

Memorandum

October 20, 2023

To: Parag Amin, New York State Department of Environmental Conservation (NYSDEC)

From: Tim DiGiulio, P.E. and Tim Johnson, Anchor QEA

cc: Kerry Maloney, NYSDEC; Seth Levine, Cambrex; Christopher Clark, Pfizer;
Matt Robinson, ELT Harriman; Jeff Caputi, Brown and Caldwell

**Re: Quarterly Progress Report—3rd Quarter 2023; Harriman Inactive Waste Disposal Site
#336006**

Introduction

This memorandum and attached inspection reports provide the Third Quarter 2023 project progress report for the Harriman Inactive Waste Disposal Site (Site) on behalf of Nepera, Inc., and Warner-Lambert Company (Corporate Defendants) and ELT Harriman, LLC (ELT).

The New York State Department of Environmental Conservation (NYSDEC) was notified on August 9, 2023, that Anchor QEA, LLC, is now the designated technical representative for the Corporate Defendants. Therefore, going forward, Anchor QEA will be preparing the quarterly progress reports. Like previous reports, due to the presence of other remediation programs and voluntary investigative work being performed at the Site, this report includes activities that are beyond the scope of the parties' obligations under the Consent Decree.

Site Inspection

This memorandum covers the full scope of the quarterly site inspection requirements that are outlined pursuant to the Interim Site Management Plan (ISMP) dated July 2023. The site inspection was performed on September 15, 2023, by Anchor QEA staff with the aid of Tetra Tech personnel. In accordance with the ISMP notification requirements, Anchor QEA provided NYSDEC with a 7-day advance notice prior to conducting the quarterly inspection.

Monitoring Wells

The quarterly well inspection report includes a total of 74 monitoring wells. Visual observations were conducted on 70 monitoring wells evaluating the collar, plug, lid, lock, tag, and casing. A total of four monitoring wells were inaccessible due to extremely dense vegetation. During the routine five-quarter monitoring program and Emerging Contaminants (EC) investigation sampling later this year, clearing and grubbing activities are planned to make these wells accessible for inspection and sampling. No further inspection will be conducted on three monitoring wells that are abandoned. Of the 70 monitoring wells inspected, the well components remain in satisfactory condition with the

exceptions noted in the attached monitoring well summary tabulation forms provided in Attachment 1. In summary, two wells were observed with casing deficiencies, one well with an open plug, and three wells in need of new locks.

Monitoring wells installed in August 2020 and October 2021, while not part of the five-quarter monitoring program, have been included within the inspection checklist and will continue to be inspected as part of this report.

Former Biosparge System

As outlined in Section 3.3.4 of the ISMP, SVE well VER-2 has historically exhibited observed product, so an absorbent sock has been placed in that well and monitored. The absorbent sock was at 25% capacity when inspected on September 15, 2023. As a note, Cornerstone PLLC's inspection conducted on June 21, 2023, also observed the absorbent sock at 25%. This quarter showed no change to capacity of the sock, indicating no significant change of free-phase product in the well. The quarterly SVE well VER-2 well inspection form has been provided for reference in Attachment 1.

Streambank Interim Cover

The interim riverbank turf reinforcement mat and vegetative cover system along the West Branch of the Ramapo River was inspected, and representative photographs of this area are provided as Attachment 2. Observations of the cover system show thick, dense vegetation with no significant signs of erosion, and the system is observed to be functioning as designed.

Parking Lot

Section 3.4.1 of the ISMP addresses the interim control and integrity of the parking lot asphalt cover. The asphalt continues to provide erosion protection to the area. However, observations during the inspection revealed areas where the surface has deteriorated and is vulnerable to infiltration from precipitation. Representative photographs of the parking lot conditions are shown in Attachment 2. As discussed during the monthly update call with NYSDEC on October 2, 2023, the Corporate Defendants and ELT are revisiting the *Revised, Parking Lot Area Feasibility Study*, last revision dated January 2023, prepared by Cornerstone, PLLC. The intent is to refine and advance this previous study for NYSDEC review to allow for the selection of an appropriate final remedy for this area in the near future.

Former Excavation Areas F and K and Building 35

Section 3.4.2 of the ISMP requires inspection to evaluate there are no signs of vandalism or erosion. Observations show these areas contain thick, dense vegetation with no visual evidence of disturbance or erosion. Inspection photographs for these areas are included in Attachment 3.

Site Perimeter Fencing

Section 3.4.6 of the ISMP requires visual inspection of the fence and gates to minimize access to the Site by unauthorized personnel. During the site inspection, the entire fence perimeter was visually inspected. It was observed that the perimeter fencing had been damaged in two remote locations. In the locations where damage was observed, there was no evidence of unauthorized entry. Both areas were in areas of dense vegetation and away from routine access areas. All observed gates were secure with locks. Attachment 4 contains photographs of the two damaged areas of the fence.

