**EA Project File:** 1447429 Report No.: 67 Date: April 09, 2012 **EA Engineering, P.C.** Site No. 1-52-140 6712 Brooklawn Parkway, Suite 104 Contractor PM: AECOM - Walter Howard Syracuse, NY 13211-2158 NYSDEC PM: Jeffrey Dyber **Construction Manager: AECOM - Kent Wagoner** NYSDEC Division of Environmental Remediation Site Location: Albany St., Babylon, NY (Site No. 1-52-140) Air Monitoring: AECOM Health & Safety: AECOM Weather Conditions Pm General Description Sunny am Sunny Рm **Temperature** 48 am 63 16-23 WNW Wind Direction 16-23 mph WNW Pm am **HEALTH & SAFETY:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No (X) NA () Were there any changes to the Health & Safety Plan? Were there any exceedances at the perimeter \*Yes ( ) No (X) NA () action level reported on this date? Were there any dust/odor issues reported or \*Yes ( ) observed on this date? No (X) NA () **WASTE HAULING:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No () NA (X) Were there any vehicles that did not display proper D.O.T. numbers and placards? \*Yes ( ) No () NA (X) Were there any vehicles which were not tarped? **Materials Removed From Site:** 

**Disposal Facility: 110 Sand Company** 

Total Loads (on this date): 0 Total Loads (to date): 5

Total Estimated Daily Weight (tons): 0 Total Approximate\* Weight (tons): 100

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

### **Summary of Events:**

- Onsite at 11:00, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Drilling (Layne) and Les Pennington (Wasatch) 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 40 ft west of DDC-10 along Benjoe Dr. and
  downwind station installed at corner of Benjoe Dr. and Beta Dr. 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 at DDC-10 to prevent contamination of ground surface from drill rig fluids.
   Traffic Controls and poly-lined fencing were maintained around DDC-10 exclusion zone.
- Over the weekend approximately 30-feet of sediment infiltrated DDC-10 outer casing. Layne removed sediment using a 6-inch diameter steel bailer. All sediment and water generated during the bailing process were discharged to a poly lined roll-off. Gardiners Clay was encountered at 82 ft below ground surface (bgs). Wasatch and EA confirmed depth of clay aquitard. 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. Tomorrow (10 April 2012), Layne will begin installing DDC-10 well at 82 ft bgs.
- Gray Electric temporarily removed construction trailer power supply line to accommodate placement of treatment system trailers. Treatment systems will be delivered tomorrow.
- No concerns/complaints from residences were documented.
- Offsite at 17:30.

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

## **PROJECT SCHEDULE:**

- DDC well installation (16 January 23 April 2012).
- Develop DDC wells (23 April 07 May 2012).
- DDC Treatment System mobilization (10 April 2012).
- Airline Connections to Treatment System (10 16 April 2012).
- DDC well head assembly (30 April 11 May 2012).

#### **ISSUES PENDING:**

None

## **ITEMS OF CONCERN:**

None

Site Representative: Robert Peterson

Date: 09 April 2012 Robert Peterson

**EA Project File:** 1447429 Report No.: 68 Date: April 10, 2012 **EA Engineering, P.C.** Site No. 1-52-140 6712 Brooklawn Parkway, Suite 104 Contractor PM: AECOM - Walter Howard Syracuse, NY 13211-2158 NYSDEC PM: Jeffrey Dyber **Construction Manager: AECOM - Kent Wagoner** NYSDEC Division of Environmental Remediation Site Location: Albany St., Babylon, NY (Site No. 1-52-140) Air Monitoring: AECOM Health & Safety: AECOM Weather Conditions Pm General Description Sunny am Sunny Рm **Temperature** 43 am 57 Wind Direction 8-18 mph W 8-18 mph W Pm am **HEALTH & SAFETY:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No (X) NA () Were there any changes to the Health & Safety Plan? Were there any exceedances at the perimeter \*Yes ( ) No (X) NA () action level reported on this date? Were there any dust/odor issues reported or \*Yes ( ) observed on this date? No (X) NA () **WASTE HAULING:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No () NA (X) Were there any vehicles that did not display proper D.O.T. numbers and placards? \*Yes ( ) No () NA (X) Were there any vehicles which were not tarped? **Materials Removed From Site:** 

