

DAILY OBSERVATION REPORT

Report No.: 77 EA Project File: 1447429 Date: April 23, 2012

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 Wagener
Air Monitoring: AECOM
Health & Safety: AECOM

Weather Conditions

General Description	Cloudy	am	Cloudy	Pm
Temperature	42	Am	58	Pm
Wind Direction	9-12 mph SW	Am	14-18 mph SW	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 ()	NA (X)
Were there any dust/odor issues reported or observed on this date?	*Yes ()	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).

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?	*Yes ()	No ()	NA (X)

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.

DAILY OBSERVATION REPORT

Report No.: 77

EA Project File:

1447429

Date: April 23, 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 Posillico Construction (Posillico) on-site.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Layne mobilized well development rig and equipment to DDC-06. Tomorrow (24 April 2012), sediment will be bailed from DDC-06.
- Posillico installed DDC manhole frames and covers at DDC-07, DDC-08, DDC-09, and DDC-10. Temporary asphalt patches and timber were removed from DDC vaults using an excavator. Sediment surrounding the concrete vault collars was also removed. All debris was disposed of off-site at Posillico's construction yard. The cast iron H-20 load rated manhole frames and covers were mortared to the concrete vault collars. Bricks and mortar were also used to elevate the manhole covers to grade. DDC manhole frames and covers were installed in accordance with AECOM's Remedial Action Work Plan (RAWP) Section 2.3.2 – DDC Well Manhole Construction. Road base material (recycled concrete blend) was used as backfill around the manhole frames. Temporary asphalt was placed over the road base material. Asphalt and road base material were compacted using a plate compactor. Permanent asphalt pavement will be placed at a later date. 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.
- No concerns/complaints from residences were documented.
- Offsite at 16:00.

VISITORS TO SITE:

NAME	Representing	Entered Exclusion/CRZ Zone	
None		Yes ()	No ()

PROJECT SCHEDULE:

- Develop DDC wells (19 April – 11 May 2012).
- Process development water (24 April – 11 May 2012)
- DDC eductor piping and well head assembly (25 April – 11 May 2012).

ISSUES PENDING:

- None

ITEMS OF CONCERN:

- None

Site Representative:

Robert Peterson

Date: 23 April 2012



Report No.: 77

EA Project File: 1447429

Date: April 23, 2012

Photographs



Posillico removing asphalt patch, timber, and sediment from DDC-10.



Bricks and mortar being placed to elevate manhole cover to grade.

Report No.: 77

EA Project File:

1447429

Date: April 23, 2012



View of DDC-10 manhole frame and cover mortared to concrete vault collar.



Posillico compacting road base material at DDC-09, looking east.

Report No.: 77

EA Project File: 1447429

Date: April 23, 2012



View of temporary asphalt at DDC-09, looking north.

DAILY OBSERVATION REPORT

Report No.: 78 EA Project File: 1447429 Date: April 24, 2012

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 Wagener
Air Monitoring: AECOM
Health & Safety: AECOM

Weather Conditions

General Description	Partly Cloudy	<i>am</i>	Partly Cloudy	<i>Pm</i>
Temperature	43	<i>Am</i>	60	<i>Pm</i>
Wind Direction	14-16 mph SW	<i>Am</i>	21-23 mph SW	<i>Pm</i>

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 ()	NA (X)
Were there any dust/odor issues reported or observed on this date?	*Yes ()	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).

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?	*Yes ()	No ()	NA (X)

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.

DAILY OBSERVATION REPORT

Report No.: 78 EA Project File: 1447429 Date: April 24, 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) onsite.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Layne bailed 10-ft of sediment from DDC-06 via 4-inch diameter steel bailer. Material placed in super sacks and staged on Suffolk County Water Authority (SCWA) property. Sediment will be disposed of once well development is complete.
- Layne remobilized to DDC-05 to remove fine-grained material that settled after development. A centrifugal pump was lowered to the bottom of the well and the material was pumped into the frac tank.
- AECOM began discharging DDC-05 development water to DDC-05 recirculation well. Water was pumped through two 10-gal filter vessels mounted on a secondary poly-lined containment pad. Pressure gauges were installed at the inlet and outlet of both vessels to monitor filter efficiency and a sampling port was installed on the outlet for sample collection and periodic measurements of turbidity. The filtration system operated at 100-110 gallons per minute and achieved less than 50 nephelometric turbidity units (NTUs) between successive well volumes. Well development water was discharged in accordance with the Contract Documents Section 02686 – Re-Circulation Wells and AECOMs RAWP Section 2.3.1 - Installation of DDC Wells.
- Tomorrow (25 April 2012), AECOM and Layne will install DDC-05 eductor piping and well head, continue discharging DDC-05 development water, and begin developing DDC-06. Air line connections to well head will be done at a later date.
- No concerns/complaints from residences were documented.
- Offsite at 17:30.

