

#### **VIA ELECTRONIC MAIL**

November 14, 2022

Mr. Christopher Mannes III, P.E. Environmental Engineer II New York State Department of Environmental Conservation 615 Erie Boulevard West Syracuse, NY 13204-2400

**Subject:** Third Quarter 2022 Progress Report

Former Rollway Bearing Corporation Facility, Liverpool, New York

Agreement Index Number: V7-1007-96-10; Site No. V00202

#### Dear Mr. Mannes:

On behalf of Emerson Electric Co., WSP USA Inc. (WSP) is submitting this Third Quarter 2022 Progress Report for the former Rollway Bearing Corporation facility in Liverpool, New York. This quarterly progress report summarizes all work completed at the site from July through September 2022, and work planned for October through December 2022. The report was prepared in accordance with the requirements of the revised Site Management Plan (SMP), dated May 4, 2021, and includes the following information:

- a summary of all work completed and the results of sampling and testing performed during the reporting period
- a summary of reports and deliverables that were completed and submitted during the reporting period
- an estimate of the percentage of completion of the approved work plan activities, problems encountered during the quarter and actions taken to alleviate those problems, and modifications to work plans approved by the New York State Department of Environmental Conservation (NYSDEC)
- a description of activities anticipated to be completed during the next quarter

### **WORK COMPLETED**

The following activities were completed during July through September 2022:

#### **LNAPL RECOVERY SYSTEM**

- From August 17 through 19, 2022, Emerson performed a voluntary high-vacuum removal event using a vacuum truck to remove residual light non-aqueous phase liquid (LNAPL) primarily from wells OW-2, OW-3, OW-5, OW-11/FB-4, and RW-1 (Figure 1). Vacuum was also applied to SB-5 and SB-8 for approximately 20 minutes; however, these were essentially dry due to low rainfall over the summer months. The LNAPL removal activities were conducted in accordance with WSP's email to Christopher Mannes of the NYSDEC, dated May 3, 2021, and consisted of applying a high vacuum to the wells using an air-tight well cap equipped with a drop tube. During the 3-day event, approximately 745 gallons of liquid were removed from the wells and pumped into a vacuum truck. The vacuum truck remained onsite for 3 days to allow time for the emulsified quench oil to form a separate-phase layer on the surface for measurement.
- On August 22, 2022, WSP measured 0.015 foot of LNAPL in the vacuum truck tank, which is equivalent to approximately 9 gallons (or approximately 1 percent of the recovered liquid). The recovered liquids were transported offsite for disposal at the permitted Covanta Environmental Solutions facility in Oriskany, New York (Enclosure A). On completion of the high-vacuum removal event, the system's vacuum blower was left off and the absorbents were left suspended above the water table in the targeted wells to evaluate LNAPL recovery under ambient conditions.
- WSP conducted an operation, maintenance, and monitoring (OM&M) visit on August 31, 2022. During the visit, WSP obtained LNAPL thickness measurements from the wells targeted during the high-vacuum removal event. The

WSP USA One Penn Plaza New York, NY 10119



measurements indicated the presence of 0.09 foot of LNAPL in OW-3, 0.02 foot of LNAPL in OW-5, 0.03 foot of LNAPL in OW-11/FB-4, and 0.01 foot of LNAPL in RW-1 (Figure 1; Table 1). Wells SB-5 and SB-8 were dry. Therefore, LNAPL had accumulated in wells OW-3, OW-5, and OW-11/FB-4 above the remedial action objective of 0.01 foot within 12 days of completing the high-vacuum removal event.

— During the August 31 OM&M visit, absorbent socks that were left suspended in wells RW-1, OW-2, OW-3, OW-5, and OW-11/FB-4 following the high-vacuum removal event were re-deployed into the water column. The absorbent in well OW-1 was replaced. The absorbents in the remaining wells were not replaced because no significant staining was observed on the absorbents (Enclosure B). The spent absorbents were weighed and placed in a U.S. Department of Transportation (DOT)-compliant 55-gallon steel drum for subsequent characterization and offsite disposal. On completion of the OM&M activities, the LNAPL recovery system vacuum blower was restarted and system performance measurements were collected. The OM&M log is included in Enclosure C.

#### SUB-SLAB DEPRESSURIZATION SYSTEM

— The sub-slab depressurization system (SSDS) installed in the eastern portion of the facility was operational during the quarter (Figure 2). On August 31, 2022, WSP inspected the SSDS to ensure its proper operation and collected bimonthly vacuum readings from the SSDS extraction points. The vacuum readings obtained from the SSDS extraction points are documented on the SSDS Inspection Form, which is included in Enclosure D and summarized in Table 2.