**Disposal Facility: 110 Sand Company** 

Total Loads (on this date): 0 Total Loads (to date): 5

Total Estimated Daily Weight (tons): 0 Total Approximate\* Weight (tons): 100

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

### **Summary of Events:**

- Onsite at 07:00, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Drilling (Layne) and Les Pennington (Wasatch) 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 40-feet west of DDC-10 along Benjoe Dr.
  and downwind station installed at corner of Benjoe Dr. and Beta Dr. 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 at DDC-10 to prevent contamination of ground surface from drill rig fluids.
   Traffic Controls and poly-lined fencing were maintained around DDC-10 exclusion zone.
- Layne began installing DDC-10 recirculation well (See RAWP Figure 2 for general DDC well construction). The well was constructed of 10-in. diameter Schedule 40 polyvinyl chloride (PVC). Centralizers were used to position the well in the borehole. The 12-ft long lower screen (Johnson HQ 0.020 slot) and 1-ft sump (blank casing) were set from 69 to 82 ft bgs, with its bottom slot set near the surface of the clay aquitard. The 15 ft upper screen was screened from 14 to 29 ft bgs to capture the approximate seasonal water table. Layne installed two, 2-in. diameter, Schedule 40 PVC piezometers, mounted on the outside of the DDC well. The deep piezometer (DDC-10-PD) was placed on the north side of DDC-10 and screened over the same interval as the lower DDC well screen. The shallow piezometer (DDC-10-PS) was placed on the south side of DDC-10 and screened over the same interval as the upper DDC well screen. Tomorrow (11 April 2012), Layne will begin placing annular materials at DDC-10.
- Two treatment system trailers and Atlantic Crane were mobilized to the site. Treatment Trailer #1 housed the blowers, knock-out tank, system logic and blower controls, and was lined with acoustical material to reduce sound levels from the blowers. Treatment Trailer #2 housed six vapor phase carbon vessels and associated piping. The crane positioned the system trailers on the crushed concrete pad and both trailers were leveled. Piping connections were made between trailers for closed loop system and 4-in. air supply lines from DDC wells were connected. 6-in. air return lines will be connected at a later date. Vacuum gauges, flow indicators, and sample ports also installed in Treatment Trailer #1. Both Treatment Trailers were installed in accordance with AECOM's RAWP Section 2.3.3 Off-Site Treatment Systems.
- Gray Electric installed sump pumps at each airline sump. Electric and condensate drainage line connections made to pumps.
- Grav Electric reinstalled power supply line to construction trailers.
- No concerns/complaints from residences were documented.
- Offsite at 17:00.

VISITORS TO SITE:			
NAME	Representing	Entered Exclusion	on/CRZ Zone
Dave Maconi	AECOM	Yes (X)	No ( )
Randy Bindis	NES	Yes (X)	No ( )

## **PROJECT SCHEDULE:**

- DDC well installation (16 January 23 April 2012).
- Develop DDC wells (23 April 07 May 2012).
- Airline Connections to Treatment System (10 16 April 2012).
- DDC well head assembly (30 April 11 May 2012).

### **ISSUES PENDING:**

None

### **ITEMS OF CONCERN:**

None

Site Representative: Robert Peterson

Date: 10 April 2012 Robert Peterson



Atlantic Crane along north side of treatment system pad, looking north.



Atlantic Crane positioning Treatment Trailer #2, looking north.



View of 4-in. DDC air supply lines connected to Treatment Trailer #1.



View of piping connections between both trailers. Treatment Trailer #2 on left.

1447429 Report No.: 69 **EA Project File:** Date: April 11, 2012 **EA Engineering, P.C.** Site No. 1-52-140 6712 Brooklawn Parkway, Suite 104 Contractor PM: AECOM - Walter Howard Syracuse, NY 13211-2158 NYSDEC PM: Jeffrey Dyber **Construction Manager: AECOM - Kent Wagoner** NYSDEC Division of Environmental Remediation Site Location: Albany St., Babylon, NY (Site No. 1-52-140) Air Monitoring: AECOM Health & Safety: AECOM Weather Conditions Pm General Description Sunny am Sunny Рm **Temperature** 44 49 am Wind Direction 10 mph N 10 mph NNE Pm am **HEALTH & SAFETY:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No (X) NA () Were there any changes to the Health & Safety Plan? Were there any exceedances at the perimeter \*Yes ( ) No (X) NA () action level reported on this date? Were there any dust/odor issues reported or \*Yes ( ) observed on this date? No (X) NA () **WASTE HAULING:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No () NA (X) Were there any vehicles that did not display proper D.O.T. numbers and placards? \*Yes ( ) No () NA (X) Were there any vehicles which were not tarped? **Materials Removed From Site:** 

