7C, which is both deeper and upgradient of the CPC monitoring wells, indicate that TCE is migrating onto the CPC site from off-site sources at deeper levels in the aquifer. There is strong evidence of at least one source of upgradient off-site contamination is contributing to TCE levels at the CPC site. A NYSDEC Superfund site known as the former Aluminum Louvre site is located approximately 750 feet north (upgradient) of the CPC site. Groundwater data from the former Aluminum Louvre site were noted at levels up to 3,000 ug/l of TCE and 130 ug/l of PCE. The TCE plume from the former Aluminum Louvre site extends to the southeast in the direction of groundwater flow and is migrating onto the CPC site. The TCE plume impacts the northeast corner of the CPC property and the monitoring wells EW-7 and EW-4. NYSDEC completed an RI confirming groundwater beneath the former Aluminum Louvre site is contaminated with PCE, TCE, and DCE. NYSDEC issued a ROD for the on-site contamination at Aluminum Louvre in March 2013, and a remedial investigation for the off-site groundwater contamination from that facility is underway.

The following Table 1 presents both historical and the most recent data for PCE and TCE in monitoring wells SW-1, EW-1A and EW-4C located on the CPC Property and recovery wells EXT-1, EXT-2 and EXT-3 located south, outside of the CPC Property boundaries.

Table 1 –Claremont Polychemical - Historical and Most Recent Concentrations of PCE and TCE in the Groundwater at Selected Monitoring Wells

Well	Well Description	Contaminant	Initial Concentration (ug/l)/Date	Recent Concentration (ug/l)/Date
EW-7C	Upgradient monitoring well screened at 207 feet below ground surface (bgs) located on the north side of the CPC property boundary	PCE	63/Nov. 2004	25/March 2013
		TCE	1,800/Nov. 2004	480/March 2013
SW-1	Monitoring well on the property and upgradient from the recovery wells	PCE	1,100 / July 1992	110 / March 2013
		TCE	150/July 1992	15/March 2013
EW-1A	Monitoring well	PCE	690 / July 1992	5.5 / March 2013
		TCE	2.2/May 2000	3.3 / March 2013
EW-4C	Cross-gradient monitor well	PCE	120 / Feb. 2001	8.3/ March 2013
		TCE	4,200 / Feb. 2001	67/ March 2013
EXT-1	Extraction Well	PCE	1,900 / Feb. 2000	<1 / March 2013
		TCE	1,600/April 2000	<1 / March 2013
EXT-2	Extraction Well	PCE	330/ Nov. 2001	17/ March 2013
		TCE	290/ Nov. 2001	6.0/ March 2013
EXT-3	Extraction Well	PCE	32 / Aug. 2001	8.7/ March 2013
		TCE	820/Aug. 2001; highest concentration 1,500/Jan. 2003	20/ March 2013

TCE and PCE detections from the October 2012 sampling event are provided in Table 2 below for monitoring wells on the CPC Property and downgradient from the OU 4 extraction wells that are being monitored as part of OU 4. Review of the data indicates that VOCs are currently at non-detectable levels or below the groundwater standard of 5 ug/l in 13 of the 15 monitoring wells. Monitoring wells with concentrations exceeding groundwater standards continue to decrease and are only slightly above the MCL. Only SW-1 continues to show elevated levels of VOCs. This well is screened at 65 feet bgs. Based on the higher concentrations in this well and its shallow screen depth the elevated contaminant levels may be a result of contribution from remaining source material located under the Process Building's slab. Monitoring wells EW-3A, EW-3B, EW-3C, MW-6D, MW-8C, MW-10B, and MW-10C are located downgradient from EXT-1, EXT-2 and EXT-3 and VOC concentrations in these wells are non-detect or below drinking water standards. These monitoring wells are also located upgradient from the OU 5 groundwater recovery wells. A discussion of the OU 5 groundwater remedy is presented below.

Table 2 – Claremont Polychemical - Groundwater Data from Monitoring Wells on the CPC Property and Downgradient from the OU 4 Extraction Wells - October 2012 Sampling Event

Well Number	[Total VOC]	[Total VHO]*	[Total Aromatics]	[PCE] / [TCE]
Limits:	50	N/A	N/A	5 / 5
EW-1A	39.5	18.9	12.2	**5.1** / 3.3
EW-1B	0.5	ND	ND	ND / 0.5
EW-1C	0.5	ND	ND	ND / 0.5
EW-2A	1.5	1.5	ND	ND / ND
EW-2B	0.4	0.4	ND	ND / ND
EW-2C	0.4	ND	ND	ND / 0.4
EW-2D	3.8	0.6	0.4	0.5 / 2.3
EW-3A	ND	ND	ND	ND / ND
EW-3B	ND	ND	ND	ND / ND
EW-3C	ND	ND	ND	ND / ND
MW-6D	ND	ND	ND	ND / ND
MW-8C	ND	ND	ND	ND / ND
MW-10B	ND	ND	ND	ND / ND
MW-10C	2.4	ND	ND	0.9 / 1.5
MW-10D	18.4	2.5	ND	**6.5 / 9.4**

Notes: VHO - *Volatile Halogenated Organics Excluding PCE and TCE
ND – Not Detected
Results are in ug/l

OU 5, CPC Off-Property Groundwater Remedy

As discussed above, a groundwater treatment system owned and operated by the TOB is capturing and treating this part of the CPC groundwater plume. A system of five recovery wells is pumping approximately 1.5 million gallons per day to control both the OBL and CPC plumes. OU 5 monitoring wells and extraction wells are depicted on attached Figure 2.

Recovery wells RW-3, RW-4, and RW-5 capture contaminated groundwater specifically from the CPC off-Property plume. The analytical results of samples from recovery wells RW-3, RW-4, and RW-5 do not show a significant impact from the OBL landfill derived wastes, which are benzene, chlorobenzene, methylene chloride, chloroform, toluene, and xylenes. The primary VOC constituent recovered from these recovery wells is TCE. Sampling results of the TCE and PCE detections for the 4th Quarter 2012 are provided below. A high percentage of the total VOC mass is TCE, not PCE, and the source of the TCE is being investigated.