### RESULTS OF SAMPLING AND TESTING

- On August 31, 2022, measurable LNAPL was present in wells OW-3, OW-5, and OW-11/FB-4 (Figure 1; Table 1).
- WSP estimates that approximately 9 gallons of LNAPL were removed from the wells during the reporting period.

### REPORTS AND DELIVERABLES

- On July 11, 2022, WSP submitted the Periodic Review Report (PRR) to the NYSDEC and New York State Department of Health, which covered the reporting period from June 21, 2021, through June 21, 2022.
- WSP submitted the Second Quarter 2022 Progress Report to the NYSDEC on August 2, 2022, which summarized activities conducted from April through June 2022.

### PERCENTAGE OF COMPLETION

WSP estimates that the project is 90 percent complete.

### DIFFICULTIES/MODIFICATIONS TO WORK PLAN

During the quarter, system operating parameters were generally within typical operating ranges with the following exceptions:

The vacuum readings for LNAPL recovery wells OW-2 and OW-8, collected on August 31, 2022, were below the typical operating range; however, the flow from these wells was relatively uniform and, thus, no corrective action is recommended at this time (Enclosure C).

#### **WORK PLANNED**

The following work has been completed, or is anticipated to be undertaken in October through December 2022:

- WSP conducted an OM&M visit on October 12, 2022, to ensure proper operation of the LNAPL recovery system and SSDS. The O&M logs for this event will be provided in the Fourth Quarter 2022 Progress Report.
- During the October 12, 2022, site visit, absorbent socks were removed from wells RW-1, RW-2, OW-1, OW-2, OW-3, OW-4, OW-5, OW-8, SB-5, SB-8, OW-9/FB-2, OW-10/FB-1, and OW-11/FB-4, weighed, and placed in a DOT-compliant 55-gallon steel drum for subsequent characterization and offsite disposal. The field form for this event will be provided in the next quarterly progress report.



- In November 2022, WSP will collect LNAPL thickness measurements from all wells, and on completion of the measurements, new absorbents will be installed in all applicable wells.
- In December 2022, WSP will conduct an OM&M visit to ensure proper operation of the LNAPL recovery system and SSDS.

Please contact us at (315) 374-5574 with any questions regarding this Third Quarter 2022 Progress Report, or other aspects of the project.

