EA Project File: 1447429 Report No.: 62 Date: April 02, 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** 38 59 am Wind Direction 6-8 mph WNW 9-10 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): 4

Total Estimated Daily Weight (tons): 0
Total Approximate* Weight (tons): 80

^{*}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) 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 on corner of Beta Dr. and Benjoe Dr. and
 downwind station installed on 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 both drill rigs to prevent contamination of ground surface from drill rig fluids. Traffic Controls and poly-lined fencing were maintained around DDC-07 exclusion zone.
- Layne finished installing annular materials at DDC-07 (See RAWP Figure 2 for general DDC well construction). Ricci #1 sand filter pack was placed appropriate to the upper screen (14–29 ft below ground surface [bgs]). #1 Sand was extended 2-feet above the screen to prevent bentonite from entering well screen. Between the screens, the borehole annulus was filled with three to four feet long bentonite seals placed at 32, 48, and 62 ft bgs, separated by 10 to 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 (feet bgs)
#1 Sand (Lower Screen Filter Pack)	66 – 83.6
Bentonite	62 – 66
#00 Sand	52 – 62
Bentonite	48 – 52
#00 Sand	36 – 48
Bentonite	32 – 36
#1 Sand (Upper Screen Filter Pack)	12 – 32
Bentonite	10 – 12
DDC Vault	0 – 10

- Layne finished installing DDC-06 deep piezometer (DDC-06-PD). DDC-06-PD was screened over the same interval as
 the lower DDC well screen (69–81 ft bgs). #1 sand filter pack was placed appropriate to the screen and extended 5feet above the screen to prevent intrusion of bentonite. Bentonite was from 50-64 ft and 4–8 ft bgs with a section of
 choker sand from 8–50 ft bgs. Choker sand was placed from 4 ft bgs to grade. DDC-06-PD will be finished as a
 flush mount.
- Layne drilled DDC-06 shallow piezometer (DDC-06-PS). DDC-06-PS was installed 2-ft to the north of DDC-06-PD.
 The borehole was drilled to 29 ft bgs. Tomorrow (3 April 2012), Layne will install DDC-06-PS well construction
 materials and annular materials. Piezometer will be screened over same interval as the upper DDC well screen (14–
 29 ft bgs).
- No concerns/complaints from residences were documented.
- Offsite at 16:30.

VISITORS TO SITE:			
NAME	Representing	Entered Exclusion/CRZ Zone	
Jeff Dyber	NYSDEC	Yes (X) 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: 02 April 2012 Robert Peterson

Photographs



View of DDC-06-PD.



View of DDC-06-PD and DDC-06 well.



View of Layne drilling DDC-06-PS, 2-ft to the north of DDC-06-PD.

EA Project File: 1447429 Report No.: 63 Date: April 03, 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** 38 59 am Wind Direction 6-8 mph WNW 9-10 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): 4

Total Estimated Daily Weight (tons): 0
Total Approximate* Weight (tons): 80

^{*}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 on corner of Beta Dr. and Benjoe Dr. and
 downwind station installed on 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 DDC-06-PS drill rig to prevent contamination of ground surface from drill rig fluids.
- Layne demobilized drilling equipment at DDC-07 and mobilized to DDC-10 (RAWP Figure 1 Off-site DDC System Plan). DDC-07 man-way was temporarily sealed with timber and asphalt. Permanent DDC vault man-way covers will be installed once well installation is complete. AECOM and Layne installed traffic controls and poly-lined fencing around DDC-10 exclusion zone. Section of sidewalk along drill rig (southern edge of Benjoe Dr.) was closed for pedestrian safety. Poly was also placed under drill rig to prevent contamination of ground surface from drill rig fluids. Tomorrow, Layne will begin installing outer casing and drilling DDC-10.
- Due to DDC-10 location, drill rig and roll-off blocked the driveway of 7 Benjoe Drive. EA spoke with the resident of 7
 Benjoe Dr. and explained that the driveway would be blocked for ~7–8 days. Resident stated that they will park on
 the street during the drilling of DDC-10. No concerns or complaints were voiced by the resident.
- Layne finished installing DDC-06 shallow piezometer (DDC-06-PS). DDC-06-PS was screened over the same interval as the upper DDC well screen (14–29 ft below ground surface [bgs]). #1 sand filter pack was placed appropriate to the screen and extended 4-feet above the screen to prevent intrusion of bentonite. Bentonite was placed from 52–10 ft bgs, and choker sand was placed from 2 ft bgs to grade. DDC-06-PS will be finished as a flush mount.
- At 17:00, Mayo Ravenell (11 Benjoe Drive resident) approached Kent Wagoner (AECOM) at DDC-10 and voiced concern about not receiving proper notification of drilling operations and that no drilling equipment/supplies should be placed in front of his property. AECOM informed the resident that drilling operations will not extend pass DDC-10 to the west. Therefore, the resident's property will not be impacted by drilling operations. EA will meet with Mr. Ravenell tomorrow (4 April 2012) to discuss the overall project and schedule.
- Offsite at 16:30.