During this reporting period, TCE concentrations in recovery well RW-3 ranged from 2.2 to 42.7 ug/l, and averaged 17.6 ug/l. In well RW-4, concentration levels ranged from 116 to 387 ug/l, and averaged 232 ug/l. In recovery well RW-5, concentration levels ranged from 15.4 to103 ug/l, and averaged 55.0 ug/l.

PCE concentrations in recovery well RW-3 ranged from 0.5 to 16.1 ug/l, and averaged 6.7 ug/l. In recovery well RW-4, concentration levels ranged from 5.7 to 76.9 ug/l, and averaged 33.3 ug/l. In recovery well RW-5, concentration levels ranged from 1.6 to 18.4 ug/l, and averaged 11.1 ug/l.

TCE and PCE detections for the October 2012 sampling event for wells located downgradient of the CPC Property are provided in Table 3 below. All the monitoring wells listed on this table are located downgradient from the CPC Property. Review of the data on this table indicates that VOCs are currently at non-detectable levels and below drinking water standards in 12 of the 16 monitoring wells sampled this quarter. The only well with high levels of TCE and PCE is MW-7B-R which is located downgradient of the CPC Property near extraction wells RW-3 and RW-4. Monitoring well MW-7B-R is screened in the deep aquifer and the TCE concentration in this well appears to be from an upgradient source. The October 2012 sampling results in monitoring well MW-7B-R (located downgradient of the CPC Property, near RW-3 and RW-4) reported TCE at 682 ug/l and PCE at 27 ug/l. Monitoring well MW-7B-R is screened in the "deep" potentiometric zone of the aquifer and is part of the OU 5 monitoring well network.

These findings indicate that groundwater quality impacted by the VOCs associated with the CPC site is continuing to improve as a result of the groundwater remediation.

Table 3 – Claremont Polychemical - Groundwater Data from OU 5 Monitoring Wells - October 2012 Sampling Event

Well Number	[Total VOC]	[Total VHO]*	[Total Aromatics]	[PCE] / [TCE]
Limits:	50	N/A	N/A	5 / 5
M-30B-R	ND	ND	ND	ND / ND
LF-1	ND	ND	ND	ND / ND
MW-5B	ND	ND	ND	ND / ND
MW-6A	6.5	ND	ND	ND / **6.5**
MW-6B	ND	ND	ND	ND / ND
MW-6C	ND	ND	ND	ND / ND
MW-6E	ND	ND	ND	ND / ND
MW-6F	1.9	0.3	1.6	ND / ND
MW-7B-R	**800**	90.8	ND	**27.1 / 682**
MW-8A	0.9	ND	ND	0.9 / ND
MW-8B	ND	ND	ND	ND / ND
MW-9B	ND	ND	ND	ND / ND
MW-9C	ND	ND	ND	ND /ND
MW-11A	16.1	12.1	ND	0.6 / 3.4
MW-11B	ND	ND	ND	ND / ND
OBS-1	8.0	1.0	7.0	ND / ND

OU 4 and OU 5 Groundwater Summary

Review of the data indicates that extraction wells are effectively capturing and treating groundwater contamination associated with CPC operations both on and off- the CPC Property. Most monitoring wells have detected PCE and TCE below groundwater standards. A shallow well remains contaminated on-site, downgradient of the Process Building area and may be impacted by source material being addressed under OU 2.

As discussed above, the two most contaminated wells in the monitoring network, EW-7C and MW-7B-R, are screened at depth, and it appears that this "deep" TCE plume emanates from a source upgradient of the CPC site and flows downgradient under the CPC site. It may also flow under and downgradient of the CPC off-Property groundwater recovery wells (OU 5) operated by the TOB at the Old Bethpage Landfill, as well as under and downgradient of the groundwater recovery wells operated by the Nassau County for the Firemen's Training Center site. The Aluminum Louvre site is one source of off-site contamination upgradient of the CPC site and is being addressed by NYSDEC.

OU 2 - CPC Soil under the Former Process Building

In accordance with the 2003 ESD, an SVE system was used to address VOC sources below the Process Building. While operating, the system removed more than 1,200 pounds of VOCs from soils beneath the building. In May 2013, after the new property owner demolished the building, the EPA collected soil samples from beneath the building's concrete floor slab to assess whether the soil cleanup goals established in the decision document had been achieved. Sampling results indicated that there were still some residual VOCs above the soil cleanup goals established for the soil under the slab at four soil boring locations. At seven feet bgs in soil boring ERT-6 PCE was detected at

270,000 ug/kg (soil cleanup goal of 1,500 ug/kg) and TCE was detected at 19,000 ug/kg (soil cleanup goal of 700 ug/kg). Soil borings SVE-2 and SS-0011 detected only PCE at 2,200 ug/kg and 2,400 ug/kg, respectively at 2 feet bgs. EPA is evaluating options to address this residual VOC soil contamination below the building slab.

Site Inspection

The site was inspected by Maria Jon (RPM), Cecilia Echols (CIC), Robert Alvey (Hydrogeologist), and Charles Nace (Human Health Risk Assessor) on July 18, 2013. Also in attendance were Benjamin Rung with the NYSDEC, and Peter Takach and James Jackson of HRP Associates, Inc. During the site inspection, no problems or issues with ongoing remedial activities were noted. There were no visible signs of trespassing or vandalism at the site. All of the well casings were found to be properly secured and locked. The treatment system building was found to be properly secured and locked. The fence surrounding the recharge basins was intact and its gate was secured.

