Virgilio Cocianni
Remediation Manager

Schlumberger Technology Corporation
205 Industrial Boulevard
Sugar Land, TX 77478
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July 17, 2015

David Szymanski
New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Ave.
Buffalo, New York 14203-2915

Re: **Periodic Review Report (July 7, 2014, through July 7, 2015), Former Dowell Facility, Depew, New York**

Dear Mr. Szymanski,

Please find enclosed one electronic copy (submitted via e-mail) of the above-referenced document. The original signed certification form has been mailed to your attention at the New York State Department of Environmental Conservation Regional Office address listed above.

If you have any questions or comments, please call me at (281) 285-4747. I can also be reached by e-mail at cocianni-v@slb.com.

Sincerely,

Virgilio Cocianni
Remediation Manager

Enclosures

c: Matt Focucci/New York State Department of Health
Jim Strunk/The Dow Chemical Company
Cathy Barnett/CH2M HILL

Periodic Review Report
(July 7, 2014, through July 7, 2015)

Former Dowell Depew Facility
3311 Walden Avenue, Depew, New York

Prepared for

New York State Department of Environmental Conservation

On Behalf of

Schlumberger Technology Corporation and The Dow Chemical Company

July 2015

CH2M HILL Engineers, Inc.

Executive Summary

On behalf of the Volunteers (Schlumberger Technology Corporation [STC] and The Dow Chemical Company [Dow]), CH2M Engineers, Inc., has prepared this periodic review report (PRR) in accordance with the Site Management Plan (SMP) for the former Dowell Depew Facility (site) located in Depew, New York. The site entered into the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) on February 26, 2001—Voluntary Cleanup Agreement # B9-0586-00-10, Site # V-00410-9. The PRR was prepared as required in the SMP for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

Dowell Schlumberger Incorporated (Dowell, a defunct joint venture between STC and Dow) operated a facility at 3311 Walden Avenue in the Village of Depew located to the east of Buffalo, New York. Former activities at the site included servicing industrial facilities and limited oilfield-related projects. In the late 1980s, Dowell discontinued operations at the site, and the facility was permanently closed. After site operations ceased, the Volunteers performed site investigations to determine the nature and extent of contamination in site soil and/or groundwater that may be attributed to previous site activities.

Site investigations detected elevated concentrations of volatile organic compounds (VOCs) in both soil and groundwater at the site. Additionally, asbestos-containing material was identified in several of the onsite building structures. The Volunteers subsequently entered the site into the NYSDEC VCP, and remedial actions were initiated in October 2003. Remedial actions conducted between October 2003 and May 2004 included building/structure demolition, asbestos-containing material abatement, contaminated soil excavation/disposal, monitoring well removal/installation, and site restoration. No engineering controls were installed as part of the site remedy; however, a Declaration of Covenants and Restrictions granted to NYSDEC was recorded with the Erie County Clerk on June 22, 2005.

Following completion of the remedial actions, but before issuance of the Certificate of Completion by NYSDEC, a long-term monitoring program consisting of quarterly groundwater sampling of onsite monitoring wells was instituted for the site. A final remedial action report was completed and submitted to NYSDEC in September 2010. The SMP was prepared and submitted to NYSDEC in May 2011. NYSDEC issued a Certificate of Completion for the site remediation on December 7, 2011. Since this time, the long-term monitoring program and site maintenance activities have been conducted in accordance with the SMP and NYSDEC-approved modifications.

This PRR summarizes the site maintenance and monitoring activities conducted during the reporting period of July 7, 2014, to July 7, 2015. Because the NYSDEC-approved modified sampling schedule alternates from spring to fall each reporting period, no groundwater samples were collected during the reporting period; however, the June 2015 site inspection form and June 2014 groundwater sampling data indicate that the final remedy continues to perform as designed and that concentrations of remaining site contaminants are stable or decreasing. The institutional controls remain in place as required, and no areas of noncompliance were identified during the reporting period.

Based on the consistency of the groundwater data since the remedial action was completed, it is recommended that the NYSDEC-approved annual site inspection and annual groundwater monitoring of monitoring wells MW-06S, MW-06D, MW-07S, MW-07D, and RW-01 continue as scheduled into the next reporting period of July 7, 2015, to July 7, 2016.

