



Department of Environmental Conservation

UNDERGROUND STORAGE TANK CLOSURE REPORT FOR SPILL NUMBER 14-02556

WORK ASSIGNMENT D007622-30

FORMER SPIC AND SPAN CLEANERS
& DYERS, INC. SITE
GREENPOINT/EAST WILLIAMSBURG
INDUSTRIAL AREA

SITE NO. 224129

KINGS (C), NY

Prepared for:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York

Basil Seggos, Acting Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION

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March 2016

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FOR
SPILL NUMBER: 14-02556
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SITE NUMBER 224129
GREENPOINT/EAST WILLIAMSBURG INDUSTRIAL AREA OF BROOKLYN
KINGS COUNTY, NEW YORK**

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REMEDIAL BUREAU B
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PREPARED BY:

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Table of Contents

1.0	Introduction.....	1
1.1	Purpose of Report	1
1.2	Site Background.....	1
1.3	Site Location and Description.....	1
2.0	Tank Removal Activities	2
2.1	Underground Storage Tank Description	2
2.2	Closure Activities and Observations.....	2
2.3	Closure Investigation	4
2.3.1	Soil Sampling.....	4
2.3.2	Laboratory Analyses	4
2.4	Summary	6
2.5	Regulatory Information.....	6
3.0	Conclusions and Recommendations	6

List of Tables

Table 1	Summary of Detected Compounds in UST Liquid Sample
Table 2A	Summary of Detected Compounds in UST Removal Documentation Samples – Unrestricted Use, Protection of Groundwater and Site Background Criteria
Table 2B	Summary of Detected Compounds in UST Removal Documentation Samples – Residential and Restricted Residential Use Criteria
Table 3A	Summary of Detected Compounds in UST Removal Confirmation Samples – Unrestricted Use, Protection of Groundwater and Site Background Criteria
Table 3B	Summary of Detected Compounds in UST Removal Confirmation Samples – Residential and Restricted Residential Use Criteria
Table 4	Summary of Detected Compounds in UST Excavation Stockpile Soil Sample
Table 5	Summary of Detected Compounds in Drummed UST Cleaning Waste Sample

List of Figures

Figure 1	Site Location Map
Figure 2	315 Kingsland Avenue Site Plan
Figure 3	315 Kingsland Avenue UST Confirmation Soil Analytical Results

Attachments

- Attachment A 315 Kingsland Avenue Underground Storage Tank Report, NYSDEC Spill No. 14-02556, Data Summary Report (on compact disk)
- Attachment B Daily Field Construction Reports
- Attachment C Shoring Design and Specifications
- Attachment D Photo Log
- Attachment E Videos (on compact disk)
- Attachment F As-Built Drawings
- Attachment G Backfill Source Documentation
- Attachment H Field Notes
- Attachment I Data Usability Summary Report (on compact disk)
- Attachment J Island Pump and Tank Report

1.0 INTRODUCTION

1.1 Purpose of Report

URS Corporation – New York (URS) is under contract with the New York State Department of Environmental Conservation (NYSDEC) to provide construction oversight activities associated with the removal of an underground storage tank (UST) and to complete reporting requirements. The work was performed under Work Assignment D007622-30. The UST removal work was performed by a NYSDEC Call-Out contractor, Island Pump & Tank Corporation (IPT) of East Northport, New York.

The UST was discovered during field activities during the On-Site Phase III Remedial Investigation (RI). The On-Site Phase III RI field activities were performed between May and July 2014, in a courtyard located between the 307-313 Kingsland Avenue (307 Kingsland Avenue) property and the 315 Kingsland Avenue building, and in the building located at 315 Kingsland Avenue. URS prepared a *315 Kingsland Avenue Underground Storage Tank Report, NYSDEC Spill No. 14-02556, Data Summary Report* (URS, January 2015) in which URS recommended the permanent closure of the UST and associated piping. A copy of the report is provided on a compact disk (CD) in Attachment A.

This Tank Closure Report presents the actions taken during the removal of the UST. The report summarizes the results of the sampling conducted to determine if the UST and system had any impact on the subsurface soil at the site. The report also tracks the wastes generated during removal, transport, and disposal of the UST.