Institutional Controls Verification and Effectiveness

The September 26, 2007, Environmental Protection Easements and a Declaration of Covenants and Restrictions remain in force and are on file at the EPA's offices and at the Nassau County Clerk's office.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The remedy was designed to achieve substantial risk reduction through a combination of source control with active restoration of the groundwater and building decontamination. The contaminated soils were excavated, treated on site and backfilled, the contaminated materials were removed from the site, groundwater is currently being extracted and treated, and PCE and TCE concentrations in the groundwater have substantially declined. The SVE system removed more than 1,200 pounds of VOCs from soils beneath the former Process Building and the building was recently demolished. The building slab remains in place. Subsequent soil sampling of the soil beneath the slab detected some residual VOC above the soil cleanup goals established for the soil under the slab at four soil boring locations. Currently, the building concrete floor covering the contaminated soil is intact and undisturbed, which prevents any direct human exposure to contaminated soil located underneath the concrete slab, and options to address this residual contamination are being evaluated. The institutional controls recorded on the property deed, requires that the concrete floor remain in-place as a barrier to the underlying cadmium contaminated soil. The deed restriction also limits the CPC Property to commercial or light industrial use and prevents construction of structures on the Claremont Property unless appropriate vapor mitigation systems are installed. In essence, the remedy at the site is functioning as intended.

Question B: Are the (a) exposure assumptions, (b) toxicity data (c) cleanup levels and (d) remedial action objectives used at the time of the remedy still valid?

Human Health – The previous five-year review indicated that the exposure pathways, exposure assumptions and toxicity data identified in the 1990 ROD were still valid. The exposure pathways and exposure assumptions are still valid for this five-year review. As noted in the previous review, some of the toxicity values have been updated since the endangerment assessment was completed; however, since the toxicity values were not used to generate cleanup values, there is no impact on the current status of the protectiveness of the remedy. There are two media, soil and groundwater, for which cleanup values have been established. The soil cleanup values were based upon action-specific ARARs and health-based levels for both the LTEV (1990 ROD) and for the soil under the building slab (2003 ESD). The soil cleanup values that were used are still valid and fall within EPA's acceptable risk range of 10^{-6} to 10^{-4} and are below a hazard index of 1. The groundwater cleanup values were identified in the 1990 ROD as "all related ARARs including NY Groundwater Quality Standards and Federal Maximum Contaminant Levels (MCLs)." The process of applying the current Federal and State Drinking Water Standards and groundwater standards as cleanup values for the groundwater remain valid. The remedial action objectives (RAOs) were identified as achieving substantial risk reduction through a combination of source control with active restoration of the groundwater and building decontamination. These RAOs are still valid.

The 2008 five-year review concluded that the vapor intrusion pathway for PCE, TCE, and chloroform should be investigated further to determine if the pathway is complete. The five-year review recommended that this investigation focus on areas downgradient of the CPC Property. As part of this evaluation, additional information regarding the depth to contamination in each well and the location of the wells was collected for downgradient monitoring wells. The evaluation indicated that the contamination in the groundwater is greater than 100 feet in depth in the areas that contain buildings. Based on this information, vapor intrusion is not expected to be a completed pathway and no further evaluation of vapor intrusion is needed at these locations.

Ecological – The former five-year review indicated that there were no completed exposure pathways for ecological receptors. Based upon review of the past and current data, combined with the site visit, the previous conclusion that there are no completed exposure pathways for ecological receptors is still valid because the primary exposure pathway for ecological receptors would be through exposure to groundwater. The contaminated groundwater associated with the site does not discharge to any local surface water bodies, therefore, the exposure pathway is not complete.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

The former building that was located on the CPC Property was demolished in 2013. The building slab remains in place. Subsequent sampling of the soil below the slab indicated that there were still VOCs above the soil cleanup goals located at four soil boring

locations under the slab. The VOCs under the slab could be contributing to the shallow groundwater contamination that is being observed and options for addressing the VOCs under the slab are being evaluated now that the building has been removed.

It was also noted during the site visit that the parcel of land that housed the former building is currently being used for highway and landscaping equipment storage. These activities should not result in any exposure to site-related contaminants given that the building slab is still in place.

Concentrations of VOCs in soil and groundwater on the CPC Property continue to be present at levels that could potentially cause vapor intrusion to occur should buildings be constructed on the CPC Property. The environmental easement the EPA imposed on the Claremont Property prevents construction of structures on the Claremont Property unless appropriate vapor mitigation systems are installed. The existing environmental easement includes a requirement which prohibits the disturbance of the concrete slab underneath the former Process Building. If any property development or slab disturbance is anticipated, the property owner is required to notify and obtain EPA approval.

Technical Assessment Summary

Based upon the results of this five-year review process, it has been concluded that the remedy is functioning as intended by the site's remedial decision documents. The specific points are as follows:

- The groundwater treatment system continues to meet discharge standards.
- Extraction wells demonstrate a high specific capacity and show no signs of deteriorating. The system appears to be well maintained.
- GAC is routinely monitored and changed out when necessary.
- The fence on the periphery is intact and in good repair.
- Locks on monitoring wells and covers to extraction wells are in good repair and functional.
- SVE system was removed when the on-site building was demolished. EPA and NYSDEC are evaluating alternatives to address remaining contamination in the shallow soils (access to the soils is controlled by the existing slab).

VIII. Issues, Recommendations and Follow-up Actions

This report does not identify any issue or recommend any action at this site needed to protect public health and/or the environment that is not addressed by the remedy selected in the Site decision documents.

IX. Protectiveness Statement

The implemented remedy for OU 2 is protective of human health and the environment.