During the next reporting period, the Volunteers with NYSDEC-approval plan to design, install, and operate an in situ thermal treatment (ISTT) system to remediate the remaining VOC in onsite groundwater. The remedial action objective of the ISTT remedy is to reduce VOC concentrations below applicable NYSDEC standards, criteria, and guidelines values that necessitate continued operation and maintenance monitoring. A remedial action work plan documenting the selection, design, installation, and operation of the ISTT system will be submitted to NYSDEC for approval before implementation.

Contents

Abbreviations and Acronyms

CH2M	CH2M HILL Engineers, Inc.
1,1-DCA	1,1-dichloroethane
Dow	The Dow Chemical Company
EC	engineering control
IC	institutional control
ISTT	in situ thermal treatment
NYSDEC	New York State Department of Environmental Conservation
PRR	periodic review report
SCG	applicable standards, criteria and guidelines
site	Former Dowell Depew Facility
SMP	Site Management Plan
STC	Schlumberger Technology Corporation
1,1,1-TCA	1,1,1-trichloroethane
TCL	Target Compound List
VCP	Voluntary Cleanup Program
VOC	volatile organic compound

SECTION 1

Introduction and Site Overview

This periodic review report (PRR) was prepared for the former Dowell Depew Facility (site) located in Depew, New York. The PRR was prepared in accordance with the Site Management Plan (SMP) for the periodic submittal of data, information, recommendations, and certifications to the New York State Department of Environmental Conservation (NYSDEC). Fieldwork reported in this PRR was performed in accordance with the SMP (URS Corporation 2011) and NYSDEC-approved modifications (NYSDEC 2014 and Szymanski 2014).

1.1 Purpose

The PRR provides the following information for the reporting period to NYSDEC (URS Corporation 2011):

- Identification, assessment, and certification of institutional controls (ICs) required by the remedy for the site
- Results of the required annual site inspections and severe conditions inspections, if applicable
- Applicable inspection forms and other records generated for the site during the reporting period in electronic format
- A site evaluation, including compliance of the remedy, new conclusions or observations regarding site contamination based on inspections or data generated for the media monitored, recommendations regarding changes to the remedy and/or monitoring plan, and the overall performance and effectiveness of the remedy

1.2 Site Location

The site is located east of Buffalo, New York, at 3311 Walden Avenue in the Village of Depew (Figure 1-1). The site is in a mixed residential and industrial/commercial area. Properties surrounding the site include Walden Avenue to the north, a CSX railroad yard to the south, a lumber yard and supply store (84 Lumber) to the east, and a mattress manufacturer (Buffalo Batt and Felt) to the west (Figure 1-2). A residential neighborhood and a recycling facility (EnviroSense Corp.) are located adjacent to the site on the north side of Walden Avenue.

The site covers approximately 1.8 acres and is relatively flat with a gentle downward slope to the north–northwest toward Walden Avenue. Maximum relief across the site (that is, from south to north) is about 4 feet, and surface water flows from south to north across the site. The property is currently vacant, and the ground surface consists primarily of gravel and grass with small- to medium-sized trees on portions of the site. A 6-foot-high chain-linked fence with a locked entrance gate along Walden Avenue surrounds the site.

1.3 Site History

Former activities at the site included servicing industrial facilities and limited oilfield-related projects. Various industrial cleaning and oilfield-related chemicals were stored onsite and transferred into tank trucks for use at different job sites (URS Corporation 2004). A former railroad siding, which has been removed, traversed the site from east to west. Former onsite building structures included the following: a two-story office building, a chemical storage building, a one-story office/maintenance shop, an acid plant, a bulk cement plant, cement silos, an 8,000-gallon diesel aboveground storage tank, a 1,000-gallon gasoline underground storage tank with dispenser, a mud separator, an oil/water separator, and a hydrochloric acid aboveground storage tank (Figure 1-2). In the late 1980s, operations at the site were discontinued, and the facility was permanently closed. Building structures were razed during the 2003 to 2004 remedial action, and the site has been inactive since (URS Corporation 2011).

1.4 Previous Site Investigations and Remedial Action Activities

Site investigations and remedial actions were performed after site operations were discontinued. A chronology of the site investigations and remedial actions is presented in Table 1-1.

SECTION 2

Institutional Controls and Engineering Controls Plan Compliance

This section summarizes the IC and engineering control (EC) requirements for the site.