VISITORS TO SITE:

NAME	Representing	Entered Exclusion/CRZ Zone	
		Yes ()	No ()
None			

PROJECT SCHEDULE:

- Develop DDC wells (19 April – 11 May 2012).
- Process development water (24 April – 11 May 2012)
- DDC eductor piping and well head assembly (25 April – 11 May 2012).

ISSUES PENDING:

- None

ITEMS OF CONCERN:

- None

Site Representative: Robert Peterson

Date: 24 April 2012



Report No.: 78

EA Project File: 1447429

Date: April 24, 2012

Photographs



Layne bailing sediment from DDC-06, looking north.



View of water filtration system.

DAILY OBSERVATION REPORT

Report No.: 79 EA Project File: 1447429 Date: April 25, 2012

EA Engineering, P.C.

6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211-2158



Site No. 1-52-140

Contractor PM: AECOM – Walter Howard
NYSDEC PM: Jeffrey Dyber
Construction Manager: AECOM - Kent Wagener
Air Monitoring: AECOM
Health & Safety: AECOM

NYSDEC Division of Environmental Remediation
Site Location: Albany St., Babylon, NY (Site No. 1-52-140)

Weather Conditions

General Description	Sunny	am	Sunny	Pm
Temperature	45	Am	63	Pm
Wind Direction	7-10 mph NW	Am	12-14 mph SW	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 ()	NA (X)
Were there any dust/odor issues reported or observed on this date?	*Yes ()	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).

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?	*Yes ()	No ()	NA (X)

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.: 79

EA Project File:

1447429

Date: April 25, 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) onsite.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Layne installed DDC-05 eductor piping. The components of the eductor pipe include a 6-in. and 8-in. diameter pipe (connected by a reducer coupling), with two 6-in. x 10-in. packers, a 125-slot screened section at the top, and three rows of eleven 1.5-in. diameter holes in the bottom portion of the eductor pipe (see AECOMs Remedial action Work plan [RAWP] Figure 2 – DDC Well Construction). The eductor was set at the bottom of the well (82 ft below ground surface [bgs]) and extended to the surface with the top of the eductor screen 8-ft above the water table. The two packers were installed below the upper DDC well screen in between the well casing and the 6-in. section of the eductor. The well head was connected to DDC-05 and a temporary cover was placed on top. A permanent lid will be installed once the 4-in. air supply pipe (blower tube) is installed. The eductor pipe and components were installed in accordance with AECOMs RAWP Section 2.3.1 – Installation of DDC Wells and Figure 2 – DDC Well Construction.
- AECOM finished discharging DDC-05 development water to DDC-05 recirculation well. Water was pumped through two (2) 10-gal filter vessels mounted on a secondary poly-lined containment pad. Pressure gauges were installed at the inlet and outlet of both vessels to monitor filter efficiency and a sampling port was installed on the outlet for sample collection and periodic turbidity measurements. The filtration system operated at 100-110 gal per minute and achieved less than 50 nephelometric turbidity units (NTUs) between successive well volumes. Well development water was discharged in accordance with the Contract Documents Section 02686 – Re-Circulation Wells and AECOMs RAWP Section 2.3.1 - Installation of DDC Wells.
- Layne began developing DDC-06 recirculation well using a surge block and pump. The lower well screen was 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 lower screen 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. AECOM sampled the development water throughout the 4 hour period to determine when the screen was completely developed (less than 50 NTUs). DDC-06 lower screen was developed in accordance with the Contract Document Section – 02686 Re-Circulation Wells and AECOMs RAWP Section 2.3.1 – Installation of DDC Wells.
- Tomorrow, Layne will begin developing DDC-06 upper screen and AECOM will continue dewatering the frac tank.
- No concerns/complaints from residences were documented.
- Off-site at 19:00.

VISITORS TO SITE:

NAME	Representing	Entered Exclusion/CRZ Zone	
None		Yes ()	No ()

PROJECT SCHEDULE:

- Develop DDC wells (19 April – 11 May 2012).
- Process development water (24 April – 11 May 2012)
- DDC eductor piping and well head assembly (25 April – 11 May 2012).

DAILY OBSERVATION REPORT

Report No.: 79

EA Project File: 1447429

Date: April 25, 2012

ISSUES PENDING:

- None

ITEMS OF CONCERN:

- None

Site Representative:

Robert Peterson

Date: 25 April 2012



Report No.: 79

EA Project File: 1447429

Date: April 25, 2012

Photographs



Layne installing educator piping and upper packer at DDC-05.



Close up view of DDC-05 upper packer.

Report No.: 79

EA Project File:

1447429

Date: April 25, 2012



View of eductor piping sticking out of DDC-05.



