TANK REPORT, UST H, BUILDING 100

100 CANTIAGUE ROCK ROAD, HICKSVILLE, NEW YORK

FORMER SYLVANIA ELECTRIC PRODUCTS INCORPORATED FACILITY

HICKSVILLE, NEW YORK

SITE NUMBER V 00089-1

Prepared by
URS Corporation
and
Envirocon, Inc.

For:

GTE Operations Support Incorporated
One Verizon Way (VC34W453)
Basking Ridge, NJ 07920

May 2006

URS

May 31, 2006

Ms. Jean Agostinelli
Vice President – Controller
GTE Operations Support Incorporated
600 Hidden Ridge Drive (HQE03E60)
Irving, Texas 75038

Re: **Voluntary Cleanup Agreement**
For: GTE Former Sylvania Electric Products Incorporated Facility
By: GTE Operations Support Incorporated
Site #: V-00089-1 Index #: W1-0903-01-12

Tank Report, UST H, 100 Building, 100 Cantiague Rock Road, Hicksville, New York

Dear Ms. Agostinelli:

This letter documents findings and activities associated with the underground storage tank (UST) encountered during implementation of the *Systematic Subsurface Soil Sampling and Analysis Plan Beneath the 100 Building* (SSSA Plan), dated November 2004, at the Former Sylvania Electric Products Incorporated (Sylvania) facility located at 140, 100 and 70 Cantiague Rock Road, Hicksville, New York (the "Site"). The SSSA Plan was approved by the New York State Department of Environmental Conservation (NYSDEC) in their letter dated January 31, 2005. A copy of this letter is included in Appendix B of the *Systematic Subsurface Soil Sampling and Analysis Report, Investigation Beneath the 100 Building (Survey Units 03, 04, and 05), Former Sylvania Electric Products Incorporated Facility, Hicksville, New York*, submitted to NYSDEC in November 2005.

Underground Storage Tank

On April 29, 2005, during the advancement of soil boring DECH (**Figure 1**) in Survey Unit 03 (SU03), refusal was encountered at 5.5 feet (ft) below the concrete slab. Immediately, soil boring advancement was terminated to further evaluate the nature of the refusal encountered. On May 2, 2005, and in accordance with the Site Health and Safety Plan, the borehole was screened using a photoionization detector (PID) for volatile organic compounds (VOCs) and a 3-inch sodium iodide (NaI) detector for radioactivity. The PID reading from the borehole was measured at 17 parts per million (ppm), and the gamma readings were not elevated. A camera was then lowered inside the borehole and the photographs revealed that a UST had been encountered. The photographs show the visible portion of the interior of the UST (**Appendix A, Photographic Log**).

URS Corporation – New York
5 Penn Plaza, 13th Floor
New York, NY 10001
Tel: 212.840.0595
Site Tel: 516,932.9157
www.urscorp.com

The UST (hereafter "UST H"), positioned in an east-west orientation within subcell L17, measured approximately 5 ft in diameter and 15 ft in length, with an approximate capacity of 2,500 gallons. The location and orientation of UST H are illustrated in **Figure 1**.

Through an opening on top of UST H created during the advancement of the boring, liquid and sludge contained in the UST were measured to be 14 inches in depth (10 inches of sludge and 4 inches of liquid), equaling a total estimated volume of approximately 400 gallons (250 gallons of sludge and 150 gallons of liquid). No associated electrical equipment, piping, or vent lines were observed.

UST Contents Sampling

On May 2, 2005, samples of the liquid and sludge were collected from UST H. The samples were screened with a PID prior to laboratory analysis. PID readings were measured at 6.9 ppm for both the liquid and sludge. These samples were sent off Site for analysis to Severn Trent Laboratories, Inc. (STL) in Earth City, Missouri for the following analytes:

- pH using U. S. Environmental Protection Agency (USEPA) Method 9045A (solid) and 9040 (liquid);
- Reactivity (sulfide and cyanide) using USEPA Methods 7.3.3 and 7.3.4, respectively;
- Ignitability (flashpoint) using USEPA Method 1010;
- VOCs using USEPA Method 8260B;
- Toxicity Characteristic Leaching Procedure (TCLP) VOCs using USEPA Methods 8260B and 1311;
- TCLP semivolatile organic compounds (SVOCs) using USEPA Methods 8270C and 1311;
- TCLP metals using USEPA Methods 6010B and 1311 and TCLP mercury using USEPA Method 7470A;
- Total metals using USEPA Method 6010B and mercury using USEPA Method 7470;
- Polychlorinated biphenyls (PCBs) using USEPA Method 8082 (sludge only);
- TCLP organochlorine pesticides using USEPA Methods 8081A and 1311;
- TCLP chlorinated herbicides using USEPA Methods 8151A and 1311; and
- Radionuclides:
    - Gamma spectroscopy using Department of Energy (DOE) Method GA-01-R-MOD; and
    - Alpha spectroscopy: isotopic uranium using National Academy of Science (NAS)/DOE Method 3050/RP-725 and isotopic thorium using NAS/DOE Method 3004/RP-725.

The results of these analyses are presented in **Tables 1 through 11**.

Soil Sampling

To assess potential soil impacts adjacent to UST H, soil borings were advanced at location DECK, approximately 6 ft north of boring DECH and at location DECL, approximately 8 ft south of boring DECH (**Figure 1**). In both soil borings, soil samples were collected continuously in one-foot intervals to a total depth of 15 ft below the concrete slab. Field information and boring logs for the three borings are included in **Appendices B and C**, respectively.

