1447429 Report No.: 97 **EA Project File:** Date: May 21, 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 Overcast/Rain Pm General Description Overcast/Rain Am **Temperature** 60 62 Pm Am Wind Direction 7-12 mph ENE 7-12 mph ENE 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.

Summary of Events:

- Onsite at 09:30, spoke with Kent Wagoner, Sam Rowe, and Dave Macone (AECOM) regarding planned work for the day. National Environmental Systems (NES) onsite for startup of treatment systems.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Prior to treatment system startup, AECOM and NES conducted pre-commissioning inspections and tests. Pre-commissioning checklist included DDC wells, piping, valves, gauges, sampling ports, programmable logic controller (PLC), remote access to system, knock-out tanks, blower rotation, ventilation fans/louvers, thermostat controls, and other miscellaneous items. AECOM will furnish a pre-commissioning report that includes factory tests completed by NES and field tests completed by AECOM.
- The system was started using only one blower and two DDC wells (DDC-05 and DDC-06). Once both DDC wells had equilibrated, the second blower was introduced and the remaining DDC wells were added incrementally by two. The system's performance was assessed by gauging DDC piezometers, observing proper aeration within the DDC well heads, and monitoring system components. AECOM was able to achieve a 4–5 ft difference (delta) between the shallow and deep piezometers, which indicated proper convection of the aquifer. AECOM and NES continued to monitor the system and wells throughout the day and collect startup data. The system was allowed to operate overnight.
- Tomorrow (22 May 2012), AECOM and NES will continue to monitor the system and equilibrate DDC wells. Aarco
 Environmental will clean frac tanks located on Suffolk County Water Authority property and Beta Drive. Frac tanks
 will be de-mobilized on 29 May 2012.
- No concerns/complaints from residences were documented.
- Offsite at 17:30.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
Jim Hayward	EA	Yes (x) No ()

PROJECT SCHEDULE:

- Treatment system startup (21 25 May 2012).
- Restoration; permanent asphalt & topsoil/seed SCWA (11 15 June 2012).

ISSUES PENDING:

• None

ITEMS OF CONCERN:

• None

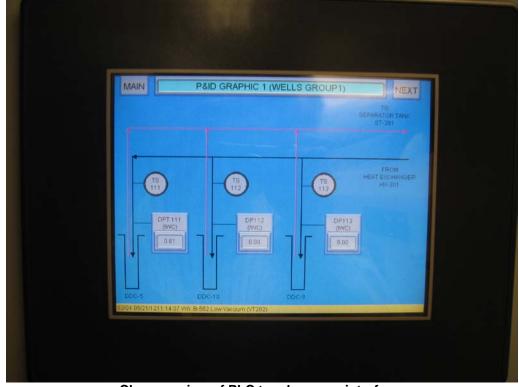
Site Representative: Robert Peterson

Date: 21 May 2012 Robert February

Photographs



View of PLC controller.



Close up view of PLC touch screen interface.



View of variable frequency drive (VFD).



View of Kaeser EB 291C blower.



One of two knock-out tanks and associated piping.



Knock-out tank pump and associated piping.



View of knock-out tanks flow meter (TAG No. FM-601).



View of digital pressure transmitter and associated pitot tubes.



View of vapor phase carbon vessels.



Carbon vessel vacuum gauge and sampling port. NOTE: white tag on right displays Maximum Allowable Working Pressure (MAWP) at 10 psi.

1447429 Report No.: 98 **EA Project File:** Date: May 22, 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 Overcast/Rain Pm General Description Overcast/Rain Am Рm **Temperature** 64 Am 69 Wind Direction 5-8 mph NE 5-8 mph NE 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.

