DNAPL RECOVERY LETTER REPORT

WORK ASSIGNMENT D007622-30

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

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

DIVISION OF ENVIRONMENTAL REMEDIATION
REMEDIAL BUREAU B

URS Corporation
257 West Genesee Street, Suite 400
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February 2016
February 18, 2016

Mr. David Harrington, P.E., Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B
625 Broadway, 12th Floor
Albany, NY 12233-7016

RE: Contract D007622, Work Assignment No. 30
Former Spic and Span Cleaners & Dyers, Inc. Site No. 224129, Brooklyn, New York
DNAPL Recovery Status Letter Report

Dear Mr. Harrington:

URS Corporation – New York (URS) has prepared this letter updating on the status of DNAPL removal activities at the former Spic and Span Cleaners & Dyers, Inc. site, located at 315 Kingsland Avenue (Figure 1). DNAPL removal activities began on September 14, 2015, and continued through October 30, 2015 (Table 1). DNAPL removal was performed at wells DEC-136, DEC-136D, DEC-092D, EW-01, EW-02, DEC-024, DEC-024D, and DEC-024DR (Figure 2). At the end of October 2015, DNAPL removal was temporarily suspended due to only trace quantities of DNAPL accumulation and recovery during the latter part of October 2015. The temporary hiatus should allow the formation to re-equilibrate.

**DNAPL Removal**

DNAPL removal at DEC-136 was performed using a Waterra Inertial Hydrolift pump with dedicated/disposable HDPE tubing and check valves. At DEC-136D, DEC-092D, EW-01, EW-02, DEC-024, DEC-024D, and DEC-024DR, DNAPL removal was performed using dedicated/disposable, 36 inch long 1-liter HDPE bailers. In total 267.50 gallons (3,357.44 lbs) of DNAPL was removed at the site through October 30, 2015 (Table 2). The majority of DNAPL was removed from one well, DEC-136. Attachment I provides DNAPL product recovery summaries for each well and Attachment II provides the well construction logs. A photographic log is provided as Attachment III.

**Well Redevelopment/Surging**

Well redevelopment took place at wells DEC-024, DEC-024D, DEC-024DR, DEC-092D and EW-02. Redevelopment was performed using a Waterra Inertial Hydrolift pump with dedicated/disposable HDPE tubing and check valves to induce a hydraulic gradient to the wells and promote DNAPL accumulation. The purge water removed from all wells had visible sheens, with occasional blebs of product, and also exhibited concentrated levels of dissolved phase chlorinated volatile organic compounds (CVOCs) as evidenced by high photoionization detector (PID) readings. Total groundwater purge volumes were: 165 gallons was removed from DEC-024 over three days; 110
gallons was removed from DEC-024D on a single day; 105 gallons was removed from DEC-024DR on a single day; 110 gallons was removed from DEC-092D over two days; and 110 gallons was removed from EW-02 on a single day.

**Air Monitoring**

Throughout DNAPL removal activities, air monitoring was performed using a combination of PID readings, as well as substance-specific monitoring using a Dräger Chip Measurement System (CMS). CMS chips employed included Vinyl Chloride, Tetrachloroethene, Trichloroethene, and Benzene. At no point during DNAPL removal did concentrations of these four substances exceed Occupational Health Safety Administration (OSHA) permissible exposure limits (PELs) or short-term exposure limits (STELs). Additionally, breathing zone and downwind PID measurements ranged from background to 2.3 ppm and were within community air monitoring requirements at all times per the Health and Safety Plan.

**Recommendations**

DNAPL monitoring and removal activities (if DNAPL is present) should resume in February 2016. If DNAPL remains at only trace quantities, DNAPL monitoring should be conducted at monthly intervals. One or two additional shallow DNAPL extraction wells should be installed in the area north of DEC-136 and constructed similarly to target the DNAPL-contaminated upper sand layer observed during drilling at other nearby soil borings as part of the remedial investigation and pilot study. The new wells should be included in DNAPL monitoring and removal activities.

We appreciate working with the Department on this challenging project.

Sincerely,

**URS Corporation**

Michael Gutmann
Project Manager

Enc. Figure 1 – Site Location
    Figure 2 – Monitoring Well and Soil Boring Locations
    Table 1 – Daily Summary of DNAPL Recovery at Well Location
    Table 2 – Combined Summary of DNAPL Observations/DNAPL Recovery
    Attachment I – DNAPL Product Recovery Summaries
    Attachment II – Well Construction Logs
    Attachment III – Photographic Log

cc: George Kisluk, URS Buffalo, NY