Sincerely yours,

Min E. Silfer, P.G.
Practice Leader

BES:rlo

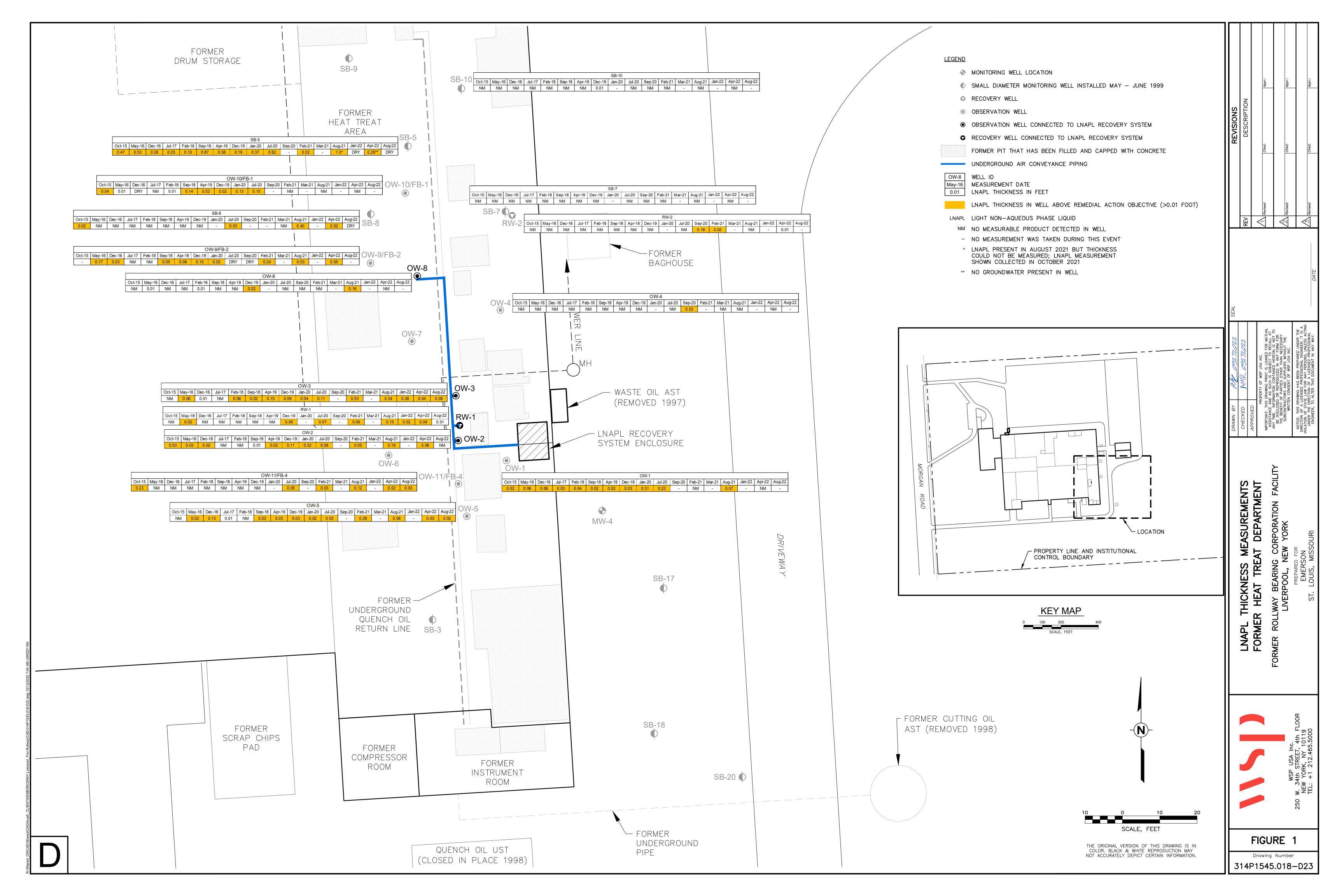
**Enclosures** 

cc/encl.: Mr. Johnathan Robinson, New York State Department of Health

Mr. Stephen L. Clarke, Emerson

Sheila M. Harvey, Esquire, Pillsbury Winthrop Shaw Pittman

# **FIGURES**





# **TABLES**

Table 1

### LNAPL Thickness Measurements in Former Heat Treat Department Former Rollway Bearing Corporation Facility Liverpool, New York

								I NAPI. N		t (feet)							
Well	Oct-15	May-16	Dec-16	Jul-17	Feb-18	Sep-18	Apr-19	Dec-19	Jan-20	Jul-20	Sep-20	Feb-21	Mar-21	Aug-21	Jan-22	Apr-22	Aug-22
OW-1	0.02	-		0.03	0.04	-	1	0.03	0.31	0.22	1	NM		0.07		NM	
		0.06	0.06	0.00		0.02	0.02				-	- 1-1-	-	0.00.	-	- ,-,-	<u>-</u>
OW-2	0.03	0.03	0.02	NM	NM	0.01	0.02	0.11	0.32	0.08	-	0.05	-	0.19	-	0.06	NM
OW-3	NM	0.06	0.01	NM	0.06	0.02	0.15	0.09	0.04	0.11	-	0.53	-	0.34	0.08	0.04	0.09
OW-4	NM	-	NM	0.03	-	NM	NM	-	NM	-							
OW-5	NM	0.02	0.13	0.01	NM	0.02	0.03	0.03	0.02	0.03	-	0.29	-	0.08	-	0.03	0.02
OW-8	NM	0.01	NM	NM	0.01	NM	NM	0.02	-	NM	NM	NM	-	0.16	-	NM	-
OW-9/FB-2	-	0.17	0.03	NM	NM	0.05	0.08	0.15	0.02	DRY	DRY	0.24	-	0.03	-	0.05	-
OW-10/FB-1	0.04	0.01	DRY	NM	0.01	0.14	0.03	0.02	0.13	0.15	-	NM	-	NM	-	NM	-
OW-11/FB-4	0.23	NM	-	0.05	-	0.03	-	0.12	-	0.02	0.03						
RW-1	NM	0.02	NM	NM	NM	NM	NM	0.06	-	0.07	-	0.09	-	0.15	0.02	0.04	0.01
RW-2	NM	-	NM	0.19	0.02	-	NM	-	0.01	-							
SB-5	0.47	0.53	0.26	0.25	0.10	0.87	0.38	0.19	0.37	0.82	-	0.02	-	1.0*	DRY	0.29**	DRY
SB-7	NM	-	NM	NM	NM	-	NM	-	NM	-							
SB-8	0.02	NM	-	0.03	-	-	NM	0.40	-	0.02	DRY						
SB-10	NM	0.01	-	NM	NM	NM	-	NM	-	NM	-						

Notes:

LNAPL = light non-aqueous phase liquid

LNAPL thickness above remedial action objective (> 0.01 foot).