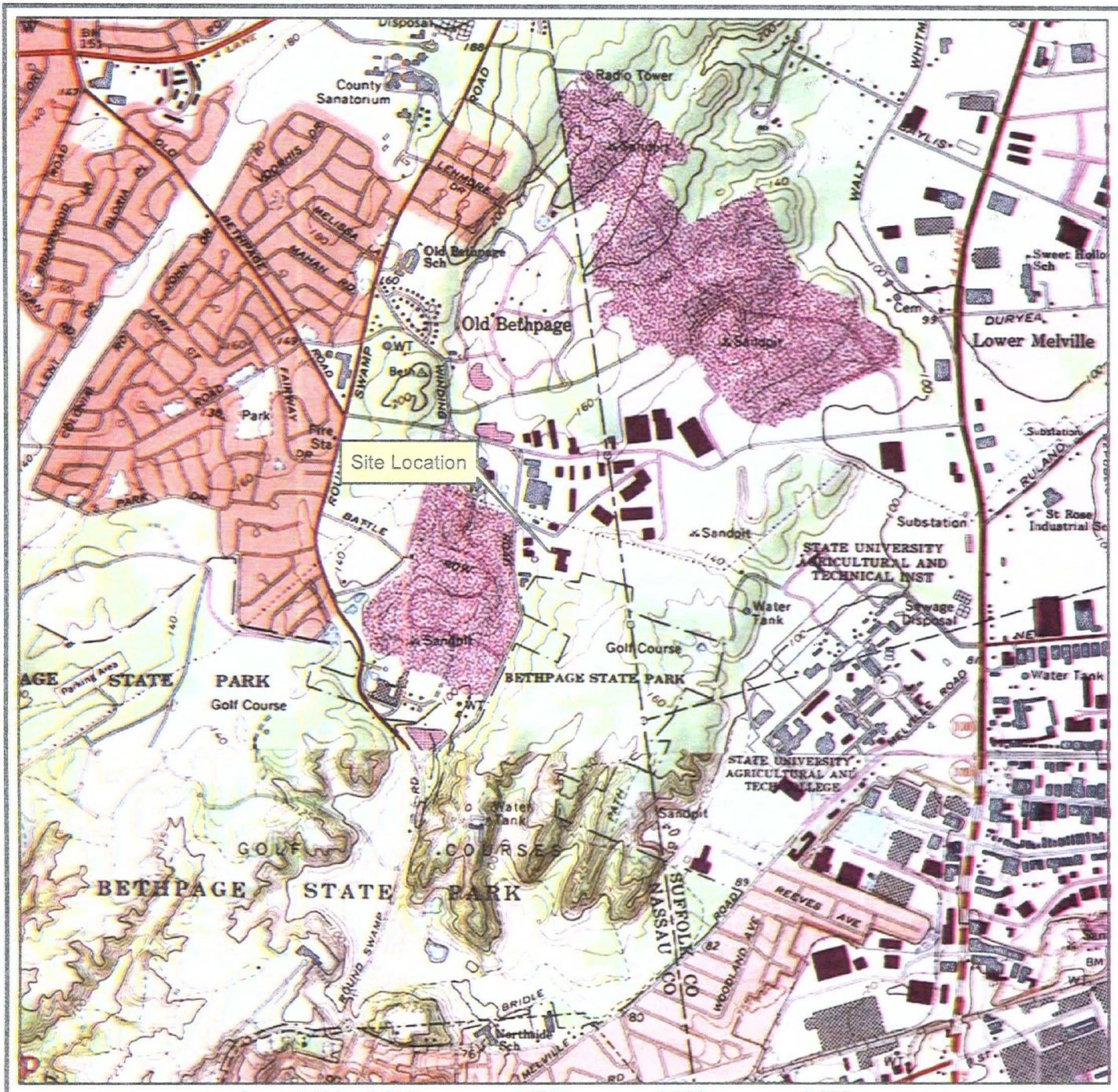
The implemented remedy for OU 4 (CPC on-Property groundwater) is protective of human health and the environment.

The implemented remedy for OU 5 (CPC off-Property groundwater) is protective of human health and the environment.

The remedies at the CPC site are protective of human health and the environment.

X. Next Review

The next five-year review for the CPC Superfund site will be completed within five years of the date of this review.



USGS Quadrangle Information
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Name: Huntington, New York
Date Rev: 1977
Date Pub: 1979

0 1,000 2,000 4,000 6,000 8,000 Feet

1 inch = 2,000 feet

N

Figure 1
Site Location
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 2,000'

HRP Associates, Inc.
Environmental/Civil Engineering & Hydrogeology
Creating the Right Solutions Together
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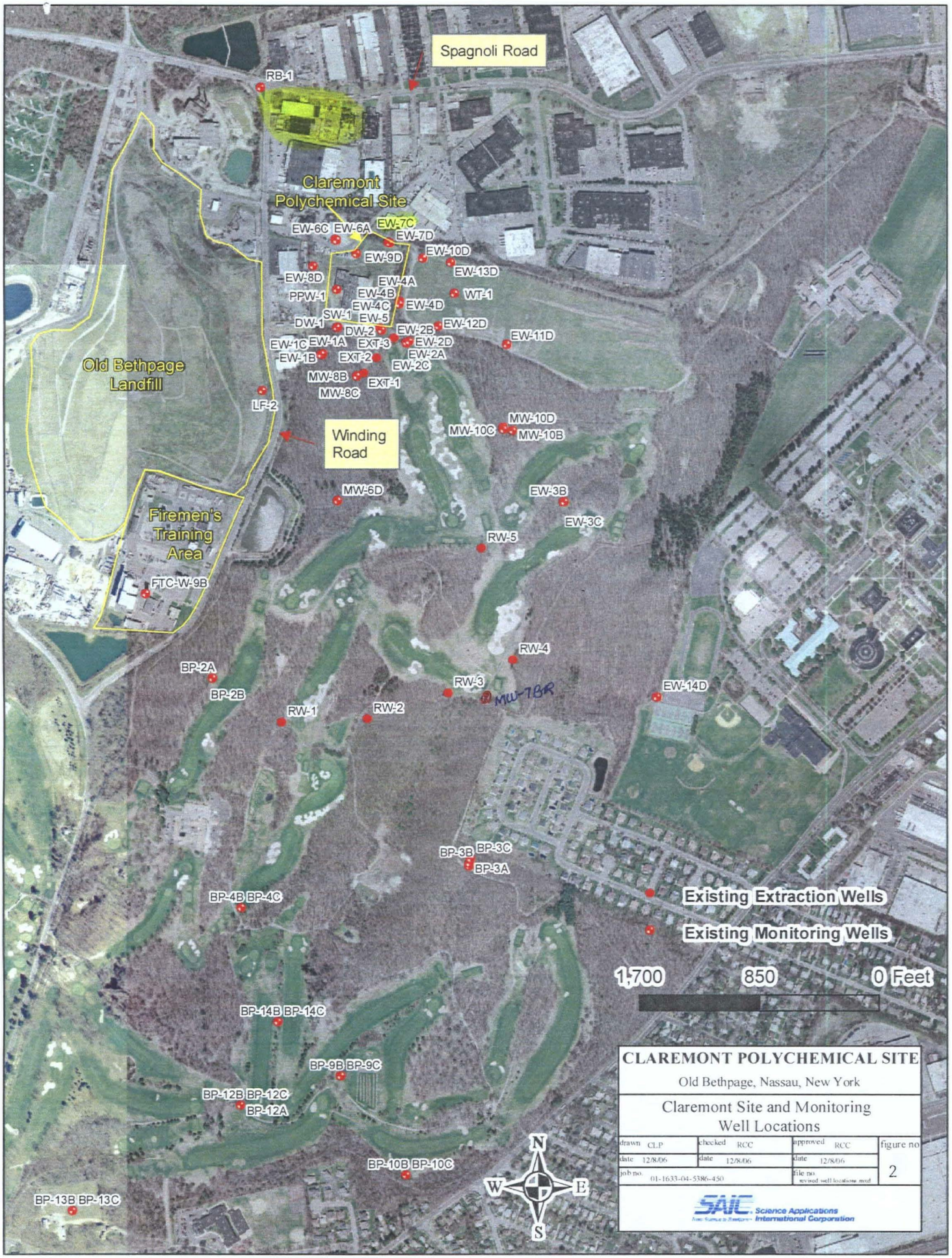