The soil samples were analyzed on Site for radiological activity using the gamma spectroscopy system. Samples from every other foot were analyzed for nickel (Ni) using on-Site x-ray fluorescence spectroscopy (XRF). In addition, soil samples collected at 15 ft from each soil boring were analyzed for trichloroethene (TCE) and tetrachloroethene (PCE) by Stone Environmental Inc. (SEI) using solid phase microextraction and capillary gas chromatography. Results of these analyses are presented in **Table 12**.

UST Contents Analytical Results

The following discussion summarizes the findings of the liquid and sludge analysis from UST H. It should be noted that the liquid and sludge matrices presented analytical challenges during analysis as indicated by the validation qualifiers detailed on the individual tables.

General Chemistry:

The pH of both liquid and sludge samples was measured in the laboratory at 8.7 J,h for the liquid sample designated USTHL and at 9.1 J,h for the sludge sample designated USTHG. (See table notes for data qualifiers.) The samples did not flash (flash point of the samples was greater than 60 degrees Celsius), and reactive cyanide and reactive sulfide were not detected (**Table 2**).

Chemical Analyses:

Analytical results from STL indicate the presence of PCE, TCE, cis-1,2-dicholorethene, xylene, 2-butanone, and acetone (**Table 1**).

The TCLP analyses found PCE at a questionable concentration of 540 J,r µg/l in USTHG (**Table 3**). The TCLP analysis of USTHL reported 92 ug/l for PCE. No SVOCs were detected by TCLP analysis (**Table 4**).

Numerous metals were detected in both samples (**Table 5**). However, none of the metals were detected in concentrations that would limit disposal options. Generally, metals concentrations in sample USTHL were lower than those found in USTHG. Metals, organochlorine pesticide and chlorinated herbicide concentrations did not exceed the maximum concentration for toxicity characteristics (**Tables 6, 7 and 8**).

The PCB Aroclor® 1260 was found in sample USTHG at a concentration of 5,000 D µg/kg. Sample USTHL had insufficient volume for analysis of PCBs. No other PCBs were detected (**Table 9**.)

Radiological Analyses:

Tables 10 and 11 show the results of the STL gamma and alpha spectroscopy analysis, respectively. The alpha spectroscopy analytical results indicate the presence of uranium and thorium at elevated activity levels in both samples. In sample USTHG, total uranium (U-234, U-235 and U-238) activity was 1,338.7 pCi/g; in sample USTHL, the total uranium activity was 962,700 pCi/l. The relative ratios of U-238 to U-234 to U-235 indicate the uranium is at naturally-occurring abundances and is not enriched. In sample USTHG, Th-232 activity was 0.85 pCi/g; in sample USTHL, the Th-232 activity was 77.4 pCi/l.

Soil Boring Samples Analytical Results

The following discussion presents the analytical results for samples collected from the three soil borings (DECH, DECK, and DECL).

Chemical Analyses:

As shown on **Table 12**, no TCE concentrations were detected that were above the Site cleanup level of 0.7 mg/kg.

Several samples from the three soil borings (DECH, DECK, and DECL) had PCE concentrations that were above the Site cleanup level (1.82 mg/kg). The samples with concentrations above the Site cleanup level ranged from 2.10 J,s mg/kg to 13.2 D J,s mg/kg. The samples above the Site cleanup level were collected from depths of 2 to 5 ft. PCE concentrations detected from samples collected approximately 1 ft deeper (6 ft bgs) in borings DECK and DECL were two orders of magnitude lower.

Ni was detected in only 1 of the 18 samples tested (DECH, at 5 ft deep). The concentration of Ni (61.8 J mg/kg) is below the Site cleanup level of 560 mg/kg. Other samples analyzed for Ni were reported below the laboratory reporting limit of 100 mg/kg (**Table 12**).

Radiological Analyses:

Uranium and thorium met the Site cleanup levels in the soil samples tested (**Table 12**).

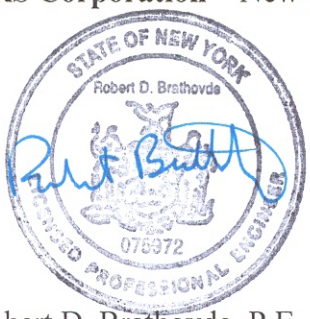
Status of UST and UST Contents

On May 4, 2005, a second soil boring was drilled in the UST for access approximately 5 ft to the east of boring DECH (**Figure 1**). The shallow soils from this boring location (between the

bottom of the concrete slab and the top of the UST) were not tested since the hole was created for access only. On May 5 and May 9, 2005, Liqui-Sorb® 200-gel polymer (an emulsifier) was added, through each UST access hole, to solidify the liquid and sludge mixture. In order to protect the access holes and to prevent sloughing of soils beneath the concrete slab, a 10-inch PVC pipe was placed into each of the tank's access borings to fill the holes in the building floor. Each pipe's stick-up above the floor is about 1 ft and each is capped to limit access. UST H has been registered with New York State Department of Health and remains in place. (Due to the location of the UST, it cannot be removed without threatening the integrity of the building.)

On June 3, 2005, the analytical results were submitted to NYSDEC.

Sincerely,
URS Corporation – New York



Robert D. Brathovde, P.E.
Engineer of Record

Professional Radiation Consulting, Inc. (PRCI) has reviewed this letter and the included radiological analysis results. I am in agreement with these conclusions.

Shane Brightwell, CHP
President, PRCI

Envirocon, Inc., has reviewed this letter and the included radiological analysis results. I am in agreement with these conclusions.

Richard Hafner
Radiation Safety Officer

Tables:

Figures:

Appendices:

Appendix C – Boring Logs

Boring Logs are available for review on CD provided.