2.1 Institutional Control and Engineering Control Requirements

A series of ICs is required by the Declaration of Covenants and Restrictions to (1) prevent future exposure to remaining contamination and (2) limit the use and development of the site to commercial uses only. Adherence to the ICs on the site is required by the Declaration of Covenants and Restrictions and was implemented under the SMP. The ICs for the site consist of the following:

- Compliance with the Declaration of Covenants and Restrictions and the SMP by the Grantor and the Grantor's successors and assigns.
- Groundwater monitoring must be performed as defined in the SMP. (Alterations to the groundwater monitoring program, schedule, or sampling and analysis methods require prior approval by NYSDEC before implementation.)
- Data and information pertinent to site management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP. (Alterations to the frequency of reporting to the NYSDEC require prior approval by NYSDEC before implementation.)

The site has a series of ICs in the form of site restrictions. Adherence to the ICs is required by the Declaration of Covenants and Restrictions. The following site restrictions apply to the Controlled Property:

- The property may only be used for restricted commercial use, provided that the long-term ICs included in the SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted or restricted residential use, without additional remediation and amendment of the Declaration of Covenants and Restrictions, as approved by NYSDEC.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.
- The use of the groundwater underlying the property is prohibited without treatment, rendering it safe for intended use.
- The potential for vapor intrusion must be evaluated for any buildings developed on the site, and any potential impacts that are identified must be monitored or mitigated.
- Vegetable gardens and farming on the property are prohibited.

The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, the following: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by NYSDEC, and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow, and will be made by a Qualified Environmental Professional as defined by 6NYCRR Part 375-1.2 (ak).

ICs identified in the Declaration of Covenants and Restrictions may not be discontinued without an amendment to or extinguishment of the Declaration of Covenants and Restrictions. To date, no changes have been made to the ICs, and monitoring activities have been performed in compliance with applicable requirements.

2.2 Institutional Control and Engineering Control Certification

The NYSDEC IC/EC Certification Form has been completed by a CH2M HILL Engineers, Inc. (CH2M) New York Registered Professional Engineer for this reporting period and is provided as Appendix A.

SECTION 3

Monitoring Plan Compliance

3.1 Monitoring Plan Requirements

On April 9, 2014, NYSDEC approved reducing the site monitoring plan requirements to annual sampling of site monitoring wells MW-06S, MW-06D, MW-07S, MW-07D, and recovery well RW-01 for target compound list (TCL) volatile organic compounds (VOCs) only (NYSDEC 2014). Because the NYSDEC-approved modified sampling schedule alternates from spring to fall each reporting period, no groundwater samples were collected during this reporting period (URS Corporation 2013). The next groundwater sampling event is scheduled to occur in the fall (September 2015) and will utilize the NYSDEC-approved modified monitoring plan requirements and sample collection method.

3.2 Groundwater Level Measurements

Depth to groundwater was measured at each site monitoring and recovery well and piezometer on June 24, 2015. Depths were measured relative to the top of casing and were recorded to the nearest 0.01 foot. Table 3-1 presents the depth to groundwater measurements and groundwater elevations for each site monitoring well and piezometer for the June 2015 site inspection.

3.3 Groundwater Sampling and Analysis

No groundwater samples were collected during the reporting period.

3.4 Groundwater Monitoring Results

3.4.1 Groundwater Elevations and Groundwater Flow

Groundwater elevation measurements for the June 2015 site inspection are presented in Table 3-1. Figure 3-1 presents the potentiometric surfaces for the two lithologic units present onsite (defined as the upper and lower till units) as measured in June 2015. The general groundwater flow direction for both lithologic units in relation to site monitoring wells MW-06S, MW-06D, MW-07S, MW-07D, and recovery well RW-01 is to the west and northwest. The groundwater flow directions are consistent with past measurements (URS Corporation 2013; CH2M 2014). A site survey was performed in April 2015 to verify and/or establish ground surface elevations, top of casing elevations, and horizontal and vertical coordinates of wells.

3.4.2 Evaluation of Groundwater Results

No groundwater samples were collected during the reporting period. Results from the last groundwater sampling event (June 2014) are presented in the second PRR (CH2M 2014). Historical VOC concentrations detected in groundwater from September 1996 to July 2013 are presented in the first PRR (URS Corporation 2013).

3.4.3 Conclusions and Recommendations

No groundwater monitoring was conducted during the reporting period; however, conclusions and recommendations presented in the second PRR (CH2M 2014) remain the same:

- Data indicate that remaining groundwater contamination above applicable standards, criteria, and guidelines (SCG) values onsite is still limited to the area around MW-06S and MW-06D, and concentrations in MW-06S are significantly lower than in prior rounds.
- Chloroethane concentrations in MW-06S and MW-06D suggest that 1,1,1-trichloroethane (1,1,1-TCA) and 1,1-dichloroethane (1,1-DCA) may be breaking down as part of the natural attenuation process.