VISITORS TO SITE:			
NAME	Representing	Entered Exclusion/CRZ Zone	
Jeff Dyber	NYSDEC	Yes (X)	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: 03 April 2012 Robert Peterson

Photographs



View of DDC-06, DDC-06-PD, and DDC-06-PS (looking west).



AECOM installing temporary asphalt patch at DDC-07.



View of roll-off and drill rig at DDC-10, looking west.



View of traffic controls and exclusion zone fencing at DDC-10, looking west.



View of exclusion zone fencing at DDC-10.



View of DDC-10 vault. Note: 4 in. and 6 in. airline piping entering vault.

EA Project File: 1447429 Report No.: 64 Date: April 04, 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 Sunny am Рm **Temperature** 64 am 66 Wind Direction 15 mph NW 16 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): 4

Total Estimated Daily Weight (tons): 0 Total Approximate* Weight (tons): 80

^{*}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 began drilling DDC-10 (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 below ground surface (bgs) (target depth: 87 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. 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.
- EA spoke with Mayo Ravenell (11 Benjoe Drive resident) and discussed the project and fact sheet. The resident voiced concern that he did not receive notification of construction activities and asked that no drilling equipment/supplies be placed in front of his property. EA stated that DDC-10 is the extent of construction activities to the west and therefore no drilling operations, equipment, or supplies will impact his property. EA also outlined the construction schedule, stating that drilling operations will be complete in ~2–2.5 weeks. A project fact sheet and Jeff Dyber's (NYSDEC PM) contact info was left with Mr. Ravenell for his records.
- Tetrasolv Filtration delivered 1,000-lb vapor phase carbon super sacks. Super sacks staged along southern edge of treatment system pad. Carbon will be loaded into treatment system carbon vessels next week.
- Offsite at 16:30.

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

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: 04 April 2012 Fobut februs

Photographs



Layne attaching additional outer casing at DDC-10.



Layne advancing outer casing at DDC-10.



View of 1,000-lb. vapor phase carbon super sacks.

EA Project File: 1447429 Report No.: 65 Date: April 05, 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 Pm **Temperature** 45 55 am Wind Direction 5 mph NW 5 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 (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): 5

Total Estimated Daily Weight (tons): 20 Total Approximate* Weight (tons): 100

^{*}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 continued drilling DDC-10 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dual-rotary/air rotary and bailing techniques. Layne advanced the boring and outer casing to 60 ft below ground surface (bgs) (target depth: 87 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. 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 transported roll-off to 110 Sand Company, Melville, NY for disposal. Roll-off contained drill cuttings from DDC-05 and DDC-06 piezometers. 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 17:30.

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

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: 05 April 2012 Robert February

DFR_152140_05April2012.doc

Report No.: 65 EA Project File: Date: April 05, 2012 1447429

Photographs



Layne attaching additional outer casing at DDC-10.



Layne drilling DDC-10.

DFR_152140_05April2012.doc

EA Project File: 1447429 Report No.: 66 Date: April 06, 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 NA am Pm **Temperature** 40 am NA Wind Direction 9-11 mph N Pm am NA **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

^{*}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 continued drilling DDC-10 (Refer to AECOMs Revised RAWP Figure 1, Submittal No. 02686-002A) using dual rotary/air rotary and bailing techniques. Layne advanced the boring and outer casing to 84 ft below ground surface (bgs) (target depth: 87 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. 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. Monday (09 April 2012), Layne will finish drilling DDC-10 and begin well installation.
- No concerns/complaints from residences were documented.
- Offsite at 10:30.

VISITORS TO SITE:	VIS	SIT	OR	S T	OS	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: 06 April 2012 Fobut Februsan