CLAREMONT POLYCHEMICAL SITE

Old Bethpage, Nassau, New York

Claremont Site and Monitoring Well Locations

drawn CLP	checked RCC	approved RCC	figure no 2
date 12/8/06	date 12/8/06	date 12/8/06	
job no. 01-1633-04-5386-450		file no. revised well locations mxd	

SAIC Science Applications International Corporation

Table 4: Chronology of Site Events **Event**	**Year**
Initial discovery of problem or contamination	1979
NPL listing	1986
EPA Removal Action	1988
ROD signature for OU 2	1989
Remedial Investigation/Feasibility Study complete	1990
ROD signature for OUs 1, and 3-6	1990
Remedial Design completed for OUs 3-6	1995
Remedial Action construction initiated for OUs 3-6	1996
ESD for changes to groundwater component of the remedy described in the 1990 ROD	2000
ESD for changes to the 1989 ROD	2003
Remedial Action construction completed	2003
Transfer of OU 5 responsibility to NYSDEC	2006
Transfer of OU 4 responsibility to NYSDEC	2011

Table 5: Annual System Operations/O&M Costs

	OU 4	OU 5
2008	$649,437	$1,126,085
2009	$704,701	$824,352
2010	$719,815	$529,267
2011	$562,890	$1,035,902
2012	Not Available	Not Available
2013	Not Available	Not Available

Table 6: Documents, Data, and Information Reviewed in Completing the Five-Year Review

Document Title, Author	Submittal Date
Remedial Investigation/Feasibility Study, Army Corps of Engineers, Kansas City District, Kansas City, Missouri.	1987
Record of Decision, EPA	1990
Final Remedial Design Report, EPA	1999
ESDs, EPA	2001 and 2003
Preliminary Close-Out Report, EPA	2003
CPC Superfund Site, Long-term Groundwater Monitoring, Old Bethpage, New York, U.S. Army Corps of Engineers, Kansas City District, Kansas City, Missouri.	2008- 2010
Organic Analysis Report, Old Bethpage Solid Waste Disposal Complex Groundwater Treatment Facility, Lockwood Kessler & Bartlett, Inc.	2008-2012

Table 7 – Status of 2008 Five-Year Review Issues/Recommendations and Subsequent Actions Taken to Address the Issues/Recommendations

Issues/Recommendations	Actions Taken
Building safety and security. Property owner is seeking permit to demolish the former Process Building.	The building demolition was completed on April 29, 2013.
Newly discovered septic systems. EPA will continue to investigate with the property owner the septic systems.	In April and May 2009, the septic systems were sampled, cleaned, and closed by the EPA in accordance with Nassau County and EPA requirements. This remedy achieved health based standards which allow for unrestricted use.