Based on the consistency of the groundwater data with prior sampling rounds, it is recommended that monitoring wells currently in the NYSDEC-approved revised monitoring program continue to be sampled annually for TCL VOCs. If the annual sampling results show a significant change in contaminant concentrations, then change in the frequency of sampling impacted monitoring well(s) will be discussed and agreed upon with NYSDEC

Because of the slow degradation of VOCs in groundwater in site monitoring wells MW-06S and MW-06D, the Volunteers are pursuing additional remedial action to accelerate the VOC degradation process. During the next reporting period, the Volunteers propose to install and operate an in situ thermal treatment (ISTT) system to remediate the residual VOC in onsite groundwater. This action, pending NYSDEC approval, will require the removal of the existing monitoring wells. After completing the additional remedial action, the Volunteers will discuss the necessity of continued operation and maintenance sampling with NYSDEC.

SECTION 4

Operation, Maintenance, and Inspections Compliance

4.1 Operation and Maintenance Plan Requirements

The site remedy does not rely on mechanical systems, such as groundwater pump and treat or air sparge/soil vapor extraction, to protect public health and the environment; therefore, operation and maintenance are not applicable at this site. However, the SMP does require sitewide inspections to be conducted concurrently with the monitoring plan.

4.2 Site Inspections

The CH2M project manager performed a sitewide inspection on June 24, 2015. A copy of the completed sitewide inspection form is provided as Appendix B. The sitewide inspection indicated no significant changes in the conditions of the site since the time of the last PRR dated August 2014, with the exception of an increase in size and density of onsite vegetation.

During the reporting period, the following maintenance activities were performed:

- Grass between the perimeter fence and Walden Avenue was mowed.
- Vegetation (grass, bushes, and small trees) within the perimeter fence was brush-hogged.
- To the extent possible, vegetation growing within the perimeter fence was removed.
- Trash that had accumulated along the road easement between the perimeter fence and Walden Avenue was removed and disposed of offsite.

SECTION 5

Remedy Performance, Effectiveness, and Protectiveness

This section includes a summary of the remedy performance, effectiveness, and protectiveness based on inspections and data generated during the previous reporting period (July 7, 2013, through July 7, 2014) (CH2M 2014), and as the data compare to historical data. No groundwater analytical data were collected during this reporting period.

5.1 Remedy Performance

Previous documents have detailed the remedy performance as it relates to site soil (URS Corporation 2011, 2013). The remedy performance related to site groundwater is demonstrated by the stable or decreasing groundwater concentrations since remedial action activities were completed. Based on the 2014 PRR (CH2M 2014), analysis of data indicate that remaining groundwater contamination exceeding SCG values onsite is still limited to the area around MW-06S and MW-06D. In addition, chloroethane concentrations suggest that 1,1,1-TCA and 1,1-DCA may be breaking down as part of the natural attenuation process.

5.2 Remedy Effectiveness

The remedy was effective in removing soil with VOC concentrations exceeding soil cleanup objectives for restricted commercial use (URS Corporation 2013). The remedy has also been effective in reducing VOC concentrations in groundwater below SCG values, with the exception of the area around MW-06S and MW-06D. Groundwater concentrations are lower in MW-06S and approximately the same in MW-06D since the 2013 PRR (URS Corporation 2013); however, because of the slow degradation of VOCs in groundwater in site monitoring wells MW-06S and MW-06D, the Volunteers are pursuing additional remedial action to accelerate the VOC degradation process. During the next reporting period, the Volunteers propose to install and operate an ISTT system to accelerate the degradation of residual VOC groundwater contamination.

5.3 Remedy Protectiveness

The remedy has been protective of human health and the environment by reducing the VOC concentrations in soil to below the applicable soil cleanup objectives for commercial sites. VOC concentrations in groundwater have been reduced to levels below SCG values, with the exception of a small area along the northern side of the site (that is, characterized by MW-06S and MW-06D). In April 2008, an investigation was performed to evaluate whether site contaminants had migrated offsite in groundwater. One reason for the investigation was to evaluate the potential for offsite groundwater to serve as a potential source of vapor intrusion to offsite residences. Residual site contaminants in groundwater were not detected offsite (URS Corporation 2010).

