**EA Engineering, P.C.** 

6712 Brooklawn Parkway, Suite 104

Syracuse, NY 13211-2158

NYSDEC Division of Environmental Remediation

Site Location: Albany St., Babylon, NY (Site No. 1-52-140)

Site No. 1-52-140

Contractor PM: AECOM - Walter Howard

NYSDEC PM: Jeffrey Dyber

Construction Manager: AECOM - Kent Wagoner

Air Monitoring: AECOM Health & Safety: AECOM

## Weather Conditions

General DescriptionSunnyamSunnyPmTemperature38am46PmWind Direction5-7 mph WSWam10 mph WSWPm

### **HEALTH & SAFETY:**

(\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report).

Were there any changes to the Health & Safety	Plan?	*Yes ( )	No	(X)	NA	()
Were there any exceedances at the perimeter action level reported on this date?	Air:	*Yes ( )	No	(X)	NA	( )
Were there any dust/odor issues reported or observed on this date?		*Yes ( )	No	(X)	NA	()

- Onsite at 10:30, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Christensen Drilling (Layne) already onsite.
- Prior to the start of work, AECOM conducted health and safety meeting, discussed overall goals for day, and setup
  upwind and downwind air monitoring stations. Upwind station installed at northwest corner of Suffolk County
  Water Authority (SCWA) property and downwind station installed along southern SCWA fence line. Air monitoring
  was performed in accordance with the Contract Documents and AECOM's Remedial Action Work Plan (RAWP):
  Section 4.2 Dust Monitoring, Section 5.0 Air Monitoring Plan. No exceedances were recorded.
- Layne maintained poly under drill rig to prevent contamination of ground surface from drill rig fluids. Poly was also
  placed along SCWA western fence line to act as a barrier for sidewalk along Albany Ave. Exclusion zone around
  drill rig was distinguished by the placement of caution tape and traffic barrels.
- Layne removed remaining 24-in. diameter outer casing and placed annular sand from 17 ft below ground surface (bgs) to grade at DDC-06. Once casing was removed, Layne measured depth of DDC-06 well and associated piezometers. Layne discovered both shallow and deep piezometers (DDC-06-PD and DDC-06-PS) were sheared off at ~20 ft bgs. Layne stated that the outer casing was rotated during the removal process. This enabled Layne to pull the casing more efficiently. AECOM and Layne are currently deciding re-installation options/methods for DDC-06-PD and DDC-06-PS.
- Layne relocated drilling equipment/materials to DDC-05. All downhole drilling equipment was decontaminated using clean potable water upon extraction from DDC-06 borehole. Fire hydrant at southwest corner of SCWA property supplied decontamination water. Wash water allowed to drain into borehole. Decontamination procedures conformed to RAWP Section 2.5 Decontamination Plan.

Report No.:	31	EA Project File:	1447429	Date: February 06,	2012
Report No	<b>ा</b>	EA FIOIECL FILE.	1441429	Date. February 00.	ZU 1 Z

- Long Island Power Authority (LIPA) delivered treatment system transformer to SCWA property. Transformer set on concrete pad at southwest corner of treatment system pad. Gray Electric began installing connections to transformer.
- No trenching/pipe installation activities were conducted pending utility mark-out along Benjoe Drive.
- Offsite at 16:00.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
None		Yes ( ) No ( )
110110		100 ( )

### **PROJECT SCHEDULE:**

- DDC well installation (16 January 29 February 2012).
- Install underground piping (30 January 24 February 2012)
- Install airline sump (13 -17 February 2012)

### **ISSUES PENDING:**

Re-installation of DDC-06 piezometers (DDC-06-PD and DDC-06-PS).

### **ITEMS OF CONCERN:**

None

Site Representative: Robert Peterson

Date: 06 February 2012 Robert Leaven



View of transformer on SCWA property.

**EA Engineering, P.C.** 

6712 Brooklawn Parkway, Suite 104

Syracuse, NY 13211-2158

NYSDEC Division of Environmental Remediation

Site Location: Albany St., Babylon, NY (Site No. 1-52-140)



Site No. 1-52-140

Contractor PM: AECOM - Walter Howard

NYSDEC PM: Jeffrey Dyber

Construction Manager: AECOM - Kent Wagoner

Air Monitoring: AECOM Health & Safety: AECOM

## Weather Conditions

General DescriptionSunnyamSunnyPmTemperature45am48PmWind Direction7 mph WNWam12 mph WNWPm

### **HEALTH & SAFETY:**

(\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report).