Chart 1a: EXT-1 Concentration (PCE, TCE, 1,1-DCE) vs Time

March 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

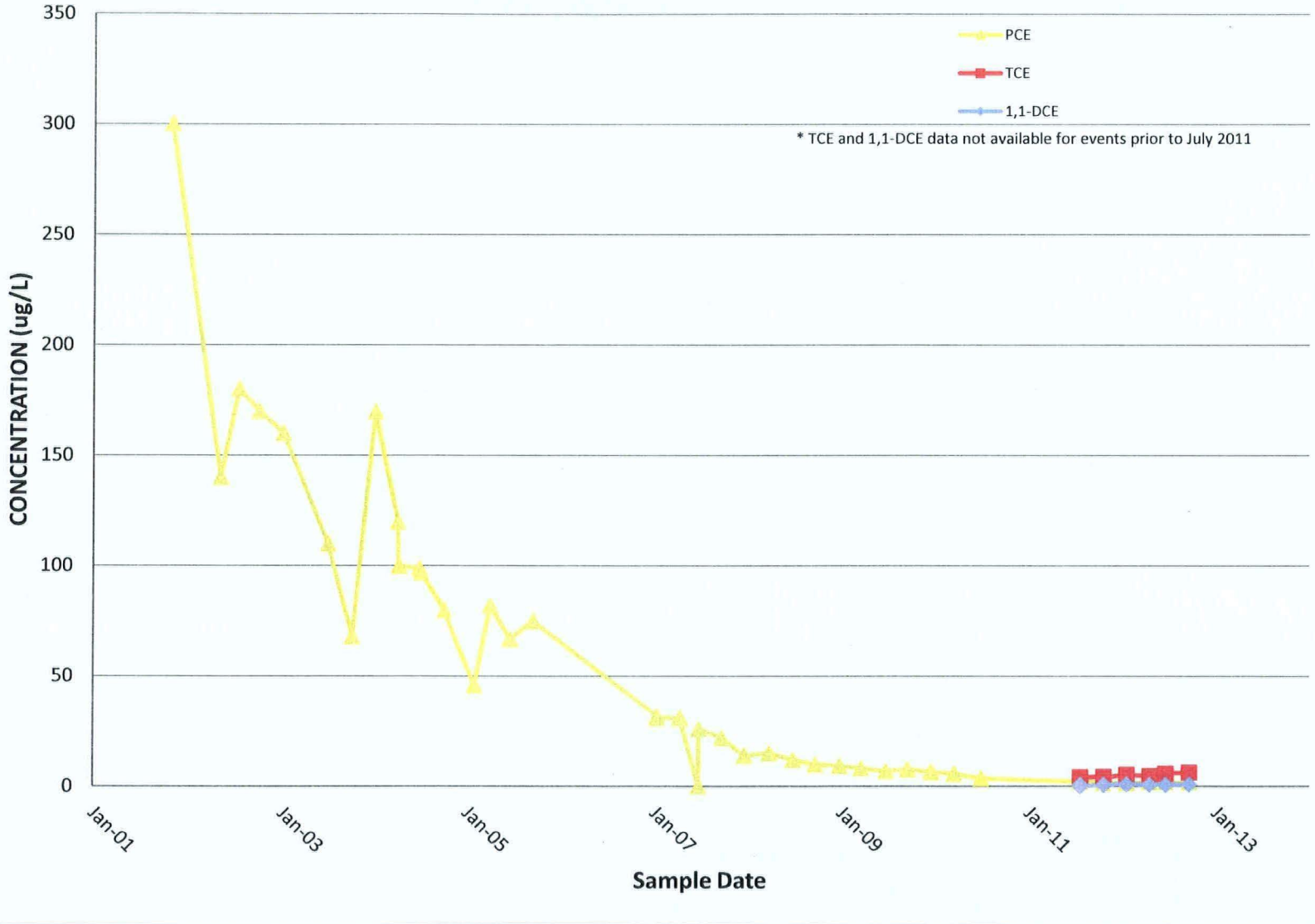

Chart 1b: EXT-2 Concentration (PCE, TCE, 1,1-DCE) vs Time

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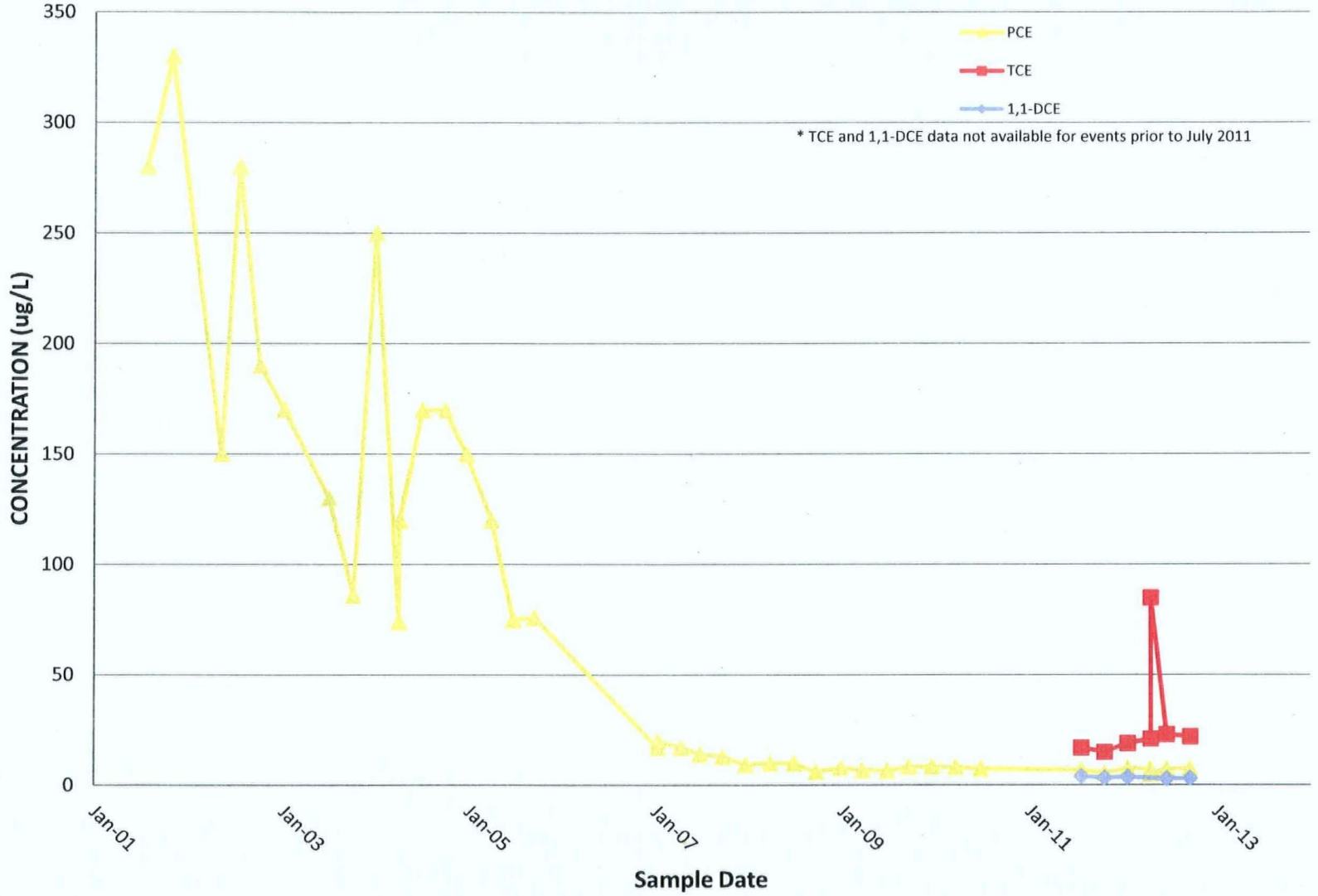