NM = No measurable product detected in well.

"-" = No measurement collected during this event.

\* = LNAPL present in August 2021 but thickness could not be measured; LNAPL measurement shown collected in October 2021.

\*\* = No groundwater present in well.

Table 2

## SSDS Monitoring and Maintenance Summary Former Rollway Bearing Corporation Facility Liverpool, New York (a)

SSDS Extraction Points	Vacuum (inches water column)										
Date:	9/18/2020 (start-up)	1/21/2021	4/21/2021	6/10/2021	8/24/2021	10/14/2021	12/6/2021	2/28/2022	4/4/2022	6/2/2022	8/31/2022
SSD-01	-9.34	-8.02	-8.53	-8.74	-7.25	-7.85	-8.48	-8.66	-8.53	-7.65	-6.95
SSD-02 (b)	-0.77	NM	-0.91	-1.03	-0.15	-0.48	-0.80	-0.81	-0.81	-0.45	-0.34
SSD-03	-24.27	-25.72	-25.94	-25.05	-23.31	-24.04	-0.50	-0.25	-36.01	-35.00	-28.80
SSD-04	-31.52	-30.51	-27.87	-26.99	-19.50	-20.78	-27.30	-27.14	-28.40	-19.90	-18.22
SSD-05 (b)	-0.38	NM	-0.49	-0.47	-0.01	-0.19	-0.48	-0.64	-0.39	-0.53	-0.34
SSD-06	-24.03	-25.12	-26.02	-25.82	-24.10	-25.32	-26.47	-26.14	-26.07	-23.88	-24.25
SSD-07	-24.68	-25.56	-25.60	-25.07	-23.58	-23.61	-23.50	-24.02	-22.70	-22.39	-22.11
SSD-08 (b)	-0.36	NM	-0.80	-1.12	-0.08	-0.41	-0.71	-0.89	-0.62	-0.44	-0.33
SSD-09	-24.59	-25.85	-26.11	-26.33	-24.30	-25.08	-26.07	-25.94	-25.74	-24.80	-24.60
SSD-10	-25.56	-26.32	-26.55	-26.49	-0.08	-0.41	-0.48	-0.56	-0.42	-0.38	-0.32
SSD-11 (b)	-0.79	NM	-1.35	-1.06	-1.04	-1.54	-1.21	-1.28	-0.90	-0.87	-0.85
SSD-12	-25.80	-27.86	-18.96	-18.25	-18.49	-19.01	-18.44	-18.91	-17.01	-0.42	-0.47
SSD-13	-5.11	-5.85	-7.25	-7.36	-5.28	-5.44	-6.12	-6.02	-6.12	-5.55	-5.67
SSD-14	-3.10	-3.32	-3.94	-4.11	-2.59	-3.03	-3.60	-3.89	-0.55	-3.07	-3.05
SSD-15	-4.05	-4.86	-5.40	-5.92	-4.36	-4.58	-5.04	-5.96	-5.03	-4.65	-4.76
SSD-16	-4.29	-4.45	-4.93	-4.06	-3.83	-4.20	-4.74	-4.02	-4.66	-4.36	-4.26
SSD-17	-2.36	-2.09	-2.55	-2.74	-1.37	-1.09	-1.61	-2.01	-1.58	-1.16	-3.11
SSD-18	-21.84	-25.69	-20.83	-20.41	-0.24	-20.45	-18.33	-19.12	-27.63	-24.88	-18.47
SSD-19	-21.28	-21.14	-21.66	-20.19	-18.34	-19.66	-21.24	-20.99	-21.15	-0.20	-0.20
SSD-20 (b)	-0.76	NM	-1.02	-1.29	-0.49	-1.02	-1.09	-1.06	-0.88	-0.81	-0.78
SSD-21	-23.15	-25.06	-25.34	-25.01	-22.63	-23.87	-25.20	-25.02	-25.00	-23.49	-22.94
SSD-22	-5.45	-6.28	-7.15	-7.64	-2.82	-3.17	-3.63	-4.11	-3.64	-3.33	-3.22
SSD-23	-0.56	-0.85	-1.08	-1.18	-0.62	-1.31	-1.49	-1.80	-1.30	-1.01	-0.92
Were flows adjusted?	No	No	No	No	No	No	No	No	No	No	No

a/ SSDS = sub-slab depressurization system; NM = not measured.

