Los Alamos Technical Associates, Inc.

756 Park Meadow Road / Westerville, Ohio 43081 / (614) 508-1200 (phone) / (614) 508-1201 (fax) / www.lata.com

September 14, 2017

Mr. Travis Young
Project Manager
US Army Corps of Engineers
Kansas City District
601 East 12th Street
Kansas City, Missouri 64106

SUBJECT: September 2017 Operating Report for the Vestal Well Field 1-1 Superfund Site, Area 4, Vestal, New York

Dear Mr. Young:

Attached is the monthly report for September 2017 on the activities being performed at the Vestal Well field 1-1 Superfund Site, Area 4, Vestal, New York. This report details the activities and data collected at the site over the operating period.

If you have any questions, please feel free call me at (614) 508-1200.

Sincerely,
LOS ALAMOS TECHNICAL ASSOCIATES, INC.

Nathan Canaris
Project Manager

Attachments

cc: Damian Duda – USEPA
Payson Long – NYS DEC
Tom Cimarelli –USACE-NYD
Timothy Leonard – USACE-NYD
Jason Lecuyer – USACE-NWK
Andrew Smith – USACE-NYD
File

TO: Travis Young, Project Manager
United States Army Corps of Engineers (USACE)

FROM: Nathan Canaris, Project Manager
Los Alamos Technical Associates, Inc. (LATA)

SUBJECT: September 2017 Monthly Report on Activities at the Vestal Well field 1-1 Superfund Site, Area 4, Vestal, New York

LATA Project # 11202
Contract # W912DQ-09-D-3003,
Task Order # 008

DATE: September 14, 2017

CURRENT ACTIVITIES

LATA's technician visited the Vestal Area 4 Site for the final regularly scheduled monthly O&M visit on September 5, 2017 to perform the routine monthly inspection and testing of the facilities and equipment, de-energize the treatment system, and transition the site to USACE. A Contracting Officer's Representative from USACE met LATA's technician on-site for the final site inspection and transition.

Work performed during the September 5th visit was; inspect the main treatment system and cell buildings and surrounding areas for issues, inspect the equipment in the main building and ancillary buildings, re-start the system to verify operation, sweep clean the floor of the SVE building and distribution cells, shutdown the SVE system, de-energize the SVE system at the main breaker panel, shut all valves on the influent vacuum pipelines, seal vacuum blower and manifold by closing all valves, seal exhaust fans, verify no fluids in the knockout tank or water storage tank, repair hole in the south wall of main equipment building, drain fuel from weed/brush cutter, and remove and dispose of remaining oil and grease.

Details and photos of the visit are attached. The site inspection forms and three-phase inspection forms detailing the final inspection observations and transition activities during the site visit are attached to this report. No other operational issues were noted during the inspection. Both the distribution buildings and the adjacent parking lot area were inspected and no issues were noted.

There were no communications or concerns with local municipalities or others during this inspection.

Blower Run Hours

Date	Hour Meter Reading
08/02/17	18,356.5
09/05/17	18,356.6
	0.1 hrs. run time

OUTSTANDING ISSUES/RESOLUTIONS

NONE

PLANS FOR NEXT MONTH

NONE

TOTAL ELECTRICITY USAGE
DW96941964 Vestal Well Field

Year	2008			2009											
Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
kwh used	1105	2417	3728	4141	4004	2995	1847	475	350	311	347	552	2011	1918	4134
Cost	$389.66	$483.00	$588.73	$716.13	$492.59	$428.00	$331.56	$190.91	$292.77	$282.02	$350.19	$233.91	$382.99	$372.20	$776.85

2009 YTD Total Usage (kwh) = 23,085
2009 YTD Total Cost = $4,850.12

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2010											
Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
kwh used	3360	3567	2892	585	1189	400	303	342	308	1184	3113	4022
Cost	$481.87	$569.27	$533.39	$212.58	$227.32	$160.27	$145.14	$136.06	$131.83	$267.07	$459.14	$547.56

2010 YTD Total Usage (kwh) = 21,265
2010 YTD Total Cost = $3,871.50

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2011											
Month	Jan	Feb	Mar	Apr	May (1)	June	July (1)	Aug	Sept (2)	Oct	Nov	Dec
kwh used	4040	3667	3341	2172	286	319	293	0	678	1473	3257	4579
Cost	$460.89	$493.33	$415.59	$338.11	-$457.97	$144.99	-$130.93	$0.00	$346.60	$317.96	$487.69	$588.15