Chart 1c: EXT-3 Concentration (PCE, TCE, 1,1-DCE) vs Time

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HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

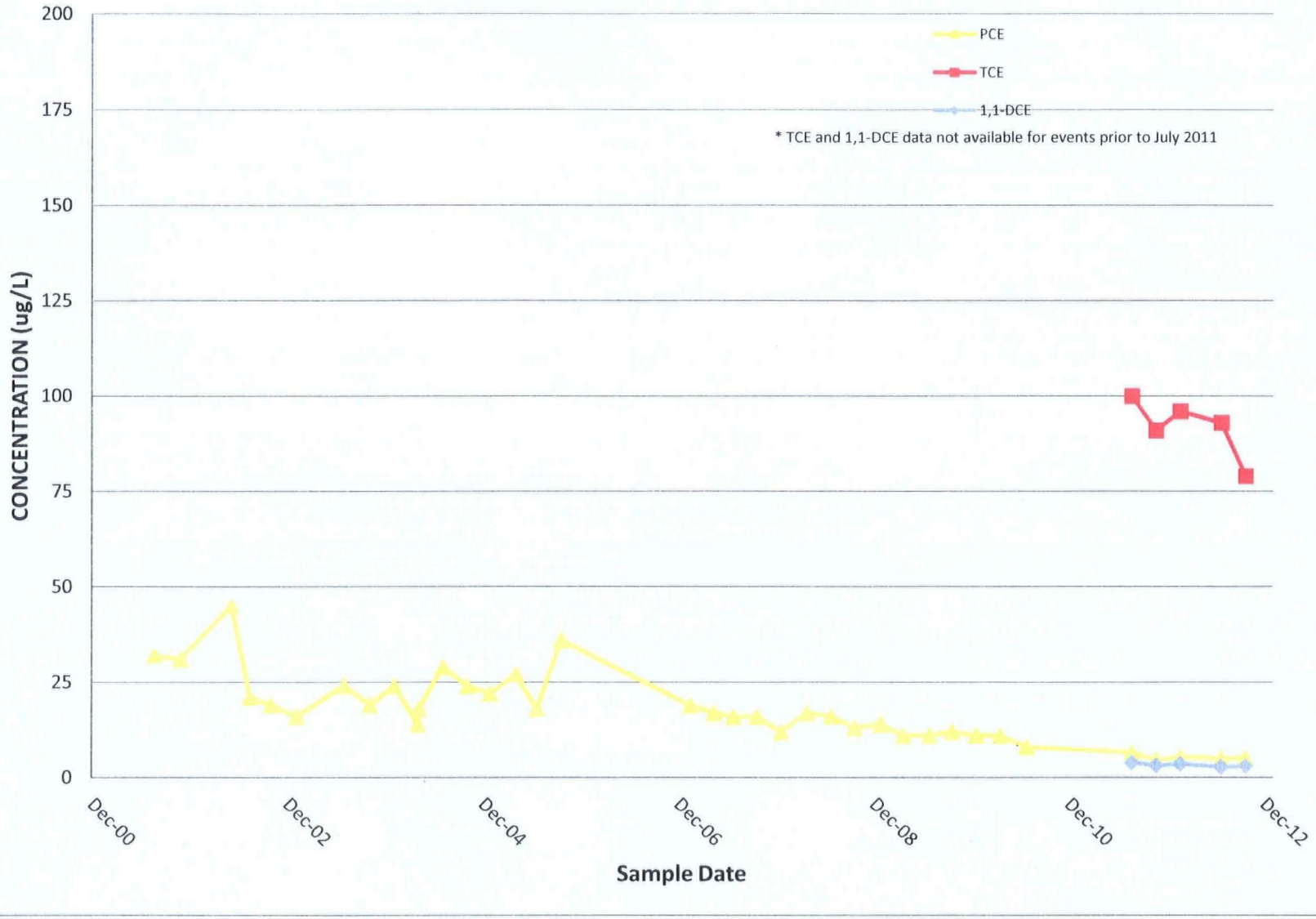

Chart 6a - PCE and TCE Concentrations In EW-1a

March 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