WSP Page 1 of 1

b/ Fan turned off because insufficient flow to operate within the manufacturer's specifications.

# ENCLOSURE A – WASTE DISPOSAL DOCUMENTATION

A	NON-HAZARDOUS	1. Generator ID Number	2. Page	1 of 3.	Emergency Respons	e Phone	4. Waste T	racking Nu	nber		
	WASTE MANIFEST			000	nerator's Site Addres	s (if different	than mailing addr	ess)			
	5. Generator's Name and Mailin	ng Address	Continue alle		7/40	种的大人	MAN 130	3.			
	/	1375-0264									
	Generator's Phone:  6. Transporter 1 Company Name						U.S. EPA ID	Number 786	19430	16	
	7. Transporter 2 Company Nan						U.S. EPA ID	A STATE OF THE STA			
	8. Designated Facility Name ar	nd Site Address	ENJURONNA	WATTH!	Sec 11770	115	U.S. EPA ID	Number			
			YARINY 1								
	Facility's Phone:	136-6080				inara		40 1104			
	9. Waste Shipping Name	e and Description			No.	Type	11. Total Quantity	12. Unit Wt./Vol.			
TOB -	1. AJOAN - K	CHANDAD-DOTT	CETAL ATTENTA	1/773			71//				
GENERATOR	2.		Y''' X' U''' ( )			/ /	1 1 401				
GE											
	3.										
	4.										
	13. Special Handling Instructions	s and Additional Information									
	1-12-1-1-C 50	1 # 7285 1200 H 1/2-10736	26								
DOMEST BOOK											
FORG DISCH	The state of the s	CORDINATION LANGE LANGE									
	marked and labeled/placarde  Generator's/Offeror's Printed/Type	S CERTIFICATION: I hereby declare that ed, and are in all respects in proper conditions and Name	tion for transport according to	applicable Signatur	nternational and nat	scribed above ional governn	by the proper sh nental regulations	ipping name			
V	HSIZIAN	SILFEIL		Juliana	CFIELFILL				Month	Day	Year
INT'L	15. International Shipments  Transporter Signature (for export	Import to U.S. s only):	Export	from U.S.	Port of er Date leav	ntry/exit: ring U.S.:					
100	16. Transporter Acknowledgment Transporter 1 Printed/Typed Name			Signatur					Month	Day	Year
7	Tronggaday O.D.:	re manage		Signatur		10-			06	Jay 19	I Gal
TRAI	17. Discrepancy			Orginatur					Month	Day	Year
	17a. Discrepancy Indication Space	ce Quantity	Type		Residue						
			туре		Manifest Reference I	lumbarı	L Partial Rej	ection	LJF	ull Rejecti	on
FACILITY	17b. Alternate Facility (or Genera	ator)			viarinest reference i	vumber.	U.S. EPA ID I	Number			
		ty (or Generator)									
DESIGNATED		, (or deficially)							Month	Day	Year
- DES											
	18. Designated Facility Owner or	Operator: Certification of receipt of mate									
,	Printed/Typed Name	The standard of receipt of mate	lais covered by the manifest e	Signatur	oted in Item 17a				Month		
169	9-BLC-O 5 11977 (Rev.	9/09)					ENIEDATOR		WOUTH	Day	Year

GENERATOR'S/SHIPPER'S INITIAL CORY

# ENCLOSURE B – ABSORBENT INSPECTION/REPLACEMENT FORM

### Field Form for Absorbent Inspection/Replacement Former Rollway Bearing Facility Liverpool, New York

Date: August 31, 2022	Inspector (print): Nathaniel Winston
Arrival Time: 10:00	Inspector (sign):
Departure Time:	Weather Conditions: 69 F, sunny

Well ID	Staining (Y/N)	Absorbent Replaced (Y/N)	Spent Absorbent Weight (in grams)
RW-1	(a)	(a)	(a)
RW-2	N	N	-
OW-1	Y	Y	389
OW-2	(a)	(a)	(a)
OW-3	(a)	(a)	(a)
OW-4	N	N	-
OW-5	(a)	(a)	(a)
OW-8	<5%	N	-
SB-5	(a)	(a)	(a)
SB-7	*	-	-
SB-8	(a)	(a)	(a)
SB-10	*	-	-
OW-10/FB-1	<5%	N	-
OW-9/FB-2	N	N	-
OW-11/FB-4	(a)	(a)	(a)

<sup>\* =</sup> no absorbent in well

## **Notable Observations:**

Description of Maintenance Needed:	Well Maintenance:
Date of Maintenance Completion:	

a/ Well included in high-vacuum event that occurred from August 17 to 19, 2022. Existing absorbents were temporarily removed during high vacuum LNAPL recovery event and then either re-deployed or replaced on August 31, 2022.