2011 YTD Total Usage (kwh) = 24,105
2011 YTD Total Cost = $3,004.41

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2012											
Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
kwh used	4027	4141	1516	515	334	344	289	325	303	0	1065	2601
Cost	$523.86	$549.93	$287.00	$155.04	$138.66	$161.01	$134.87	$154.12	$316.80		$302.85	$520.97
Account Holder - Shaw									**LATA**			

2012 YTD Total Usage (kwh) = 15,460
2012 YTD Total Cost = $3,245.11

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2013											
Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
kwh used	2594	2875	2257	740	377	358	344	354	314	641	2658	3161
Cost	$316.55	$522.94	$485.38	$394.71	$345.18	$347.92	$351.75	$349.49	$344.31	123.75 *	$515.42	$677.78
							LATA					

*- NYSEG error on October billing. LATA notified NYSEG of error and will get corrected bill

2013 YTD Total Usage (kwh) = 16,673
2013 YTD Total Cost = $4,775.18

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2014											
Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
kwh used	3356	3211	2684	1007	373	391	286	350	324	352	1713	2204
Cost	$793.03	$570.31	$581.33	$359.97	$296.86	$294.20	$44.15	$294.56	$292.42	$295.25	$415.87	$239.73
							LATA					

2014 YTD Total Usage (kwh) = 16,251
2014 YTD Total Cost = $4,477.68

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2015											
Month	Jan	Feb	Mar (3)	Apr	May	June	July	Aug	Sept	Oct	Nov (4)	Dec
kwh used	2204	0 *	6735	502	320	400	305	357	324	433	993	1484
Cost	$249.30	$0.00	$1,203.79	$93.37	$283.90	$394.41	$295.20	$292.74	$289.40	$296.82	-$9.48	$392.39
							LATA					

*- NYSEG was not able to perform actual meter reading due to snow.

2015 YTD Total Usage (kwh) = 14,057
2015 YTD Total Cost = $3,781.84

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2016											
Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
kwh used	2534	2936	1203	721	327	358	378	297	367	431	1398	3182
Cost	$198.49	$451.34	$364.52	$317.51	$278.90	$288.42	$310.89	$47.40	$314.22	$100.40	$371.72	$493.34
							LATA					

2016 YTD Total Usage (kwh) = 14,132
2016 YTD Total Cost = $3,537.15

Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas

Year	2017								
Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
kwh used	2390	2204	2163	560	375	423	392	349	
Cost	$213.96	$470.04	$436.35	$331.40	$335.53	$333.45	$327.63	$61.75	
					LATA				

2017 YTD Total Usage (kwh) = 8,856
2017 YTD Total Cost = $2,510.11

(1) = May and July 2011 cost is a previous deposit with interest credited back to account.
(2) = Usage and costs in September 2011 cover August 2011 as well.
(3) = Usage and costs in March 2015 cover February 2015 as well.
(4) = November 2015 cost is a previous deposit with interest credited back to account

SITE PHOTO LOG

Picture 1 - Main Treatment Building Exterior

Picture 2 - Patched Hole on Main Treatment Building South Wall

Picture 3 - Closing Valves on Vacuum Influent Manifold

Picture 4 - All Valves on Influent and Effluent Manifolds Closed

Picture 5 - Distribution Cell 1 Exterior

Picture 6 - Distribution Cell 2 Exterior

SITE VISIT SHEETS

Los Alamos Technical Associates, Inc.
756 Park Meadow Road
Westerville, OH 43081

Field Data Reading Sheet

Site Name VESTAL **Sampled By:** S. Samaroo
Project Number: 60402566.1113064
Date: 9/5/2017
Weather: Rain, 70s

Instrument Identification

Make/Model / Cal info	PID	Other
	NA	NA

Main Equipment Building

Main Control Panel _____ Control Box Locked **No Lock** Control Door Locked **No Lock**

Hour Meter Reading - SVE Unit **18356.6**

SVE Pumping Unit

Injection Blower Temp	NA	°F
Injection Blower Temp Setting	--	
Pressure After Injection Blower	NA	" H2O
Vacuum Blower Temp	NA	°F
Vacuum Blower Temp Setting	--	
Vacuum After Filter	NA	" H2O
Pressure AfterVacuum Blower	NA	" H2O