1.2 Site Background

The Former Spic and Span Cleaners & Dyers, Inc. Site is located in the Greenpoint/East Williamsburg Industrial Area section of the Borough of Brooklyn, New York (Figure 1) and is located within the Meeker Avenue Plume Trackdown Site (NYSDEC Site Number 224121) investigation area. During the five phases of investigation at the Meeker Avenue Plume Trackdown Site, conducted between May 2007 and July 2009, a source of groundwater contamination was identified at the building housing the Former Spic and Span Cleaners and Dyers, Inc. [a.k.a. Eastern District Dye Works (1916 Sanborn) and Norman Cleaners and Dyers, Inc. (1942 Sanborn)], located at 260 Norman Avenue/315-325 Kingsland Avenue (Tax District of Brooklyn, Block 02657, Lot 0009) and 307-313 Kingsland Avenue (Tax District of Brooklyn, Block 02657, Lot 0015). In January 2009, the above mentioned source of groundwater contamination was listed as a NYSDEC Class 2 Inactive Hazardous Waste Disposal Site (Site Number 224129).

1.3 Site Location and Description

The Former Spic & Span Site area consists of the area bound by Meserole Avenue to the north, Morgan Avenue to the east, Nassau Avenue to the south, and Monitor Street to the west. The area is a mixture of residential and manufacturing, including both commercial and industrial facilities. The buildings at 307 Kingsland Avenue that formerly housed a portion of the Spic and Span operations are currently utilized as a movie prop rental business and associated warehouse. The building located at 315 Kingsland Avenue (Figure 2) formerly housed a portion of the Spic and Span operations and is currently unoccupied. The majority of the Former Spic & Span Site area is covered by one-story and multi-story buildings and/or

pavement/concrete. Residential areas are generally south of the Site, although residents live within a multi-story building located at 260 Norman Avenue/315 Kingsland Avenue.

The Site is located in a region of historic petroleum refining and storage operations that occupied a significant portion of the Greenpoint area. By 1870, over 50 refineries were located along the banks of Newtown Creek located northeast of the site. Currently, bulk oil storage terminals exist north of the site, including the British Petroleum (BP) Terminal and the ExxonMobil Brooklyn Terminal (ExxonMobil). The former Paragon Oil facility was located east of the Site along Newtown Creek, north of Bridgewater Street, between Meeker Avenue and Apollo Street. Peerless Importers, Inc. is currently located on a portion of the former Paragon Oil facility along Newtown Creek.

In September 1978, the United States Coast Guard (USCG) noted the signs of an oil spill entering Newtown Creek from the northeastern end of Meeker Avenue. A subsequent investigation concluded that the area of the spill under the Greenpoint/East Williamsburg Industrial Area was in excess of 52 acres and the total spill volume, as estimated in 1979, was approximately 17 million gallons of petroleum products as documented by Roux Associates, Inc. (Roux) (Roux, October 14, 2005). The current BP property was determined to be the source of a petroleum product plume east of the Site. Investigation and remediation activities were conducted by Roux on behalf of ExxonMobil from 1990 to the present, further defining the extent of what is referred to as the Off-Site Plume. The Off-Site Plume consists of the area underlain by the petroleum product plume that is not on the BP Terminal or the Peerless Importers, Inc. properties. Currently, the extent of the Off-Site Plume area is less than what it was in 1990 due to the operation of the Off-Site Free Product Recovery System (Off-Site System). The Off-Site System has recovered over 6.7 million gallons of free product since it became operational in 1995 (Roux, November 13, 2015).

2.0 TANK REMOVAL ACTIVITIES

2.1 Underground Storage Tank Description

As part of the On-Site Phase III RI, a sample of liquid from the UST was collected on June 17, 2014 (Table 1) and analyzed for target compound list (TCL) volatile organic compounds (VOCs), pH (corrosivity), specific gravity, surface tension and viscosity. Compounds detected included acetone (0.00016%), methylene chloride (0.00028%) as well as traces (less than 0.000003%) of 2-hexanone, 4-methyl-2-pentanone, methyl ethyl ketone (2-butanone), and xylenes. The pH was 3.9, specific gravity was 1.009, surface tension @ 15°C was 51 dynes per centimeter and viscosity @ 15°C was less than 2 centistokes.

On September 21, 2015 the UST was exposed. The UST was covered with a 4 to 6 inch thick concrete slab floor. The UST was buried approximately 30 inches below surrounding grade. The tank measured 4 feet in diameter and 12 feet long. Based on these measurements, the tank had a capacity of approximately 1,100 gallons. The tank construction consisted of single wall carbon steel. Approximately 12 inches of product was measured in the UST. The backfill around the UST consisted of native fill.