Were there any changes to the Health & Safety	Plan?	*Yes ( )	No (X)	NA ()
Were there any exceedances at the perimeter action level reported on this date?	Air:	*Yes ( )	No (X)	NA ()
Were there any dust/odor issues reported or observed on this date?		*Yes ( )	No (X)	NA ()

- Onsite at 07:30, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Christensen Drilling (Layne) already onsite. Les Pennington (Wasatch) onsite at 10:00.
- Prior to the start of work, AECOM conducted health and safety meeting, discussed overall goals for day, and setup
  upwind and downwind air monitoring stations. Upwind station installed along west fence line of Suffolk County
  Water Authority (SCWA) property and downwind station installed west of construction trailers. Air monitoring was
  performed in accordance with the Contract Documents and AECOM's Remedial action Work Plan (RAWP): Section
  4.2 Dust Monitoring, Section 5.0 Air Monitoring Plan. No exceedances were recorded.
- Layne maintained poly under drill rig to prevent contamination of ground surface from drill rig fluids. Poly was also
  placed along SCWA western fence line to act as a barrier for sidewalk along Albany Ave. Exclusion zone around
  drill rig was distinguished by the placement of caution tape and traffic barrels.
- Layne began drilling DDC-05 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dual rotary/air rotary techniques. Layne advanced 24-in. diameter borehole to 21 ft below ground surface (bgs). Layne continued to add water to the borehole to act as a lubricant, which increased efficiency. All drill cuttings and water generated were returned to the surface within the annulus between the drill string and outer casing. Cuttings and water were discharged to a poly lined roll-off. Water was pumped from the roll-off and directed to the 4,900-gal poly tank for settling or directed back to DDC-05 for drilling. All drill cuttings (fine-medium sands) were logged by Wasatch. Drilling activities were performed in accordance with Section 02686 Re-Circulation Wells of the Contract Documents.

- Aarco Environmental delivered DDC-05 poly-lined roll-off. AECOM pumping drill water from DDC-06 roll-off to weir tank for settling. Aarco will transport DDC-06 roll-off offsite tomorrow, 08 February 2012.
- No trenching/pipe installation activities were conducted, pending utility mark-out along Benjoe Drive.
- Offsite at 16:00.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
None		Yes ( ) No ( )

# **PROJECT SCHEDULE:**

- DDC well installation (16 January 29 February 2012).
- Install underground piping (30 January 24 February 2012)
- Install airline sump (13 -17 February 2012)

### **ISSUES PENDING:**

- Re-installation of DDC-06 piezometers (DDC-06-PD and DDC-06-PS).
- Posillico is currently acquiring National Grid mark-out near 4 Benjoe Drive to identify unknown location of gas line.

# **ITEMS OF CONCERN:**

None

**Site Representative**: Robert Peterson

Date: 07 February 2012 Fobert February



Layne at DDC-05 and poly lined roll-off, looking northwest.



View of drill rig and drill rods at DDC-05. Note: poly along fence line.



View of 24-in. outer casing at DDC-05.



Drill cuttings and water being ejected into poly lined roll-off.

Report No.: 32 Date: February 07, 2012 1447429



View of DDC-06 well and associated piezometers.

**EA Engineering, P.C.** 

6712 Brooklawn Parkway, Suite 104

Syracuse, NY 13211-2158

NYSDEC Division of Environmental Remediation

Site Location: Albany St., Babylon, NY (Site No. 1-52-140)

Site No. 1-52-140

Contractor PM: AECOM - Walter Howard

NYSDEC PM: Jeffrey Dyber

Construction Manager: AECOM - Kent Wagoner

Air Monitoring: AECOM Health & Safety: AECOM

## Weather Conditions

General Description	Overcast	am	Overcast	Pm
Temperature	32	am	38	Pm
Wind Direction	5 mph W	am	10 mph W	Pm

#### **HEALTH & SAFETY:**

(\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report).

Were there any changes to the Health & Safety	Plan?	*Yes ( )	No	(X)	NA	()
Were there any exceedances at the perimeter action level reported on this date?	Air:	*Yes ( )	No	(X)	NA	( )
Were there any dust/odor issues reported or observed on this date?		*Yes ( )	No	(X)	NA	( )