# ENCLOSURE C – OM&M LOG SHEETS

### Table 1

### Checklist LNAPL Recovery System Former Rollway Bearing Facility Liverpool, NY

Date:8/31/22	Inspector (print):Nate Winston	
Arrival Time: _09:30	Inspector (sign):	
Departure Time:	Weather Conditions:69°F, sunny	
Reason for Visit:OM&M and restart of sys	stem after high-vacuum LNAPL recovery event*	

## **LNAPL Recovery System Skid**

Course	OM&M Readin	g	Typical Operation Reading		
Gauge	Reading	Units	Reading	Units	
Inlet Vacuum: Before Vapor- Liquid Separator	-50	in H <sub>2</sub> O	-58 to -62	in H <sub>2</sub> O	
Vacuum Before Air Filter	-60	in H <sub>2</sub> O	-66 to -68	in H <sub>2</sub> O	
Vacuum After Air Filter/Before Blower Inlet	-56	in H <sub>2</sub> O	-86	in H <sub>2</sub> O	
Discharge Stack Pressure	2	in H <sub>2</sub> O	2	in H <sub>2</sub> O	
Discharge Stack Temperature	70	° F	120 to 138	° F	
Kilowatt Hour Meter	181,490	kWh	-	kWh	

# **LNAPL Recovery Wells**

Well ID	OM&M	Reading	Typical Operation Reading		
	Vacuum (in H <sub>2</sub> O)	Flow (SCFM)	Vacuum (in H <sub>2</sub> O)	Flow (SCFM)	
OW-2	-9.15	5.0	-40 to -54	3 to 7	
RW-1	-10.4	5.0	-5 to -11	5.5 to 7	
OW-3	-6.99	6.5	-6 to -11	2 to 3	
OW-8	-5.11	6.0	-8 to -10	4 to 11	

# **Notable Observations:**

V (1			1	•	1 . 1	•		1.
~\1	vetom	was	started	1mm01	natolv	nrior	to	readings.
$\sim$	youchi	WUD	siarica	unnice	iiaiciy	piloi	$\iota \cup \iota$	cuunigs.

# **System Maintenance:**

Description of Maintenance Needed:	
Date of Maintenance Completion:	
1	

ENCLOSURE D -	SUB-SLAB DEP	RESSURIZAT	ION SYSTEM II	NSPECTION F	ORMS

# Sub-Slab Depressurization System Inspection Form Former Rollway Bearing Corporation Facility Liverpool, New York

Date:	8/31/2022	Inspector (print): Nate Winston		
Time:	10:00	Inspector (sign):		
			Weather (	Conditions 69 deg F, sunny
Reason for Visit (check all that apply):				
Routine Inspection/O&M		Respon	Response to Owner Notification	
Other				
Vacuum Measurements				
SSD Extraction Point	Vacuum Reading (in W.C.)	SSD Extraction Point	Vacuum Reading (in W.C.)	
SSD-01	-6.95	SSD-13	-5.67	
SSD-02	-0.34	SSD-14	-3.05	
SSD-03*	-28.80	SSD-15	-4.76	
SSD-04	-18.22	SSD-16	-4.26	
SSD-05	-0.34	SSD-17	-3.11	
SSD-06	-24.25	SSD-18	-18.47	
SSD-07	-22.11	SSD-19	-0.20	
SSD-08	-0.33	SSD-20	-0.78	
SSD-09	-24.60	SSD-21	-22.94	
SSD-10	-0.32	SSD-22	-3.22	
SSD-11	-0.85	SSD-23	-0.92	
SSD-12	-0.47			
SSD Risers		Yes	No	Comments/Corrective Action Taken
Observable leaking connections			X	
Riser piping supports secure		X		
Defective or damaged instrumentation			X	
Damage to protective bollards or			X	
barriers <b>Piping Network</b>				
Observable leaking connections			X	
Lateral piping supports secure		X		
New air intakes within 10 ft of			X	
discharge points				
Discharge Fans			X	
Inoperable fan(s)			Λ	
Other Notable Observati	ons			
NA NA				