2.2 Closure Activities and Observations

URS oversaw activities associated with the UST removal starting on September 21, 2015. Daily Field Construction Reports (DFCRs) are included in Attachment B. As part of the scope of work with IPT, for site safety, the building/roof joist system required shoring prior to the commencement of UST

removal/excavation work. The shoring design and specifications were completed by URS/AECOM on September 3, 2015 and a copy is included in Attachment C. On September 21, 2015, IPT initially delivered 2 W12 x 30 steel I-beams to the site, but after field confirmation measurements were made, it was determined that the 2 steel I-beams were not long enough. IPT then confirmed interior measurements and delivered 3 W12 x 30 beams to the site later that afternoon. IPT constructed the beam pockets at 4 locations in the masonry walls for the I-beams on September 21, 2015. On September 22, 2015, IPT installed the three steel I-beams. The beam pockets were repaired with high strength mortar and bricks on September 23, 2015 by IPT and site photographs are included in the DFCRs in Attachment B and in Attachment D (photo log). Short videos are provided in Attachment E. As-built drawings of the I-beam installation work are provided in Attachment F. After the I-beams were installed, and on September 24, 2015, the UST excavation area was pre-cleared by IPT. The UST was uncovered by saw cutting the concrete slab and removing the concrete and soil using a wheel-mounted excavator.

After exposing the tank top and sides, the UST was removed from the excavation and staged within the building. The tank was in poor condition, with a perforation in the top of the tank as seen on the photographs in Attachment D. Holes or perforations were also observed in the tank sides. Approximately 225 gallons of residual tank liquids were pumped out of the tank directly into a vacuum truck by IPT and transported to the IPT facility for ultimate disposal. The tank was then cut and cleaned. Approximately 15 gallons of waste was generated from the tank cleaning, pumped into a drum, sampled, and disposed off-site.

Minor visual staining of the soils surrounding the UST was observed during excavation. The strongest odors were observed while excavating the west wall at approximately 4-5 feet bgs. Photoionization detector (PID) reading ranged from 0.2 to 154.9 parts per million (ppm) during initial excavation activities. Piping observed during the excavation was also removed. Excavated soil was segregated into two piles. One pile was for soils exhibiting PID readings above background and/or visual staining. This soil was stockpiled on 6 mil plastic sheeting within the building and covered with 6 mil plastic sheeting. A second pile was for soils where PID readings did not exceed background levels and did not have staining or odors. URS' environmental scientist sampled the contaminated excavated soils stockpile for waste characterization. Post excavation soil samples were collected from the excavation sidewalls (4) and bottom (2) on September 24, 2015.

On September 25, 2015, an additional excavation was performed to remove visually observed discolored and/or stained soil from the excavation sidewalls and bottom. PID reading ranged from 7.8 to 156.4 ppm during the secondary excavation activities. A second set of post excavation soil samples were collected from the excavation sidewalls (4) and bottom (2) after the additional excavation was completed on September 25, 2015. No groundwater was encountered during the excavations. A total of 18.6 tons of soil was generated from the excavations, placed into a roll-off transport and disposed off-site.

URS subcontractor MJ Engineering and Land Surveying, P.C. performed a survey of the excavation area, confirmation sample locations, building features including walls, corners, I-beam ends, and other pertinent site and building features on September 25, 2015. After the survey was completed, IPT backfilled the excavation with the clean soil stockpile. The top layer of backfill soil was from a clean source from off-site. A copy of the backfill source documentation is provided in Attachment G.

On September 27, 2015, IPT restored the concrete slab. A copy of URS' field notes is provided in Attachment H.

2.3 Closure Investigation

2.3.1 Soil Sampling

Soil samples were collected to assess the environmental impacts to the surrounding area. The first set of samples were collected from the excavation of the UST on September 24, 2015 and the second set on September 25, 2015. Soil samples were collected, recorded on a chain of custody and delivered to TestAmerica Laboratories Service Center located in Long Island City, New York for transfer to Test America Laboratories, a New York State Department of Health Environmental Laboratory Approval Program (ELAP) certified laboratory, located in Amherst, NY.

2.3.2 Laboratory Analyses

NYSDEC Analytical Services Protocol (ASP) Category B data deliverables were received by URS. The data was reviewed in accordance with the requirements outlined in Guidance for Data Deliverables and the Development of Data Usability Summary Reports (DUSR), Appendix 2B, DER-10/Technical Guidance for Site Investigation and Remediation (NYSDEC, May 2010). Data summary tables, Form I's and Form Ie's (TICs), and chain-of-custodies are provided in the DUSR and include the reporting limit for each non-detected compound. A copy of the DUSR is on a CD in Attachment I.

Documentation Samples

The soil samples collected on September 24, 2015, referred to as documentation samples (i.e., DOC-BOT-N, DOC-BOT-S, DOC-E, DOC-N, DOC-S, DOC-W), were analyzed for:

- TCL VOCs;
- TCL SVOCs;
- TCL Pesticides;
- Herbicides (i.e., 2,4,5-TP);
- TCL Polychlorinated biphenyls (PCBs); and
- Target Analyte List (TAL) metals.

