1447429 Report No.: 72 **EA Project File:** Date: April 16, 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** 50 Am 86 Wind Direction 9-14 mph SW 9-14 mph SW 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

^{*}Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

Report No.: 72 EA Project File: 1447429 Date: April 16, 2012

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) already on-site.
- 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. 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.
- Layne continued drilling DDC-09 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dualrotary/air-rotary techniques. Layne advanced the boring and outer casing to 50 ft below ground surface (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 45th 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 DDC-09 well. Drilling activities were performed in accordance with Section 02686 – Re-Circulation Wells of the Contract Documents.
- AECOM installed latches and locks on both Treatment Trailers. Keys will be provided to the NYSDEC.
- No concerns/complaints from residences were documented.
- Offsite at 15:30.

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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 well head assembly (30 April 11 May 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

None

Site Representative: Robert Peterson

Robert Peterson **Date:** 16 April 2012

Report No.: 72 EA Project File: 1447429 Date: April 16, 2012



Layne drilling DDC-09, looking north.



View of latch and lock installed on access door to Treatment Trailer #1.

EA Project File: 1447429 Report No.: 73 Date: April 17, 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** 46 77 Am Wind Direction 11-15 mph NW 11-15 mph NW 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

^{*}Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

Report No.: 73 EA Project File: 1447429 Date: April 17, 2012

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) on-site.
- 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. 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.
- Layne continued 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 83.0-feet bgs and encountered clay. 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 45th 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 DDC-09 well. Drilling activities were performed in accordance with Section 02686 Re-Circulation Wells of the Contract Documents. Tomorrow, Layne will begin installing well construction materials at DDC-09.
- AECOM made 6-in. underground air return line connections with Treatment Trailer #1.
- Able Rentals delivered air compressor for DDC well development. Well development will begin on 19 April 2012.
- No concerns/complaints from residences were documented.
- Offsite at 17:00.

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 well head assembly (30 April 11 May 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

None

Site Representative: Robert Peterson

Date: 17 April 2012 Fohrt Februson

Report No.: 73 EA Project File: 1447429 Date: April 17, 2012



Layne drilling DDC-09, looking north.



AECOM installing 6-in. air-return line connections to Treatment Trailer #1.

Report No.: 73 EA Project File: 1447429 Date: April 17, 2012



View of 6-in. air-return line connection to Treatment Trailer #1 manifold.

1447429 Report No.: 74 **EA Project File:** Date: April 18, 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 Partly Cloudy** am Рm **Temperature** 59 46 Am Wind Direction 9-11 mph N 5-7 mph SE 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

^{*}Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

Report No.: 74 EA Project File: 1447429 Date: April 18, 2012

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) on-site.
- 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. 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.
- Layne began installing DDC-09 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 at 71-82 ft below ground surface (bgs), with its bottom slot set near the surface of the clay aquitard (83 ft bgs). The 15-ft upper screen was screened from 15 to 30 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-09-PD) was placed on the north side of DDC-09 and screened over the same interval as the lower DDC well screen. The shallow piezometer (DDC-09-PS) was placed on the south side of DDC-09 and screened over the same interval as the upper DDC well screen. DDC-09 well construction materials were installed in accordance with AECOM's RAWP Section 2.3.1 Installation of DDC Wells and Figure 2 DDC Well Construction. Tomorrow (19 April 2012), Layne will begin placing annular materials at DDC-09.
- AECOM and Layne loaded vapor phase carbon into six 2,000 pound carbon vessels located within Treatment Trailer #2. Carbon super sacks were emptied through rooftop access panels above each vessel.
- Adler Tank Rentals delivered one 21,000 gallon fractionation tank for well development water. Well development will begin tomorrow (19 April 2012) at DDC-05.
- No concerns/complaints from residences were documented.
- Offsite at 17:00.

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 well head assembly (30 April 11 May 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

None

Site Representative: Robert Peterson

Date: 18 April 2012 Fobut February

Report No.: 74 EA Project File: 1447429 Date: April 18, 2012

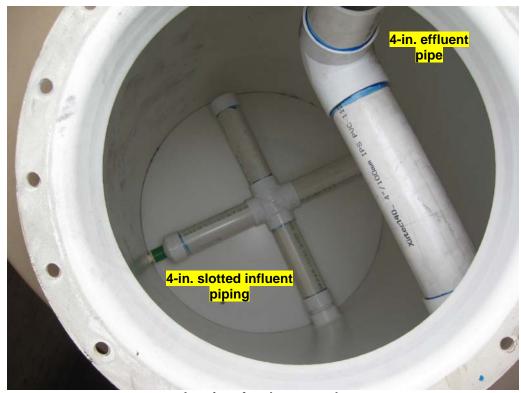


Layne installing upper screen at DDC-09.