- Onsite at 07:30, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Christensen Drilling (Layne) and Les Pennington (Wasatch) already onsite.
- Prior to the start of work, AECOM conducted health and safety meeting, discussed overall goals for day, and setup
  upwind and downwind air monitoring stations. Upwind station installed near DDC-06 and downwind station
  installed west of construction trailers. Air monitoring was performed in accordance with the Contract Documents
  and AECOM's Remedial Action Work Plan (RAWP): Section 4.2 Dust Monitoring, Section 5.0 Air Monitoring Plan.
  No exceedances were recorded.
- Layne maintained poly under drill rig to prevent contamination of ground surface from drill rig fluids. Poly was also placed along Suffolk County Water Authority (SCWA) western fence line to act as a barrier for sidewalk along Albany Ave. Exclusion zone around drill rig was distinguished by the placement of caution tape and traffic barrels.
- Layne continued drilling DDC-05 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dual rotary/air rotary techniques. Layne advanced 24-in. diameter borehole to 40 ft below ground surface (bgs). Drill rig lacks power to expel larger (heavier) grained material from borehole via air rotary. Layne uses a 6-in. diameter steel bailer to remove larger grained material from borehole. Layne continued to add water to the borehole to act as a lubricant, which increased efficiency. All drill cuttings and water generated were returned to the surface within the annulus between the drill string and outer casing. Cuttings and water were discharged to a poly lined roll-off. Water was pumped from the roll-off and directed to the 4,900-gal poly tank for settling or directed back to DDC-05 for drilling. All drill cuttings (fine-medium sands) were logged by Wasatch. Drilling activities were performed in accordance with Section 02686 Re-Circulation Wells of the Contract Documents.

- National Grid marked out gas service line to 4 Benjoe Drive. Tomorrow, Posillico will install test hole to determine depth of utility in relation to trench line.
- Offsite at 18:00.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
None		Yes ( ) No ( )

### **PROJECT SCHEDULE:**

- DDC well installation (16 January 29 February 2012).
- Install underground piping (30 January 24 February 2012)
- Install airline sump (13 -17 February 2012)

# **ISSUES PENDING:**

• Re-installation of DDC-06 piezometers (DDC-06-PD and DDC-06-PS).

# **ITEMS OF CONCERN:**

None

**Site Representative**: Robert Peterson

Date: 08 February 2012 Robert Adversor



View of Layne removing material via bailer.



Layne inserting additional drill rods into DDC-05.

**EA Engineering, P.C.** 

6712 Brooklawn Parkway, Suite 104

Syracuse, NY 13211-2158

NYSDEC Division of Environmental Remediation

Site Location: Albany St., Babylon, NY (Site No. 1-52-140)

Site No. 1-52-140

Contractor PM: AECOM - Walter Howard

NYSDEC PM: Jeffrey Dyber

Construction Manager: AECOM - Kent Wagoner

Air Monitoring: AECOM Health & Safety: AECOM

## Weather Conditions

General DescriptionSunnyamSunnyPmTemperature30am47PmWind Direction8 mph NNWam10 mph NNWPm

#### **HEALTH & SAFETY:**

(\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report).

Were there any changes to the Health & Safety	Plan?	*Yes ( )	No (X)	NA	()
Were there any exceedances at the perimeter action level reported on this date?	Air:	*Yes ( )	No (X)	NA	( )
Were there any dust/odor issues reported or observed on this date?		*Yes ( )	No (X)	NA	( )

#### Materials Removed From Site:

Disposal Facility: 110 Sand Company,

Melville, NY

Total Loads: (on this date): 1

Total Loads: (to date):

Total Daily Weight: (est.) 0 tons

Total Weight\*: (approx.) 20 tons

- Onsite at 06:00, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. 07:00 Layne Christensen Drilling (Layne), Posillico, and Les Pennington (Wasatch) onsite.
- Aarco Environmental transported 120 yard roll-off to 110 Sand Company, Melville, NY for disposal. Roll-off contained DDC-06 drill cuttings. Waste manifest signed by Rob Peterson (EA) on behalf of NYSDEC.
- Prior to the start of work, AECOM conducted health and safety meeting, discussed overall goals for day, and setup

<sup>\*</sup>Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

No exceedances were recorded.

Report No.:	34	EA Project File:	1447429	Date: February 09, 2012
upwind and dow	nwind air monitorir	ng stations. Upwind station	installed near DDC-	06 and downwind station
installed west of	construction traile	rs. Air monitoring was perf	ormed in accordanc	e with the Contract Documents
and AECOM's Ro	emedial Action Wor	k Plan (RAWP): Section 4.2	- Dust Monitoring,	Section 5.0 – Air Monitoring Plan.

Layne maintained poly under drill rig to prevent contamination of ground surface from drill rig fluids. Poly was also
placed along Suffolk County Water Authority (SCWA) western fence line to act as a barrier for sidewalk along
Albany Ave. Exclusion zone around drill rig was distinguished by the placement of caution tape and traffic barrels.