Grease Seals Checked ☑ Yes ☐ No Date of last Grease 8/2/2017
Oil Levels Checked ☑ Yes ☐ No Date of Last Oil Change 8/2/2017
Belts Checked for Wear ☑ Yes ☐ No Belt Guard in Place Yes

Alarms Present (described below if Yes) ☐ Yes ☑ No

Comments - INSPECTION CHECK LIST COVERED WITH B. PACKOWSKI (USACE)

General Site Observations

Check and Note Condition of Site
Grass around Buildings ☑ OK ☐ Trimmed
Vines and Weeds around Buildings ☑ OK ☐ Trimmed
Comments - NONE

Field Activity Checklist

SVE Wellhead air Flows Measured	☐ Yes	☑ No
SVE Wells Sampled	☐ Yes	☑ No
Carbon Changeout Performed	☐ Yes	☑ No
Water Removal Performed	☐ Yes	☑ No
Exterior of Main building and Cell Buildings Inspected	☑ Yes	☐ No

Summary of Process Air Sampling
NA

Summary of Other Activities - SITE KEYS AND EQUIPMENT TRANSFERRED TO USACE REPRESENTATIVE

Los Alamos Technical Associates, Inc.
756 Park Meadow Road
Westerville, OH 43081

Field Data Reading Sheet

Site Name **VESTAL** **Sampled By: S. Samaroo** **Date** **9/5/2017**

Carbon Bed System

Check all aboveground piping, valves, fittings and other components for cracks or leaks.
Check Carbon Beds connections and associated instrumentation

Pressure Before GAC Unit 1	**NA**	**" H2O**
Temperature Before GAC Unit 1	**NA**	**F**
Pressure Between GACUnit 1 and GAC Unit 2	**NA**	**"H2O**
Pressure Before GAC Unit 2	**NA**	**" H2O**
Temperature Before GAC Unit 2	**NA**	**F**

Water Storage Unit

Check all aboveground piping, valves, fittings and other components for cracks or leaks.
Check Carbon Beds connections and associated instrumentation

Volume of Water in Storage Tank **0** Gallons
Water in Containment Vessel ☐ Yes ☑ No Amount **0** **Inches**

Cell 1 Distribution Building

Check all aboveground piping, valves, fittings and other components for cracks or leaks and adequacy of seals

Building Locked	☑ Yes	☐ No				
Control Box Locked	☑ Yes	☐ No				
Control Box Disconnect On	☐ Yes	☑ No	240 V Disconnect On	☐ Yes	☑ No	
Selector Switch	☐ MAN	☐ OFF	☑ AUTO			
Vacuum Status Light	☑ OFF	☐ ON				

Electrical Heat Breaker	☐ Yes ☑ No	
Heater Thermostat Setting	**NA**	**°F**
Pressure at Injection Manifold	**NA**	**"H2O**
Temperature at Injection Manifold	**NA**	**°F**
Vacuum at Vacuum Manifold	**NA**	**"H2O**
Temperature at Vacuum Manifold	**NA**	**°F**
Vacuum at Knockout Tank	**NA**	**"H2O**
Water Pump Pressure Relief Settings	--	**psi**

Cell 2 Distribution Building

Check all aboveground piping, valves, fittings and other components for cracks or leaks and adequacy of seals

Building Locked	☑ Yes	☐ No				
Control Box Locked	☑ Yes	☐ No				
Control Box Disconnect On	☐ Yes	☑ No	240 V Disconnect On	☐ Yes	☑ No	
Selector Switch	☐ MAN	☐ OFF	☑ AUTO			
Vacuum Status Light	☑ OFF	☐ ON				

Electrical Heat Breaker	☐ Yes ☑ No	
Heater Thermostat Setting	**NA**	**°F**
Pressure at Injection Manifold	**NA**	**"H2O**
Temperature at Injection Manifold	**NA**	**°F**
Vacuum at Vacuum Manifold	**NA**	**"H2O**
Temperature at Vacuum Manifold	**NA**	**°F**
Vacuum at Knockout Tank	**NA**	**"H2O**
Water Pump Pressure Relief Settings	--	**psi**

Comments

Signature of Operator/Tech **Sunil Samaroo** **Date** **9/5/2017**

Daily Quality Control Report

Date: 09/05/2017		**Report No.**					
Project: VESTAL	**Day:**	Su	M	T	W	Th	F	Sa
Project no.: 60402566.11130644	**Weather:**	Clear	Cloudy		Overcas		Rain	Snow
Project Manager: Nathan Canaris	**Temp. (°F)**	To 32°	32° - 50°		50°- 70°		70° - 85°	85° up
Project QC Officer:	**Wind:**	Still	Moderate		High			
	Humidity:	Dry	Moderate		High			

Personnel onsite:
Sunil Samaroo (AECOM)
Brian Packowski (ACE)
Sampling equipment on site:
N/A
Work performed:
Performed final site observations with B. Packowski, recorded system readings
in main equipment building, Cell 1 distribution building, and Cell 2 distribution building.