**Disposal Facility: 110 Sand Company** 

Total Loads (on this date): 0 Total Loads (to date): 5

Total Estimated Daily Weight (tons): 0 Total Approximate\* Weight (tons): 100

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

### **Summary of Events:**

- Onsite at 07:00, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Drilling (Layne) and Les Pennington (Wasatch) 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 40 ft west of DDC-10 along Benjoe Dr. and
  downwind station installed at corner of Benjoe Dr. and Beta Dr. 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 at DDC-10 to prevent contamination of ground surface from drill rig fluids.
   Traffic Controls and poly-lined fencing were maintained around DDC-10 exclusion zone.
- Layne finished installing annular materials at DDC-10 (See RAWP Figure 2 for general DDC well construction). Ricci #1 sand filter pack was placed appropriate to the upper screen (14–29 ft bgs). #1 Sand was extended 2-ft above the screen to prevent bentonite from entering well screen. Between the screens, the borehole annulus was filled with 3-4 ft long bentonite seals placed at 32, 46, 60 ft bgs, separated by 10-12 ft long sections of choker sand (#00 sand). Layne gradually removed 24 in. outer casing as annular material added to borehole. Annular materials were placed in accordance with AECOM's RAWP Section 2.3.1 Installation of DDC Wells and Figure 2 General DDC Well Construction.

Annular Materials	Depth (ft bgs)
#1 Sand (Lower Screen Filter Pack)	64-84.5
Bentonite	60-64
#00 Sand	50-60
Bentonite	46-50
#00 Sand	36-46
Bentonite	32–36
#1 Sand ( Upper Screen Filter Pack)	12–32
Bentonite	10–12
DDC Vault	0–10

- Piping connections and other system work continued on Suffolk County Water Authority (SCWA) property work towards completion of system installation. Hand rails are installed on top of carbon filter treatment trailer. Railings will be completed after carbon is loaded into the filter housing next week.
- Gray Electric continued with connection of 480-volt panel to system trailers for electrical power for blowers/heaters.
- No concerns/complaints from residences were documented.
- Off-site at 17:45.

VISITORS TO SITE:			
NAME	Representing	Entered Exclu	ısion/CRZ Zone
Dave Maconi	AECOM	Yes (X)	No ( )
Randy Bindis	NES	Yes (X)	No ( )

### PROJECT SCHEDULE:

- DDC well installation (16 January 23 April 2012).
- Develop DDC wells (23 April 07 May 2012).
- Airline Connections to Treatment System (10 16 April 2012).
- DDC well head assembly (30 April 11 May 2012).

## **ISSUES PENDING:**

None

## **ITEMS OF CONCERN:**

None

**David Crandall** Site Representative: the first

**Date:** 11 April 2012



Annular space install at DDC-10.

**EA Project File:** 1447429 Report No.: 70 Date: April 12, 2012 **EA Engineering, P.C.** Site No. 1-52-140 6712 Brooklawn Parkway, Suite 104 Contractor PM: AECOM - Walter Howard Syracuse, NY 13211-2158 NYSDEC PM: Jeffrey Dyber **Construction Manager: AECOM - Kent Wagoner** NYSDEC Division of Environmental Remediation Site Location: Albany St., Babylon, NY (Site No. 1-52-140) Air Monitoring: AECOM Health & Safety: AECOM Weather Conditions Pm General Description P. Cloudy am Sunny Рm **Temperature** 44 Am 58 Wind Direction 9 mph N 8 - 15 NNW Pm Am **HEALTH & SAFETY:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No (X) NA () Were there any changes to the Health & Safety Plan? Were there any exceedances at the perimeter \*Yes ( ) No () NA (X) action level reported on this date? Were there any dust/odor issues reported or \*Yes ( ) observed on this date? No () NA (X) **WASTE HAULING:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No (X) NA () Were there any vehicles that did not display proper D.O.T. numbers and placards? \*Yes ( ) No (X) NA () Were there any vehicles which were not tarped?

## **Materials Removed From Site:**

**Disposal Facility: 110 Sand Company** 

Total Loads (on this date): 1 Total Loads (to date): 6

Total Estimated Daily Weight (tons): 20 Total Approximate\* Weight (tons): 120

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

### **Summary of Events:**

- Onsite at 07:00, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Drilling (Layne) onsite.
- Prior to the start of work, AECOM conducted health and safety meeting, discussed overall goals for day. No air monitoring required, as work involved moving rig and setting up traffic controls at DDC-9; thus, no subsurface activity took place.
- Layne set poly under drill rig at DDC-9 to prevent contamination of ground surface from drill rig fluids. Traffic Controls and poly-lined fencing were set up around DDC-9 exclusion zone.
- Following set up of traffic controls and fencing around DDC-9 exclusion zone, first two sections of casing/drill bit were set up at DDC-9 to commence drilling on 4/13/12. No drilling was completed as new roll-off for drilling spoils did not arrive onsite until 4:50pm.
- Gray Electric was onsite for part of day to continue work connecting 480-volt panel to system trailers for electrical power for blowers/heaters.
- AARCO Environmental picked up DDC-10 roll-off and transported to 110 Sand Company, Melville, NY for disposal.
   Waste manifest signed by Dave Crandall (EA) on behalf of NYSDEC. See above section "Waste Hauling" for additional details.
- One resident near where DDC-10 is located inquired about a divot in lawn (easement between sidewalk and roadway) from drill rig. He did not seem concerned about it, but only asked if it was from drilling operations. Did not request any repair work be completed on it.
- Off-site at 18:00.