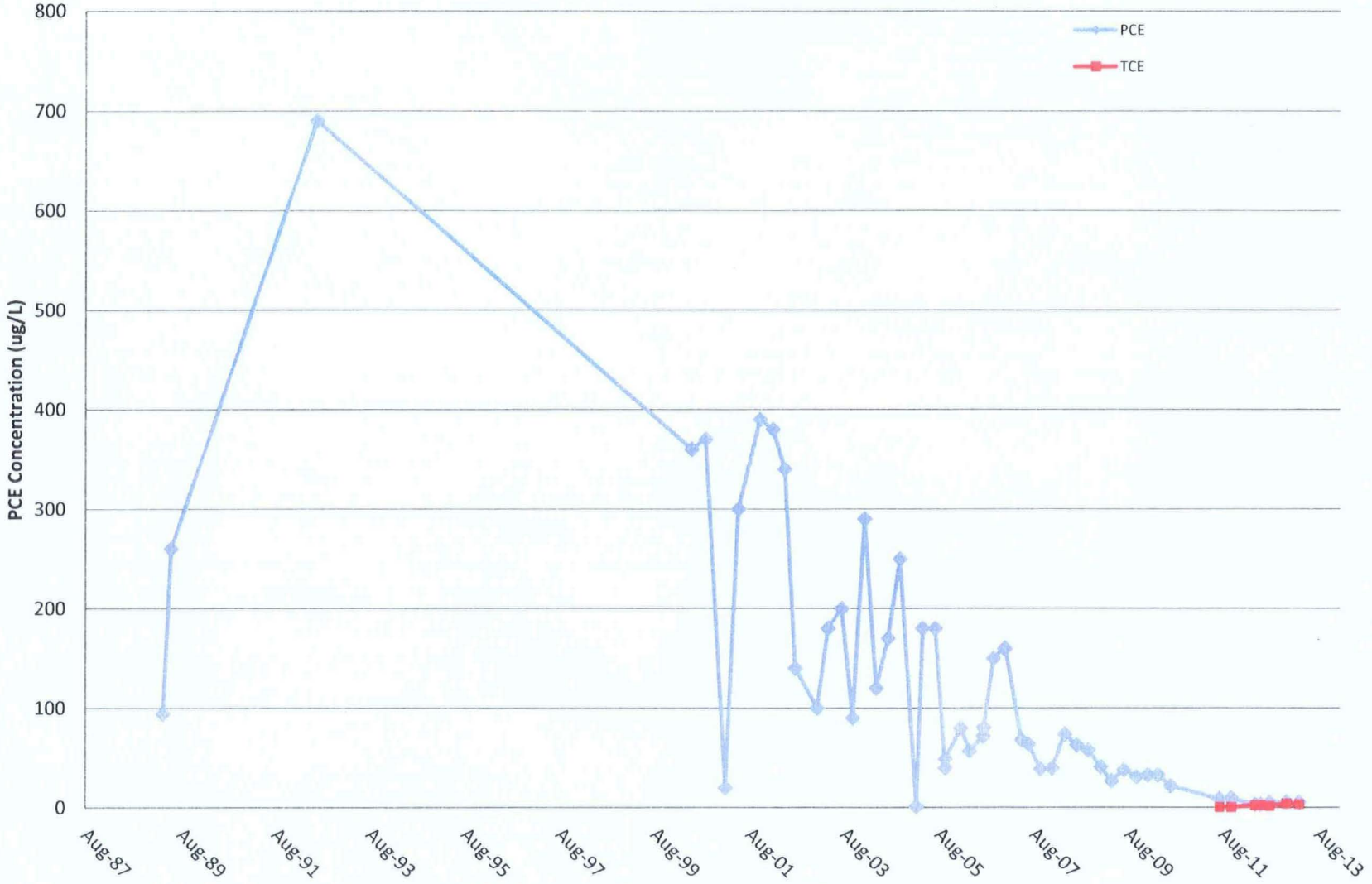

Chart 6b - PCE and TCE Concentrations in EW-4c

March 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

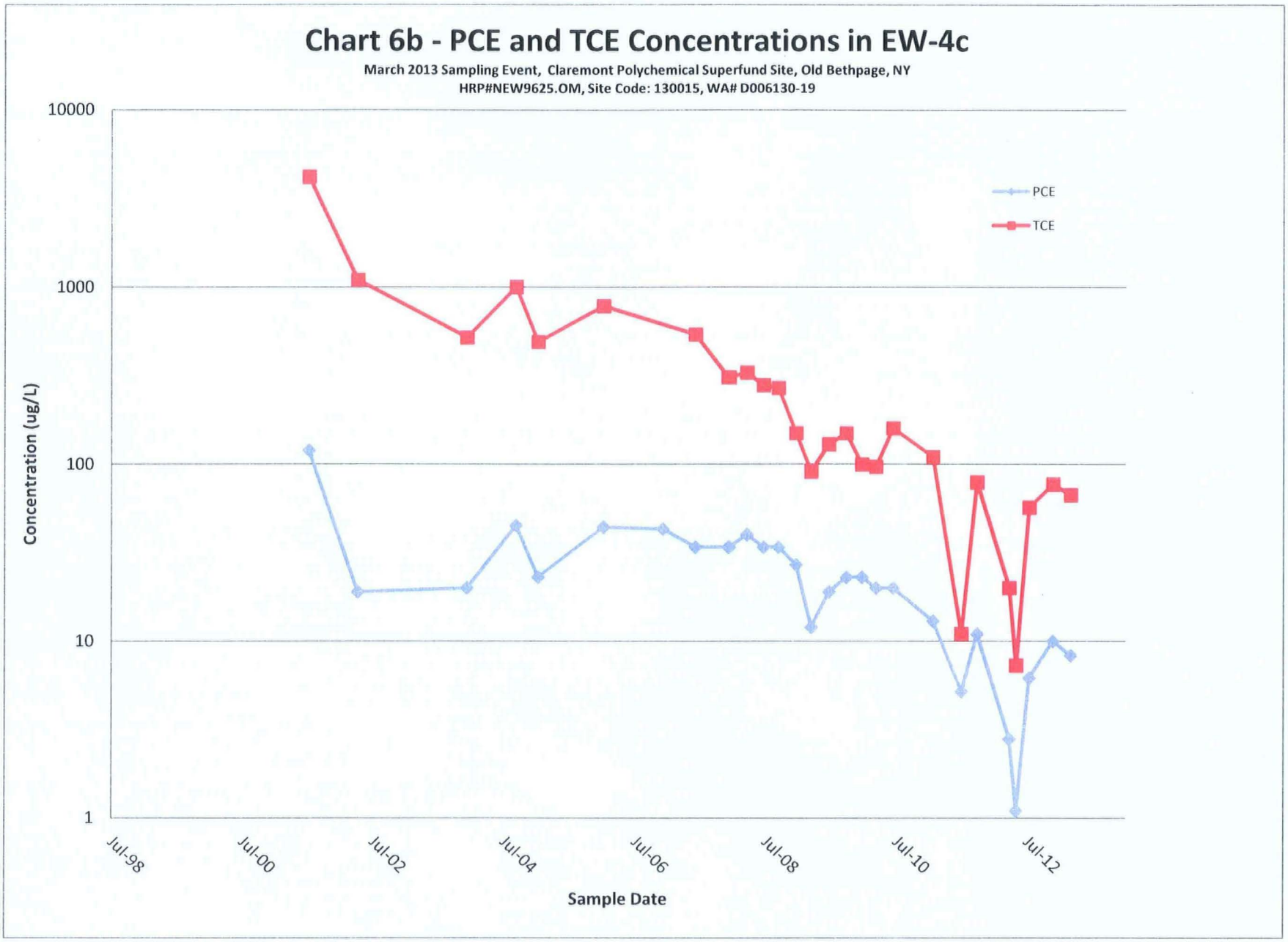

Chart 6c - PCE and TCE Concentrations in SW-1

March 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19