Daily Quality Control Report (continued)

Project: VESTAL **Report no**.:

Project no.: 60402566.11130644 **Date**: 09/05/2017

Quality control activities (including field calibrations):
N/A
Health and safety levels and activities:
Problems encountered/corrective actions taken:
Small animal was able to get into the main building through small holes
inside the main building. The holes were patched with wood from
inside the main building
rodent bait blocks were placed around the inside of the main building.
Special notes:
Tomorrow's expectations:

Sheet _2__ of _2__

By: _Sunil Samaroo_____Title:_Environmental Scientist_

PREPARATORY INSPECTION CHECKLIST FORM

REPORT NO.	DATE/SHIFT 9/5/17
ITEM/ACTIVITY INSPECTED SVE System Handoff	

PREPARATORY SITE CONDITIONS

- Review QCP and APP/SSHP
- Verify the following inspection checklists are on-hand: Preparatory Inspection Checklist, Initial Inspection Checklist, Follow-up Inspection Checklist

CONTRACT VARIANCE

ACTIVITIES/ITEMS REQUIRING COMPLETION

- Perform routine SVE system startup and system checks
- Perform routine facility maintenance
- Sweep clean the floor of the SVE building and distribution cells
- Shutdown SVE system
- De-energize SVE system at main breaker panel
- Shut all valves on the influent vacuum pipelines
- Seal vacuum blower and manifold by closing all valves
- Seal exhaust fans
- Verify no fluids in the KO tank or water storage tank
- Repair hole on south wall of main equipment building
- Drain fuel from weed/brush cutter
- Remove and dispose of remaining oil and grease

COMMENTS

MEETING ADDRESS
210 Stage Road, Vestal, NY

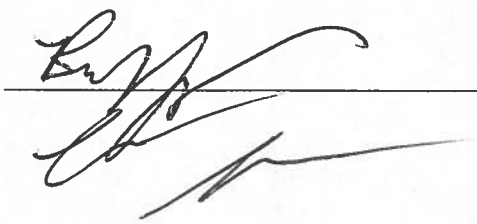
NAME	SIGNATURE	TITLE
[signature]	Sergei Samarov	Env. Scientist
Brian Packowski	[signature]	Civil Engineer

PREPARATORY INSPECTION CHECKLIST FORM

REPORT NO.		DATE/SHIFT 9/5/17	
ITEM/ACTIVITY INSPECTED SVE System Handoff			
DRAWING REFERENCE N/A	REV.	SPECIFICATION REFERENCE N/A	REV.
PERMITS/LICENSES OBTAINED		YES/NO	REFERENCE NO.
WORK PLAN WRITTEN QCP, APP/SSHP		YES/NO Yes	REFERENCE NO.
QC INSPECTION PLAN WRITTEN QCP		YES/NO Yes	REFERENCE NO.
REQUIRED SUBMITTALS APPROVED		YES/NO	REFERENCE NO.
REQUESTS FOR INFORMATION ANSWERED		YES/NO	REFERENCE NO.
FCRs/DCNs APPROVED/ISSUED		YES/NO	REFERENCE NO.
NONCONFORMANCES DISPOSITIONED/CLOSED		YES/NO	REFERENCE NO.
MATERIAL/EQUIPMENT AVAILABLE		QUANTITY	CONDITION
Mowing Equipment – weed/bush cutter			Inspect for integrity
Hand Tools			Inspect for integrity