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

## **PROJECT SCHEDULE:**

- DDC well installation (16 January 23 April 2012).
- Develop DDC wells (23 April 07 May 2012).
- Airline Connections to Treatment System (10 16 April 2012).
- DDC well head assembly (30 April 11 May 2012).

## **ISSUES PENDING:**

None

#### ITEMS OF CONCERN:

None

Site Representative: David Crandall

**Date:** 12 April 2012



Traffic controls and rig set up at DDC-9. Standing on Beta Dr. looking North.



Traffic controls and rig, looking west.



View of slight rut noted near DDC-10 location.

1447429 Report No.: 71 **EA Project File:** Date: April 13, 2012 **EA Engineering, P.C.** Site No. 1-52-140 6712 Brooklawn Parkway, Suite 104 Contractor PM: AECOM - Walter Howard Syracuse, NY 13211-2158 NYSDEC PM: Jeffrey Dyber **Construction Manager: AECOM - Kent Wagoner** NYSDEC Division of Environmental Remediation Site Location: Albany St., Babylon, NY (Site No. 1-52-140) Air Monitoring: AECOM Health & Safety: AECOM Weather Conditions Pm General Description **Partly Cloudy** am Sunny Рm **Temperature** 44 58 Am Wind Direction 9 mph N 8 - 15 mph NNW Pm Am **HEALTH & SAFETY:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No (X) NA () Were there any changes to the Health & Safety Plan? Were there any exceedances at the perimeter \*Yes ( ) No (X) NA () action level reported on this date? Were there any dust/odor issues reported or \*Yes ( ) observed on this date? No (X) NA () **WASTE HAULING:** (\*If any box(s) below are checked "Yes", list the deviation under the "Items for Concern" section of this report). \*Yes ( ) No () NA (X) Were there any vehicles that did not display proper D.O.T. numbers and placards? \*Yes ( ) No () NA (X) Were there any vehicles which were not tarped? **Materials Removed From Site:** 

**Disposal Facility: 110 Sand Company** 

Total Loads (on this date): 0
Total Loads (to date): 6

Total Estimated Daily Weight (tons): NA Total Approximate\* Weight (tons): 120

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

### **Summary of Events:**

- Onsite at 07:00, spoke with Kent Wagoner and Sam Rowe (AECOM) regarding planned work for the day. Layne Drilling (Layne) 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 in front of 9 Benjoe Dr. and downwind
  station installed in front of 3 Benjoe Dr., approximately 30 ft west of Albany Ave. 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 at DDC-09 to prevent contamination of ground surface from drill rig fluids.
   Traffic controls and poly-lined fencing were set up around DDC-9 exclusion zone.
- Gray Electric onsite to perform some electrical work at Treatment System panel and connections to system.
- Layne began drilling DDC-09 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dual rotary/air rotary techniques. Layne advanced the boring and outer casing to 30 ft bgs (Gardiners Clay estimated at 88 ft bgs). Water was added to the borehole during drilling operations to increase drilling efficiency. Water was obtained from the fire hydrant located on the corner of Albany Ave. and 45<sup>th</sup> Street. All drill cuttings and water generated during drilling 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 will be pumped from the roll-off to a weir tank for settling once water accumulates. All makeup water will be returned to DDC-09 well. Drilling activities were performed in accordance with Section 02686 Re-Circulation Wells of the Contract Documents.
- DDC-09 location was secured for weekend by Layne/AECOM prior to shut down for the day.
- No concerns/complaints from residences were documented.
- Offsite at 10:30.

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

#### **PROJECT SCHEDULE:**

- DDC well installation (16 January 23 April 2012).
- Develop DDC wells (23 April 07 May 2012).
- Airline Connections to Treatment System (10 16 April 2012).
- DDC well head assembly (30 April 11 May 2012).

#### **ISSUES PENDING:**

None

## **ITEMS OF CONCERN:**

None

Site Representative: David Crandall

**Date:** 13 April 2012



Drill Rig setup with casing at DDC-10 as viewed from West.



Traffic controls and rig, with roll off in place for drilling as viewed from East.