- Layne installed 24-in. outer casing to 60 ft below ground surface (bgs), drill head at 40 ft bgs. No drilling activities
  were conducted due to a broken hydraulic pump on drill rig. Drill team spent remainder of day repairing hydraulic
  pump. Drilling activities will resume tomorrow, 10 February 2012.
- Gray Electric continued installing transformer components and connections.
- Posillico hand cleared test hole approximately 10 ft east of DDC-07 along trench line. Prior to startup, Posillico installed necessary traffic controls in accordance with the Traffic Control Plan, Permit No. 60135649. A 4 ft x 4 ft area was excavated to approximately 4 ft bgs. The 1-in. gas service line for 4 Benjoe Drive was indentified at 3.5 ft bgs. The location was marked for future reference and backfilled. Area backfilled using excavated material and compacted using plate compactor. Recycled concrete blend compacted at grade for temporary road use. Posillico will resume trenching/pipe installation tomorrow, 10 February 2012. Backfilling was done in accordance with RAWP Sections 2.3.4, 2.3.4.1, and 2.3.4.2; and Contract Document Sections 02111, 02200, 02220, and 02225.
- Off-site at 16:00.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
None		Yes ( ) No ( )

### **PROJECT SCHEDULE:**

- DDC well installation (16 January 29 February 2012).
- Install underground piping (30 January 24 February 2012)
- Install airline sump (13 -17 February 2012)

#### **ISSUES PENDING:**

• Re-installation of DDC-06 piezometers (DDC-06-PD and DDC-06-PS).

### ITEMS OF CONCERN:

• None

Site Representative: Robert Peterson

Date: 09 February 2012 Robert Peterson



Aarco loading roll-off for off-site disposal. Contents: DDC-06 drill cuttings.



View of gas mark out (yellow) for 4 Benjoe Dr.



View of test hole and 4 Benjoe Dr. Note: Yellow paint on asphalt marks location of gas line.



View of transformer interior and connections.

EA Engineering, P.C.

6712 Brooklawn Parkway, Suite 104

Syracuse, NY 13211-2158

NYSDEC Division of Environmental Remediation

Site Location: Albany St., Babylon, NY (Site No. 1-52-140)

Site No. 1-52-140

Contractor PM: AECOM - Walter Howard

NYSDEC PM: Jeffrey Dyber

Construction Manager: AECOM - Kent Wagoner

Air Monitoring: AECOM Health & Safety: AECOM

# Weather Conditions

General DescriptionSunnyAmSunnyPmTemperature36am47PmWind Direction6 mph Wam12 mph SWPm

#### **HEALTH & SAFETY:**

(\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report).

Were there any changes to the Health & Safety Plan?		*Yes ( )	No (X)	NA ()
Were there any exceedances at the perimeter action level reported on this date?	Air:	*Yes ( )	No (X)	NA ()
Were there any dust/odor issues reported or observed on this date?		*Yes ( )	No (X)	NA ()

# Materials Removed From Site:

Disposal Facility's: 110 Sand Company,

Melville, NY

Total Loads (on this date): 0

Total Loads (to date): 1

Total Daily Weight (est.) 0 tons

Total Weight\* (approx.): 20 tons

- Onsite at 07:15, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne
  Christensen Drilling (Layne) and Posillico Construction (Posillico) already onsite. Les Pennington (Wasatch) onsite
  at 08:30.
- Prior to the start of work, AECOM conducted health and safety meeting, discussed overall goals for day, and setup
  upwind and downwind air monitoring stations. Upwind station installed at intersection of Beta and Benjoe Dr., and
  downwind station near intersection of Albany Ave. and Benjoe Dr. Air monitoring was performed in accordance

<sup>\*</sup>Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

Report No.: 35 EA Project File: 1447429 Date: February 10, 2012 with the Contract Documents and AECOM's Remedial Action Work Plan (RAWP): Section 4.2 – Dust Monitoring, Section 5.0 – Air Monitoring Plan. No exceedances were recorded.