Summary of Events:

- Onsite at 07:30, spoke with Kent Wagoner, Sam Rowe, and Dave Macone (AECOM) regarding planned work for the day. National Environmental Systems (NES) onsite for startup of treatment systems.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- The system operated correctly overnight. Throughout the day AECOM and NES continued to monitor the system
 and make adjustments as needed to achieve proper aeration of DDC wells. EA and AECOM reviewed a startup and
 functional performance checklist, which included the following items:
 - Subsurface: Inspected DDC wells for deficiencies and continued to monitor piezometers. No deficiencies observed.
 - Piping, Valves, and Instrumentation: EA suggested that the configuration of the air supply valves for each DDC well be modified. Currently the valves are located ~8-ft above grade and are not easily accessible.
 AECOM decided to retrofit each valve with a chain pulley that will be accessible from ground level (see attached photos). All other piping and valves operating correctly. Wireless pressure and flow meter transmitters communicating with PLC controller.
 - Knock-out Tanks: Floats adjusted to increase pumping cycles and discharge pumps inspected for proper operation. Current location of discharge line is inefficient and will be relocated. The current location discharges into DDC-05 air supply line, which does not allow for proper drainage to DDC-05. The discharge line will be relocated to DDC-05 air return line, which drains to the sump collection zone and eventually discharges to DDC-06 (see attached photos).
 - Pumps and Blowers: Condensate sump pumps operating correctly. Blowers are communicating properly
 with PLC controller and the following items were tested during startup; start/stop function, operation of
 variable speed, current draw and voltage, temperature at inlet and outlet, and noise level. NOTE: noise level
 of the system is minimal. System is barely audible from 45th Street and/or Albany Avenue.
 - System Controls: Verified PLC controller's set points by manually measuring controlled variables with pressure gauges, thermometers, and velocity meters. Verified interlocks and alarms.
 - ** AECOM's Startup Report will outline above items in greater detail.
- Aarco Environmental cleaned two frac tanks located on Suffolk County Water Authority (SCWA) property and Beta Dr. Aarco removed ~5,000 gal of waste water using a vacuum truck. Waste water was disposed of offsite at Clear Flo Technologies, Inc. 1110A Route 109, North Lindenhurst, NY. Clear Flo submitted proper NYSDEC and Suffolk County permits and approval letter. Rob Peterson (EA) signed waste manifests on behalf of NYSDEC. Aarco also removed fine-grained sediment from bottom of the frac tanks. Sediment was placed in poly-lined roll-off located on SCWA property. Tomorrow (23 May 2012), Aarco will solidify the overly saturated sediment with sawdust. The roll-off will be transported offsite to 110 Sand Company on 29 May 2012.
- Tomorrow (23 May 2012), AECOM will continue to monitor the system and collect O&M data. EA and AECOM will
 conduct system walkthrough and review P&ID diagrams and instrument list.
- No concerns/complaints from residences were documented.
- Offsite at 17:30.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
Jim Hayward	EA	Yes (x) No ()
Walt Howard	AECOM	Yes (x) No ()

PROJECT SCHEDULE:

- Treatment system startup (21 25 May 2012).
- Restoration; permanent asphalt and topsoil/seed SCWA (11–15 June 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

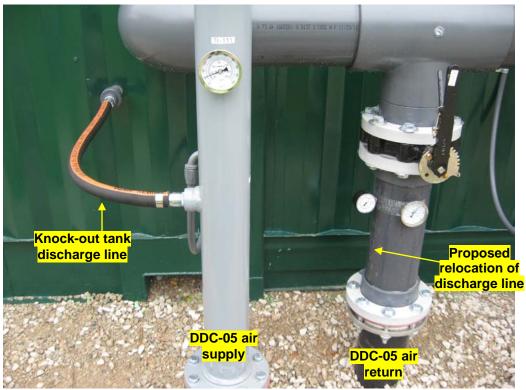
None

Site Representative: Robert Peterson

Date: 22 May 2012 Fobut February



View of air-line piping manifold on exterior of system. Note location of knock-out tank discharge line and air supply valves.



View of DDC-05 supply and return piping and knockout tank discharge line. Note proposed relocation of discharge line.