The detected results for the samples are presented in Table 2A and compared to 6NYCRR Part 375.6 Unrestricted Use, Protection of Groundwater and Site Background criteria. Table 2B compares the results to Residential and Restricted Residential Use criteria.

The soil samples exceeded Unrestricted Use and Residential Use criteria for the SVOCs 2-methylnaphthalene and di-n-butylphthalate; the pesticides 4,4'-DDD, 4,4'-DDT, and aldrin; and the metals calcium, chromium, copper, iron, nickel and vanadium. The samples exceeded Residential Use criteria for the SVOC 2-methylnaphthalene; the pesticide aldrin; and the metal iron. Only iron exceeded Site Background concentrations. There were no exceedances for Protection of Groundwater or Restricted Residential Use criteria.

Confirmation Samples

After the additional excavation was performed, confirmation samples (i.e., CONF-BOT-N, CONF-BOT-S, CONF-E, CONF-N, CONF-S and CONF-W) were collected on September 25, 2015. The confirmation soil samples were analyzed for:

- TCL VOCs;

- TCL SVOCs;
- TCL Pesticides;
- Herbicides (i.e., 2,4,5-TP);
- TCL Polychlorinated biphenyls (PCBs);
- Target Analyte List (TAL) metals; and
- Cyanide.

The detected results for the samples are presented in Table 3A and compared to Unrestricted Use, Protection of Groundwater and Site Background criteria. Table 3B compares the results to Residential and Restricted Residential Use criteria.

The confirmation samples exceeded Unrestricted Use criteria for 2-methylnaphthalene (north side bottom and north side sidewall); and the metals aluminum (south side sidewall), iron (all samples) and vanadium (south side sidewall). Residential Use criteria was exceeded for 2-methylnaphthalene (north side bottom and north side sidewall); and the metal iron (all samples). Only iron exceeded Site Background concentrations. There were no Protection of Groundwater or Restricted Residential Use criteria exceedances. Figure 3 shows detected results exceeding criteria from the confirmation sampling.

Stockpile Soil Sample

As required by the disposal facility, the soil sample collected from the stockpile of excavated soil was analyzed for:

- TCL VOCs;
- gasoline range organics (GRO);
- diesel range organics (DRO);
- Resource Conservation and Recovery Act (RCRA) metals; and
- TCLP metals.

The detected results for the excavated soil sample are presented in Table 4. The soil results were compared to Resource Conservation Recovery act (RCRA) characteristic hazardous waste regulatory levels listed in 6 NYCRR Part 371.3(e). There were no exceedances in the excavated soil pile sample, and therefore, the excavated soil stockpile was determined to be non-hazardous.

Drummed Waste Sample

As required by the disposal facility, one sample was collected from the drummed UST cleaning waste for off-site disposal characterization and analyzed for:

- TCL VOCs;
- TCL SVOVs;
- TCLP metals;
- ignitability (flashpoint); and
- corrosivity (pH).

The detected results for the waste sample are presented in Table 5. The waste results were compared to RCRA characteristic hazardous waste regulatory levels listed in 6 NYCRR Part 371.3(e). There were no exceedances in the waste sample.

2.4 Summary

The UST and contents were sampled, removed, inspected, pumped, cut, cleaned and disposed off-site. The tank was found to be in poor condition. The tank had holes, pitting, scaling and degradation. Piping associated the UST was also removed. The tank contents, cleaning waste and excavated soil were disposed off-site. In addition to the tank and associated piping, approximately 225 gallons of liquid and 18.6 tons of soil were transported off-site for recycling/disposal. The excavation was backfilled and the concrete slab was restored.

The confirmation samples indicate that some minor residual contamination remains on site.

2.5 Regulatory Information

A UST Removal Summary Letter was submitted to the NYSDEC on December 21, 2015 by IPT to document the removal of the tank and is included in Attachment J.

An Affidavit of Closure was filed with NYCFD on December 24, 2015 certifying that the tank was removed by a licensed pump and tank installer, and that the tank was properly purged, cleaned and removed for scrap metal and that the resulting excavation was backfilled. The letter is included in Attachment J.

3.0 CONCLUSIONS AND RECOMMENDATIONS

A single wall steel 1,100 gallon UST and associated piping was removed from the building.

Soil samples were collected and analyzed.

Although some minor impacts remain, because they are buried at depth, the potential for human exposure is minimal. Based on these findings and the current land use, no further actions are warranted, and closure of NYSDEC Spill No. 14-02556 is recommended.