- Layne maintained poly under drill rig to prevent contamination of ground surface from drill rig fluids. Poly was also placed along Suffolk County Water Authority (SCWA) western fence line to act as a barrier to the sidewalk along Albany Ave. Exclusion zone around drill rig was distinguished by the placement of caution tape and traffic barrels.
- Layne resumed drilling DDC-05 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dual rotary/air rotary techniques. Layne advanced 24-in. diameter borehole to 60 ft below ground surface (bgs). Drill rig lacks power to expel larger (heavier) grained material from borehole via air rotary. Layne uses a 6-in. diameter steel bailer to remove larger grained material from borehole. Bailer material temporarily placed on poly and then shoveled to roll-off. Layne continued to add water to the borehole to act as a lubricant, which increased efficiency. All drill cuttings and water generated were returned to the surface within the annulus between the drill string and outer casing. Cuttings and water were discharged to a poly lined roll-off. Water was pumped from the roll-off and directed to the 4,900-gall poly tank for settling or directed back to DDC-05 for drilling. All drill cuttings (fine-medium sands) were logged by Wasatch. Drilling activities were performed in accordance with Section 02686 Re-Circulation Wells of the Contract Documents.
- Posillico continued excavating pipe airline trench along Benjoe Drive from 50 ft west of DDC-07 to DDC-07 (Refer to Revised RAWP Figure 1, Submittal No. 02686-002A). Prior to startup, Posillico installed necessary traffic controls in accordance with the Traffic Control Plan, Permit No. 60135649. A backhoe was used to excavate the 3.6-ft wide DDC airline trench (Refer to RAWP Figure 6 Typical Trench Details). The trench bottom was excavated on a grade, to promote drainage of condensate moisture to airline sumps (see Proposed Pipe Invert Elevations, Submittal 15050-001B). Trench bottom was relatively smooth and free of rock and asphalt. Trench walls were not sloped because depth of trench was less than 4.5-ft below grade (OSHA Trenching Requirements). Excavation activities were completed in accordance with RAWP Section 2.3.4 Utility and Pipe Excavation Plan, Contract Document Section 02220 Excavation and Subgrade Preparation, and Section 02225 Trenching.
- Prior to high-density polyethylene (HDPE) pipe installation, Posillico prefabricated pipe lengths and fittings on SCWA property using heat fusion welds (RAWP Section 2.3.4.1 Piping Installation). Posillico installed HDPE piping from 50 ft west of DDC-07 to DDC-07 (for pipe layout refer to Submittal No. 15050-001B). DDC-08, DDC-09, DDC-10, and two additional sets (spares) of air lines were extended through the trench line to DDC-07. Piping extensions were connected in the trench line using Type A Couplers via Electrofusion (See Submittal No. 15064-001A for specs) and/or heat fusion techniques. Copper tracer wire was continuously placed through the trench. No damaged piping/fittings were used throughout the process. Pressure testing will be conducted once air line installation is complete and backfilled. Piping installation was completed in accordance with RAWP Section 2.3.4.1 Piping Installation and Section 02605 Underground Piping of the Contract Documents.
- Prior to backfilling, unfinished pipe ends were wrapped in plastic to prevent soils from entering. Posillico used excavated material (fine-coarse sand) as backfill. Material contained no rock, asphalt, or sharp edged debris. Backfilled material was compacted in 12-inch lifts using plate compactor. Approximately 6 in. of material placed between lower 6-in. supply lines and upper 4-in. return lines (Pipe Installation Submittal 15050-001B). Recycled concrete blend compacted at grade for temporary road use. Traffic controls removed from street at end of day. Permanent asphalt pavement will be placed once trenching is complete. Backfilling was done in accordance with RAWP Sections 2.3.4, 2.3.4.1, and 2.3.4.2 and Contract Document Sections 02111, 02200, 02220, and 02225.
- Posillico placed 100 ft of temporary asphalt along trench line from DDC-10 to DDC-09. Prior to placement, top 4 in.
  of recycled concrete road base material were removed. Once removed, trench line was re-compacted and asphalt
  was placed. Asphalt and sub-base compacted using plate compactor.
- No concerns/complaints from residences were documented.
- Offsite at 15:00.

**VISITORS TO SITE:** 

NAME Representing Entered Exclusion/CRZ Zone

None Yes ( ) No ( )

### **PROJECT SCHEDULE:**

- DDC well installation (16 January 29 February 2012).
- Install underground piping (30 January 24 February 2012)
- Install airline sump (13 -17 February 2012)

# **ISSUES PENDING:**

Re-installation of DDC-06 piezometers (DDC-06-PD and DDC-06-PS).

# **ITEMS OF CONCERN:**

None

Site Representative: Robert Peterson

Date: 10 February 2012 Robert Peterson



Posillico trenching between DDC-08 and DDC-07, looking east.



Heat fusion weld being performed in trench line.



Posillico using heat fusion welding on 4-in. line.



View of piping in trench line, looking east.



Posillico removing 4-in. of recycled concrete to accommodate asphalt.



Posillico compacting sub-base with plate compactor.



Posillico placing temporary asphalt from DDC-10 to DDC-09, looking east.



View of temporary asphalt at DDC-10 looking east.