SECTION 6

Conclusions and Recommendations

The site is compliant with the requirements of the SMP for the July 7, 2014, to July 7, 2015, reporting period. The June 2015 site inspection and the June 2014 groundwater sampling data (CH2M 2014) indicate that the final remedy continues to be effective in protecting human health and the environment, and that the remaining site contamination is stable or decreasing. ICs remain in place, as required.

There were no areas of noncompliance during the reporting period. Based on the consistency of the data since the remedial action was completed, it is recommended that the NYSDEC-approved modified groundwater monitoring program and schedule, which consist of an annual site inspection and annual monitoring (alternating spring and fall) of monitoring wells MW-06S, MW-06D, MW-07S, MW-07D, and recovery well RW-01, continue during the next reporting period of July 7, 2015, through July 7, 2016.

During the next reporting period, the Volunteers with NYSDEC-approval plan to design, install, and operate an ISTT system to remediate the residual VOC in onsite groundwater. The objective of the ISTT remedy is to reduce VOC concentrations below applicable NYSDEC SCG values that necessitate continued site operation and maintenance monitoring. A remedial action work plan documenting the selection, design, installation, and operation of the ISTT system will be submitted to NYSDEC for approval before implementation.

SECTION 7

References

CH2M HILL (CH2M). 2014. *Periodic Review Report (July 7, 2013, through July 7, 2014).* Former Dowell Depew Facility 3311 Walden Avenue, Depew, New York. August.

New York State Department of Environmental Conservation (NYSDEC). 2014. NYSDEC Letter – *Site Management (SM) Periodic Review Report (PRR) Response Letter for the Former Dowell Facility 3311 Walden Avenue Depew New York*, Depew, New York. April.

Szymanski, David/NYSDEC Project Manager. 2014. Personal communications (e-mail) with Jayson Burkard/CH2M HILL. May 16.

URS Corporation. 2004. *Remedial Action Report for the Former Dowell Facility 3311 Walden Avenue Depew New York*, Depew, New York. July.

URS Corporation. 2010. *Final Remedial Action Report for the Former Dowell Facility 3311 Walden Avenue Depew New York,* Depew, New York. September.

URS Corporation. 2011. *Site Management Plan for the Former Dowell Facility 3311 Walden Avenue Depew New York*, Depew, New York. May.

URS Corporation. 2013. *Periodic Review Report (December 7, 2011 – July 7, 2013).* Former Dowell Facility 3311 Walden Avenue, Depew, New York. August.

Tables

TABLE 1-1

Chronology of Site Investigations and Remedial Actions

Periodic Review Report (July 7, 2014, through July 7, 2015)

Former Dowell Depew Facility, Depew, New York

Date	Work Performed
September 1989	Removal and offsite disposal of the 1,000-gallon UST and its associated dispenser, the 8,000-gallon AST, and contaminated soils.
May 1990	Site investigation performed to determine the presence or absence of chemical constituents in site soil and groundwater. Low-level VOC concentrations were detected in shallow groundwater.
January 1992	Physical/chemical evaluation of groundwater performed at former UST location. No contamination was detected in the groundwater sample.
September 1996 - March 1997	Monitoring well installation (MW-01, MW-02, MW-03, and MW-04) and sampling VOC concentrations exceeded SCG values at MW-03 and lead exceeded the MCL at MW-02 and MW-04. The mud separator was decommissioned.
November 1997	Supplemental investigation was performed, soil samples were collected, and groundwater samples were collected from existing monitoring wells.
July 1998	Removal and offsite disposal of former acid plant concrete revetment, 500 tons of VOC-contaminated soil from around the acid plant, cement bulk plant debris, and other miscellaneous debris.
July 1998 - January 2000	Groundwater samples were collected four times during this period from MW-01 through MW-04 for VOCs.
February 26, 2001	The volunteers entered into a Voluntary Cleanup Agreement with NYSDEC.
July 2001	Site investigation was performed to collect soil, sediment, and groundwater samples. Hydraulic conductivity testing was performed. An asbestos survey and land survey of investigation locations was completed.
October 2003 - May 2004	Remedial activities, including asbestos abatement, building/structure demolition, monitoring well abandonment and installation, excavation and offsite disposal of approximately 4,610 tons of VOC contaminated soil.
October 2005	Installation of monitoring well MW-07D.
April 2008	Offsite groundwater investigation completed.
June 2009	Installation and implementation of six injection wells upgradient of monitoring wells MW-06S and MW-06D. 377 gallons of hydrogen peroxide and sodium persulfate was injected between August and November 2009.
September 2010	Final remedial action report was prepared and submitted to NYSDEC.
May 2011	A site management plan was submitted to NYSDEC.
December 2011	NYSDEC issued a Certificate of Completion for the site remediation.
August 2013	First Periodic Review Report was submitted and presented a summary of the remedy performance during the period of December 7, 2011, through July 7, 2013.
August 2014	Second Periodic Review Report was submitted and presented a summary of the remedy performance during the period of July 7, 2013, through July 7, 2014.