View of two digital pressure transmitters monitoring air supply pipes.



View of air flow meter.

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View of site glass and floats on knock-out tank.



View of DDC-05 sump vault and sump discharge line.



Thermostat control and temperature probe.

1447429 Report No.: 99 **EA Project File:** Date: May 23, 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** Sunny Am Рm **Temperature** 68 73 Am Wind Direction 3-12 mph SSE 3-12 mph SSE 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.

Summary of Events:

- Onsite at 07:30, spoke with Kent Wagoner, Sam Rowe, and Dave Macone (AECOM) regarding planned work for the day.
- Prior to the start of work, AECOM conducted health and safety meeting and discussed overall goals for day.
- Throughout the day AECOM continued to monitor the system and make adjustments as needed to achieve proper aeration of DDC wells. The system has been operational since 21 May 2012 and is operating correctly.
- AECOM and EA conducted a system walkthrough and reviewed P&ID diagrams and instrument list. A couple of
 pressure gauges were noted as having the incorrect range. No significant discrepancies were noted. Revisions will
 be made to As-Built drawings and the O&M manual.
- Aarco Environmental solidified sediment from frac tanks using sawdust. The roll-off will be transported offsite to 110 Sand Company on 29 May 2012.
- Tomorrow (24 May 2012), Preferred Environmental will begin startup monitoring. Groundwater samples will be collected from the 12 DDC piezometers on days 3 and 7 (23 and 30 May 2012) during the start-up period. Air samples will be collected from the two effluent-carbon sampling ports (2 samples) on days 3, 5, and 7 (23, 25, and 30 May 2012).
- No concerns/complaints from residences were documented.
- Offsite at 17:30.

VISITORS TO SITE:			
NAME	Representing	Entered Exclusion/CRZ Zone	
Jim Hayward	EA	Yes (X) No ()	

PROJECT SCHEDULE:

- Treatment system startup (21-25 May 2012).
- Restoration; permanent asphalt and topsoil/seed SCWA (11-15 June 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

• None

Site Representative: Robert Peterson

Date: 23 May 2012 Robert February

Photographs



Aarco solidifying sediment from frac tanks using saw dust and excavator.

EA Project File: 1447429 Report No.: 100 Date: May 24, 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 NA Am Pm **Temperature** 60 Am NA Wind Direction 6-8 mph ESE 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 () 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.

Summary of Events:

- Onsite at 07:00, spoke with Sam Rowe (AECOM) regarding planned work for the day.
- Upon arrival to the site AECOM and EA noticed that the site access gate chain had been cut and the two construction trailers had been broken into. The construction trailer padlocks had been cut and removed. AECOM notified the Suffolk County Police Department and three officers responded to the scene and conducted an investigation and began compiling a police report. Several items were stolen including a laptop computer, two printers, a wireless router, and modem. A police report is currently being processed and should be available in ~2-weeks. The report can be accessed at www.suffolkpd.org by clicking on the "FOIL-Request Report" icon on the homepage. NOTE: the treatment trailers were not damaged or harmed during the incident.
- Preferred Environmental conducted start-up monitoring. Groundwater samples were collected from the 12 DDC piezometers and air samples were collected from the two effluent-carbon sampling ports (2 samples). Preferred will collect additional groundwater samples on day 7 (30 May 2012) during the start-up period. Additional air samples will be collected on days 5 and 7 (25 and 30 May 2012).
- No concerns/complaints from residences were documented.
- Offsite at 10:00.

VISITORS TO SITE:		
NAME	Representing	Entered Exclusion/CRZ Zone
		Yes () No ()

PROJECT SCHEDULE:

- Treatment system startup (21–25 May 2012).
- Restoration; permanent asphalt and topsoil/seed SCWA (11–15 June 2012).

ISSUES PENDING:

None

ITEMS OF CONCERN:

None

Site Representative: Robert Peterson

Date: 24 May 2012 Robert Februson