AECOM and Layne installing carbon through rooftop access panels.

Report No.: 74 EA Project File: 1447429 Date: April 18, 2012



Interior of carbon vessel.

EA Project File: 1447429 Report No.: 75 Date: April 19, 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 Cloudy **Partly Cloudy** am **Temperature** 49 Pm Am 66 Wind Direction 2-5 mph NW 9-11 mph SW 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 ()

*Yes ()

No (X)

No (X)

NA ()

NA ()

Materials Removed From Site:

Disposal Facility: 110 Sand Company

Were there any vehicles that did not display proper D.O.T.

Were there any vehicles which were not tarped?

Total Loads (on this date): 1 Total Loads (to date): 7

numbers and placards?

Total Estimated Daily Weight (tons): 20 Total Approximate* Weight (tons): 140

*Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

Report No.: 75 EA Project File: 1447429 Date: April 19, 2012

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) on-site.
- 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. 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.
- Layne installed annular materials at DDC-09 (See RAWP Figure 2 for general DDC well construction). Ricci #1 sand filter pack was placed appropriate to the lower screen (71–83 ft below ground surface [bgs]). #1 Sand was extended 7-ft above the screen to prevent bentonite from entering well screen. Layne gradually removed 24-in. outer casing as annular material was 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. Tomorrow (20 April 2012), Layne will demobilize drill rig. drilling equipment, and traffic controls.

Annular Materials	Depth (ft bgs)	
#1 Sand (lower screen filter pack)	83–64	
Bentonite	64–60	
#00 Sand	60–50	
Bentonite	50-46	
#00 Sand	46–38	
Bentonite	38–34	
#1 Sand (upper screen filter pack)	34–12	
Bentonite	12–10	
DDC-09 concrete vault	10–0	

- Layne (well development crew) removed 9.0-feet of sediment in DDC-05. Sediment was removed using a 4-inch diameter steel bailer. Tomorrow (20 April 2012), Layne will begin developing DDC-05.
- Aarco Environmental transported DDC-09 roll-off to 110 Sand Company, Melville, NY for disposal. Waste manifest signed by Rob Peterson (EA) on behalf of NYSDEC. See above section "Waste Hauling" for additional details.
- No concerns/complaints from residences were documented.
- Offsite at 16:30.

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

PROJECT SCHEDULE:

- Develop DDC wells (19 April 07 May 2012).
- DDC well head assembly (30 April 11 May 2012).

ISSUES PENDING:

None

Report No.: 75 EA Project File: 1447429 Date: April 19, 2012

ITEMS OF CONCERN:

• None

Site Representative: Robert Peterson

Date: 19 April 2012 Fobut feterson

Report No.: 75 EA Project File: 1447429 Date: April 19, 2012



Layne bailing sediment from DDC-05, looking north.

EA Project File: 1447429 Report No.: 76 Date: April 20, 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** 53 63 Am Wind Direction 4-6 mph NE 8-11 mph SE 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 (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): 7

Total Estimated Daily Weight (tons): NA Total Approximate* Weight (tons): 140

^{*}Actual (total weight) adjusted periodically based on weight tickets submitted by the disposal facilities.

Report No.: 76 EA Project File: 1447429 Date: April 20, 2012

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) on-site.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Layne demobilized drill rig, support truck, and associated equipment/materials off-site. DDC-09 man-way was temporarily sealed with timber and asphalt. Permanent DDC vault man-way covers will be installed next week (23– 27 April 2012).
- Layne began developing DDC-05 recirculation well using a surge block and pump. The two well screens were individually surged and pumped until the turbidity stabilized. The well was packed off using an inflatable packer to isolate the two screened intervals during development. Layne developed the well for 4 hours. Over that duration (240 minutes) the surge block was run continually and the pump was run 20% of the time, over equally distributed intervals. Well development water was pumped to a fractionation tank for settling. A total of 17,280 gallons were pumped from DDC-05. AECOM sampled the development water throughout the 4-hour period to determine when the screens were completely developed. Development water will be returned to the well once settling occurs. DDC-05 recirculation well was developed in accordance with the Contract Document Section 02686 Re-Circulation Wells and AECOMs Remedial Action Work Plan Section 2.3.1 Installation of DDC Wells.
- No concerns/complaints from residences were documented.
- Off-site at 10:00.

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

PROJECT SCHEDULE:

- Develop DDC wells (19 April 07 May 2012).
- Install permanent DDC vault man-way covers (23 27 April 2012)
- DDC well head assembly (30 April 11 May 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

None

Site Representative: Robert Peterson

Date: 20 April 2012 Kohut February

Report No.: 76 EA Project File: 1447429 Date: April 20, 2012



Layne developing DDC-05 recirculation well, looking north.



View of temporary asphalt patch at DDC-09, looking northeast.