View of DDC-05 well head.

Report No.: 79

EA Project File:

1447429

Date: April 25, 2012



DDC-05 well head and temporary cover.



Close up view of DDC-05 well head and PVC well casing connection.

Report No.: 79

EA Project File:

1447429

Date: April 25, 2012



Looking down into DDC-05 well head to position of eductor piping.



Two vessel filtration system and containment pad.

Report No.: 79

EA Project File:

1447429

Date: April 25, 2012



Representative sample of DDC-05 development discharge water. NOTE: Sample less than 50 NTUs.



Layne surging and pumping DDC-06, looking north.

DAILY OBSERVATION REPORT

Report No.: 80 EA Project File: 1447429 Date: April 26, 2012

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 Wagener
Air Monitoring: AECOM
Health & Safety: AECOM

Weather Conditions

General Description	Cloudy	am	Cloudy	Pm
Temperature	47	Am	60	Pm
Wind Direction	5-10 mph NE	Am	14-16 mph S	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 ()	NA (X)
Were there any dust/odor issues reported or observed on this date?	*Yes ()	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).

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?	*Yes ()	No ()	NA (X)

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.

DAILY OBSERVATION REPORT

Report No.: 80 EA Project File: 1447429 Date: April 26, 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) on-site.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Layne continued developing DDC-06 recirculation well using a surge block and pump. The upper well screen was 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 upper screen 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. AECOM sampled the development water throughout the 4-hour period to determine when the screen was completely developed (less than 50 nephelometric turbidity units [NTUs]). DDC-06 upper screen was developed in accordance with the Contract Document Section – 02686 Re-Circulation Wells and AECOMs Remedial Action Work Plan (RAWP) Section 2.3.1 – Installation of DDC Wells.
- AECOM and Layne video logged DDC-06 recirculation well. No damage was observed during the down-hole camera investigation.
- Tomorrow (27 April 2012), Layne will install DDC-06 eductor piping.
- No concerns/complaints from residences were documented.
- Off-site at 15:00.

VISITORS TO SITE:

NAME	Representing	Entered Exclusion/CRZ Zone	
None		Yes ()	No ()

PROJECT SCHEDULE:

- Develop DDC wells (19 April – 11 May 2012).
- Process development water (24 April – 11 May 2012)
- DDC eductor piping and well head assembly (25 April – 11 May 2012).

ISSUES PENDING:

- None

ITEMS OF CONCERN:

- None

Site Representative: Robert Peterson

Date: 26 April 2012



DAILY OBSERVATION REPORT

Report No.: 81 EA Project File: 1447429 Date: April 27, 2012

EA Engineering, P.C.

6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211-2158



Site No. 1-52-140

Contractor PM: AECOM – Walter Howard
NYSDEC PM: Jeffrey Dyber
Construction Manager: AECOM - Kent Wagener
Air Monitoring: AECOM
Health & Safety: AECOM

NYSDEC Division of Environmental Remediation
Site Location: Albany St., Babylon, NY (Site No. 1-52-140)

Weather Conditions

General Description	Sunny	am	NA	Pm
Temperature	36	Am	NA	Pm
Wind Direction	13-17 mph NW	Am	NA	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 ()	NA (X)
Were there any dust/odor issues reported or observed on this date?	*Yes ()	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).

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?	*Yes ()	No ()	NA (X)

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.

DAILY OBSERVATION REPORT

Report No.: 81

EA Project File:

1447429

Date: April 27, 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) on-site.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Layne installed DDC-06 eductor piping. The components of the eductor pipe include a 6-inch and 8-inch diameter pipe (connected by a reducer coupling), with two 6-in. x 10-in. packers, a 125-slot screened section at the top, and three rows of eleven 1.5-in. diameter holes in the bottom portion of the eductor pipe (see AECOMs Remedial Action Work Plan [RAWP] Figure 2 – DDC Well Construction). The eductor was set at the bottom of the well (83.0' bgs) and extended to the surface with the top of the eductor screen 8-feet above the water table. The two packers were installed below the upper DDC well screen in between the well casing and the 6-inch section of the eductor. The well head and temporary cover will be connected to DDC-06 on Monday, 30 April 2012. A permanent cover will be installed once the 4-inch air supply pipe (blower tube) is installed. The eductor pipe and components were installed in accordance with AECOMs RAWP Section 2.3.1 – Installation of DDC Wells and Figure 2 – DDC Well Construction.
- 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 – 11 May 2012).
- Process development water (24 April – 11 May 2012)
- DDC eductor piping and well head assembly (25 April – 11 May 2012).

ISSUES PENDING:

- None

ITEMS OF CONCERN:

- None

Site Representative:

Robert Peterson

Date: 27 April 2012