Notes:

AST = above ground storage tank

MCL = maximum contaminant level

NYSDEC = New York State Department of Environmental Conservation

SCG = applicable standards, criteria, and guidelines

UST = underground storage tank

VOC = volatile organic compound

TABLE 3-1

Groundwater Elevation Measurements

Periodic Review Report (July 7, 2014, through July 7, 2015)

Former Dowell Depew Facility, Depew, New York

Well ID	Northing (feet)[a]	Easting (feet)[b]	Ground Surface Elevation (U.S. survey feet)[b]	Top of Casing Elevation (U.S. survey feet)[b]	Total Depth (ft btoc)	Depth to Top of Screen (ft bgs)	Depth to Bottom of Screen (ft bgs)	Depth to Water Measured June 24, 2015 (ft btoc)	Groundwater Elevation June 24, 2015 (ft)
MW-01	1060918.910	1118926.532	680.66	680.38	29.72	20	30	12.60	667.78
MW-02	1061207.358	1119169.445	679.10	678.83	28.03	18.3	28.3	0.03	678.80
MW-04	1061182.237	1119049.105	678.14	677.71	27.57	18	28	1.10	676.61
MW-06S	1061160.411	1118936.396	677.54	677.13	20.09	10	20	1.06	676.07
MW-06D	1061162.079	1118940.064	677.45	677.16	30.21	20	30	1.10	676.06
MW-07S	1061150.146	1118858.431	677.17	676.66	19.49	9.5	19.5	3.35	673.31
MW-07D	1061142.027	1118861.752	677.43	676.83	29.90	20	30	4.10	672.73
RW-01	1061164.035	1118969.498	677.76	680.34	18.58	6	16	2.70	677.64
RW-02	1061102.659	1119042.870	678.66	681.16	18.50	6	16	3.45	677.71
PZ-01S	1061010.277	1118925.124	678.44	681.49	15.05	2	12	4.34	677.15
PZ-01D	1061004.001	1118926.203	678.86	681.88	27.52	22.5	24.5	4.56	677.32
PZ-02S	1060920.110	1118923.845	680.72	684.53	15.81	10	12	4.76	679.77
PZ-03S	1061038.815	1119046.902	680.09	683.08	14.99	10	12	3.94	679.14
PZ-03D	1061043.063	1119052.978	680.38	682.60	26.22	22	24	3.15	679.45
PZ-04S	1061069.999	1118915.093	678.23	681.23	15.00	10	12	5.97	675.26
PZ-04D	1061074.170	1118919.821	678.24	681.44	27.70	22.5	24.5	5.89	675.55
PZ-05S	1061114.176	1119128.343	679.56	682.19	14.63	10	12	3.50	678.69
PZ-05D	1061117.993	1119132.212	679.53	682.85	27.62	22.3	24.3	4.14	678.71
PZ-07S	1061161.630	1119094.894	679.01	681.93	15.42	10.5	12.5	4.63	677.30
PZ-07D	1061164.545	1119103.472	679.01	681.91	27.90	23	25	4.64	677.27
PZ-08S	1061181.135	1119044.411	678.25	681.90	15.45	9.8	11.8	5.29	676.61
PZ-09S	1061202.304	1119170.928	679.21	683.16	16.25	10.3	12.3	5.27	677.89

[a] North American Datum of 1983 (2011), New York State Plane Coordinate System (West Zone), United States survey feet.

[b] North American Vertical Datum of 1988, United States survey feet.

An updated survey was performed in April 2015 to verify and/or establish ground surface elevations, top of casing elevations, and horizontal and vertical coordinates of wells.