INITIAL INSPECTION CHECKLIST FORM

REPORT NO.				DATE/SHIFT 9/5/17	
ITEM/ACTIVITY INSPECTED SVE System Handoff					
DRAWING REFERENCE	REV.	DRAWING REFERENCE		REV.	
SITE CONDITIONS Overall satisfactory condition					
INSPECTION ATTRIBUTE	SPECIFICATION REFERENCE	ACCEPTANCE CRITERIA	INSPECTION RESULT	ACCEPT/REJECT	
System O&M – Start system and collect system performance data. Perform general maintenance for the system as needed. Inspect motors, blowers, heat exchangers and discharge and purge pumps. Inspect system piping and control and relief valves. Inspect electrical controls.	WBS 3.0	QCP 3.0	Ok	√	
Facility Maintenance – Perform weed control and grounds maintenance around the SVE system building and two distribution cells. Perform general interior and exterior maintenance of the SVE system building and two distribution cells, and the fences and lighting.	WBS 4.0	QCP 3.0	OK	√	
REQUESTS FOR INFORMATION ISSUED/SUBJECT			REFERENCE NO.		
FCRs ISSUED/SUBJECT			REFERENCE NO.		
NONCONFORMANCES ISSUED/SUBJECT			REFERENCE NO.		
REINSPECTION REQUIRED	YES	NO X			



INITIAL INSPECTION CHECKLIST FORM

DATE/SHIFT	REPORT NO.
9/5/17	

ITEM/ACTIVITY INSPECTED

SVE System Handoff

COMMENTS

- Verify daily tailgate safety meeting has been conducted and documented
- Verify QCP and APP/SSHP have been reviewed
- Verify routine SVE system startup and system checks have been performed
- Verify routine facility maintenance has been performed
- Verify the floor of the SVE building and distribution cells has been swept clean
- Verify the SVE system has been shutdown
- Verify the SVE system has been de-energized at main breaker panel
- Verify all valves on the influent vacuum pipelines have been shut
- Verify the vacuum blower and manifold has been sealed by closing all valves
- Verify all exhaust fans have been sealed
- Verify no fluids in the KO tank or water storage tank
- Verify the hole on south wall of main equipment building has been repaired
- Verify all fuel has been drained from the weed/brush cutter
- Verify removal and disposal of remaining oil and grease

Documentation:

- Document all activities on the inspection checklists

CONTRACT VARIANCE

ATTENDEES

Sunil Sawarkar — ENV Scientist

NAME	SIGNATURE	TITLE
Brian Radkowski		Civil Engineer

FOLLOW-UP INSPECTION CHECKLIST FORM

DATE/SHIFT 9/5/17				REPORT NO.	
PROJECT NAME/NUMBER					
ITEM/ACTIVITY INSPECTED SVE System Handoff					
DRAWING REFERENCE	REV.	DRAWING REFERENCE			REV.
INSPECTION ATTRIBUTE		SPECIFICATION REFERENCE	ACCEPTANCE CRITERIA	INSPECTION RESULT	ACCEPT/ REJECT
System O&M – Start system and collect system performance data. Perform general maintenance for the system as needed. Inspect motors, blowers, heat exchangers and discharge and purge pumps. Inspect system piping and control and relief valves. Inspect electrical controls.		WBS 3.0	QCP 3.0	OK	√
Facility Maintenance – Perform weed control and grounds maintenance around the SVE system building and two distribution cells. Perform general interior and exterior maintenance of the SVE system building and two distribution cells, and the fences and lighting		WBS 4.0	QCP 3.0	OK	√
REQUESTS FOR INFORMATION ISSUED/SUBJECT				REFERENCE NO.	
FCRs ISSUED/SUBJECT				REFERENCE NO.	
NONCONFORMANCES ISSUED/SUBJECT				REFERENCE NO.	
REINSPECTION REQUIRED		YES	NO X		

COMMENTS

- Verify daily tailgate safety meeting has been conducted and documented
- Verify QCP and APP/SSHP have been reviewed
- Verify routine SVE system startup and system checks have been performed
- Verify routine facility maintenance has been performed
- Verify the floor of the SVE building and distribution cells has been swept clean
- Verify the SVE system has been shutdown
- Verify the SVE system has been de-energized at main breaker panel
- Verify all valves on the influent vacuum pipelines have been shut
- Verify the vacuum blower and manifold has been sealed by closing all valves
- Verify all exhaust fans have been sealed
- Verify no fluids in the KO tank or water storage tank
- Verify the hole on south wall of main equipment building has been repaired
- Verify all fuel has been drained from the weed/brush cutter
- Verify removal and disposal of remaining oil and grease

Documentation:

- Document all activities on the inspection checklists

Brian Rutkowski RM — Civil Engineer
NAME SIGNATURE TITLE

Sunil Bawa — Env. Scientist