Notes:

ft = feet

ft bgs = feet below ground surface

ft btoc = feet below top of casing

MW = monitoring well

PZ = piezometer

Figures

N

0 500 1,000

Feet

FIGURE 1-1

Site Location Map

Periodic Review Report

(July 7, 2014, through July 7, 2015)

Former Dowell Depew Facility, Depew, New York

LEGEND

- Site Boundary
- Former Building Location
- Former Tank
- Former Feature Location
- Former Concrete
- Monitoring Well / Recovery Well in Upper Till
- Monitoring Well / Recovery Well in Lower Till
- Piezometer in Upper Till
- Piezometer in Lower Till

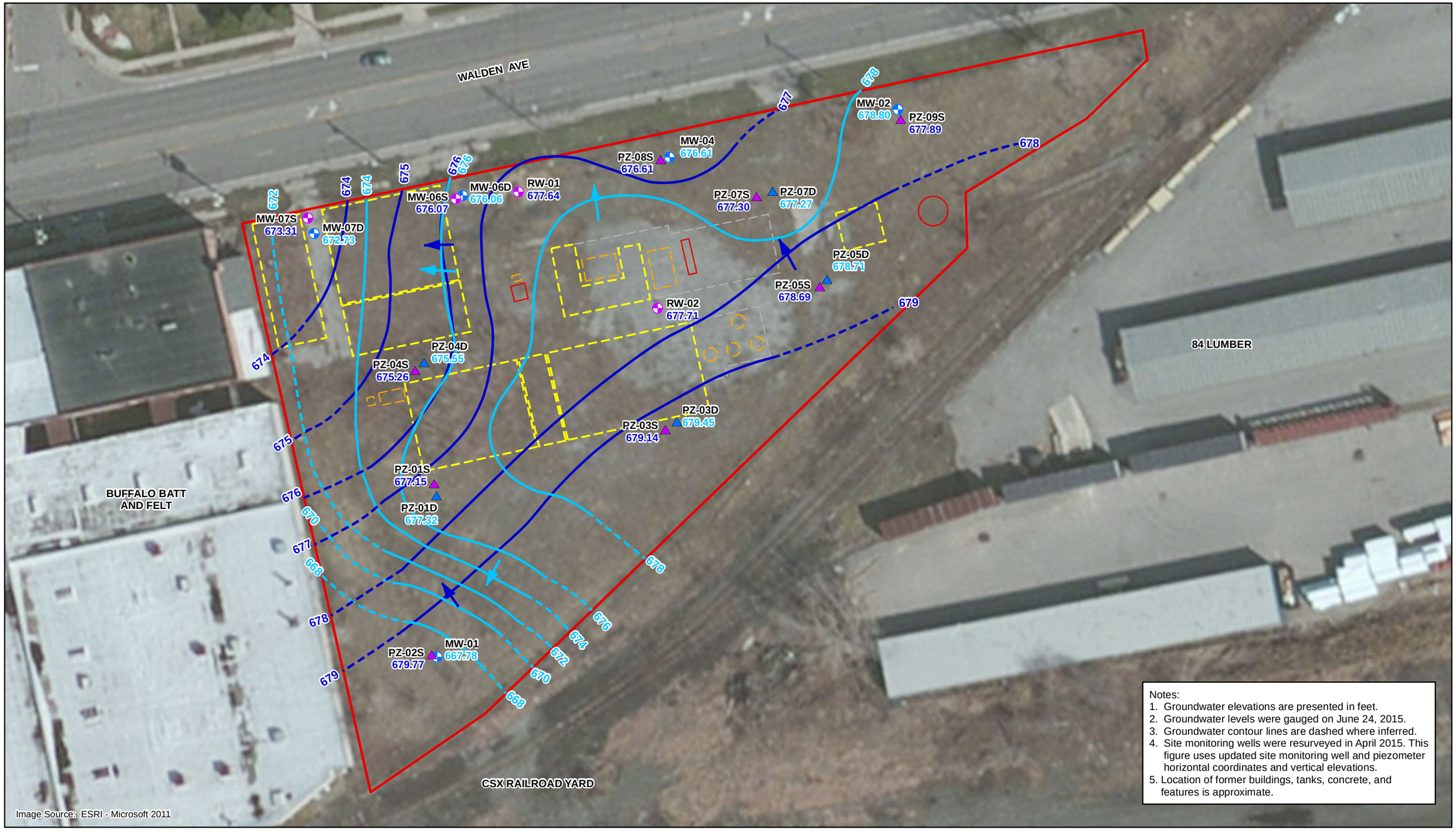
Note:
Location of former buildings, tanks, concrete, and features is approximate.

N

0 25 50
Feet

FIGURE 1-2
Site Map
Periodic Review Report
(July 7, 2014, through July 7, 2015)
Former Dowell Depew Facility, Depew, New York

ch2m



LEGEND

- Site Boundary
- Former Building Location
- Former Feature Location
- Former Tank
- Monitoring Well / Recovery Well in Upper Till
- Monitoring Well / Recovery Well in Lower Till
- Piezometer in Upper Till
- Piezometer in Lower Till
- Groundwater Elevation Contour (Upper Till)
- Groundwater Elevation Contour (Lower Till)
- 672.82 Groundwater Elevation (Upper Till)
- 672.05 Groundwater Elevation (Lower Till)
- Groundwater Flow Direction (Upper Till)
- Groundwater Flow Direction (Lower Till)
- Former Concrete

0 25 50 Feet

N

FIGURE 3-1
Potentiometric Surface Map - June 2015
Periodic Review Report
(July 7, 2014, through July 7, 2015)
Former Dowell Depew Facility, Depew, New York

ch2m

RDD \\BALDUR\PROJ\DOWELL_DEPEW_480860\MAPFILES\2015\PERIODICREVIEWREPORT\FIG3-1_POTSURF_MAP.MXD CVONFREE 7/2/2015 1:51:57 PM

Appendix A
IC/EC Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. V00410

Site Name Former Dowell Facility

Site Address: 3311-3313 Walden Ave Zip Code: 14043
City/Town: Depew
County: Erie
Site Acreage: 1.8

Reporting Period: ~~July 07, 2013 to July 07, 2014~~
July 7, 2014 to July 7, 2015

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

July 7, 2014 to July 7, 2015

SITE NO. V00410 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
104.09-1-14	Dowell Schlumberger Inc.	Ground Water Use Restriction Landuse Restriction O&M Plan Monitoring Plan Site Management Plan Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan O&M Plan

Prohibition of groundwater use, restriction of use to industrial (may request commercial use from Relevant Agency), annual reporting, no constructions without approval of Relevant Agency, adherence to an O & M Plan included as section 7-1 of the Remedial Action Report Dated July 2004 and any subsequent modifications (May 2011 Site Management Plan requires soil vapor study or installation of vapor mitigation system according to DOH guidelines before re-use.

104.09-1-15	Dowell Schlumberger Inc.	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan O&M Plan

Prohibition of groundwater use, annual reporting, no constructions without approval of Relevant Agency, adherence to an O & M Plan included as section 7-1 of the Remedial Action Report Dated July 2004 and any subsequent modifications (May 2011 Site Management Plan requires soil vapor study or installation of vapor mitigation system according to DOH guidelines before re-use.

Box 4

Description of Engineering Controls

None Required

Not Applicable/No EC's

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) If a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00410

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Key Rosebrook (print name) at 2411 Dulles Corner Park, Suite 500 Herndon, VA 20171 (print business address),

am certifying as Designated Representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Key Rosebrook
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

July 6, 2015
Date

Appendix B
Sitewide Inspection Form

FORMER DOWELL FACILITY – DEPEW, NEW YORK
SITE MANAGEMENT PLAN

NYSDEC SITE NO. V-00410-9

SITE-WIDE INSPECTION FORM

Date: 06/24/15 **Inspector:** Jayson Burkard

Weather: Clear, Sunny **Signature:** Jayson Burkard

Temperature: Around 75-80°s **Company:** CHA - Agent for Dowell Schlumberge

Quarter: First Second Third Fourth (Annual)
(Circle One)

Item Inspected	Maintenance Needed (Y/N) (JMB)	Comments
General Site Access	~~No~~ Yes	Front Gate is functional. Replacement lock installed
Soil /Grass Cover	No	Site covered with healthy green grass except near RW-01 & RW-02 in former excavation area.
Security Fencing, Gates and Locks	Yes completed 06/24/15	Fence still secures site, Front gate still work Lock at gate entrance rusted closed Jayson removes old chain & lock & replaces w/ne
Monitoring Wells	No	Jayson inspects all MWs & piezometers All have their integrity components
Site Drainage	No	Site Drainage is good. Minor standing water from recent rainfall near front entrance gate
Trees, Bushes, Other Vegetation	Yes completed 06/24/15	Needs mowing & trimming along property fence line. completed on 06/2
Miscellaneous	N/A	No comments