Summary of Third Quarter Activities

Comments and conditional approval of the *Phase II Emerging Contaminants Site Investigation Report* were received from NYSDEC on September 1, 2023. The *Phase II Emerging Contaminants Site Investigation Report Response to Comments and Associated Report Addendum* was subsequently submitted by the Corporate Defendants and ELT on September 29, 2023. A response to comments document and revised *Supplemental Floodplain Soil Investigation Report* were also submitted to NYSDEC on September 29, 2023.

On October 2nd, 2023, a team progress call was held with NYSDEC. A new recurring meeting was established for the second Monday of each month.

Projected Fourth Quarter Activities

Planning is underway to perform both the annual groundwater monitoring activities described in the ISMP and the work outlined in Appendix H of the *Phase II Emerging Contaminants Site Investigation Report*. Work is tentatively scheduled for November 2023. Appropriate advance notice of fieldwork will be provided at least 7 days prior to any field activities, as per the ISMP.

Comments on the ISMP were received from NYSDEC on September 29, 2023. The Corporate Defendants and ELT are preparing revisions to the ISMP and will resubmit the document by the due date of October 30, 2023.

The following activities are planned for the fourth quarter 2023 (October to December 2023):

- Submit a revised ISMP
- Submit a revised Parking Lot Feasibility Study
- Perform annual groundwater monitoring well sampling and reporting
- Perform the EC investigation field program
- Perform monitoring well and fence maintenance, as needed
- Perform regularly scheduled site inspection

Attachments:

Attachment 1—Well Inspection Logs

Attachment 2—Streambank Photographs and Parking Lot Inspection Photographs, Figure and Log

Attachment 3—Area F and Building 53 Area Photographs

Attachment 4—Fencing Inspection Photographs

Attachment 1

Quarterly Well Inspection Report

Monitoring Wells	Diameter Inches	Finish	Collar	Lid	Plug	Lock	Tag	Casing	Comments	Action Items
AMW-1	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-2	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-3	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-4	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-5	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-6	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-7	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-8	2	Stickup	NI	NI	NI	NI	NI	NI	Not accessible due to high vegetation and ground flooding	Clearing and grubbing will take place during the next sampling event
AMW-9	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-10	2	Stickup	OK	OK	OK	OK	OK	OK		
AMW-11	2	Stickup	OK	OK	OK	OK	OK	OK		
AP-101	2	Stickup	OK	OK	OK	OK	OK	OK		
BP-101	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-1S	6	Stickup	OK	OK	OK	OK	OK	OK		
MW-2S	4	Stickup	OK	OK	OK	OK	OK	D	Casing is sheared off a few feet below top of ground	Evaluation and possible repair planned for next field event in November
MW-3S	4	Stickup	OK	OK	OK	X	OK	OK	Lock missing	Plan to bring new lock during next inspection
MW-4S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-5S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-6D	4	Stickup	OK	OK	OK	OK	OK	OK	Well in highly vegetated area	
MW-7S	4	Stickup	OK	OK	OK	OK	OK	OK	Well in highly vegetated area	
MW-8S	4	Stickup	NI	NI	NI	NI	NI	NI	Not accessible due to high vegetation and ground flooding	Clearing and grubbing will take place during the next sampling event
MW-9S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-10D	6	Stickup	OK	OK	OK	OK	OK	OK		
MW-11S	4	Stickup	NI	NI	NI	NI	NI	NI	Not accessible due to high vegetation and ground flooding	Clearing and grubbing will take place during the next sampling event
MW-12S	2	Flushmount	OK	OK	OK	OK	OK	OK		

Quarterly Well Inspection Report

Monitoring Wells	Diameter Inches	Finish	Collar	Lid	Plug	Lock	Tag	Casing	Comments	Action Items
MW-13S	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-16S	4	Stickup	OK	OK	OK	D	OK	OK	Lock was rusted open	Plan to bring new lock during next inspection
MW-17S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-18D	6	Stickup	OK	OK	OK	OK	OK	OK		
MW-20S	4	Flushmount	OK	OK	OK	OK	OK	OK		
MW-20D	4	Flushmount	OK	OK	OK	OK	OK	OK		
MW-20DR	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-21S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-21D	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-22S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-23S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-23D	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-24S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-25S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-25D	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-26S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-26D	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-27S	4	Stickup	OK	OK	OK	OK	OK	OK		
MW-27D	6	Stickup	OK	OK	OK	OK	OK	OK		
MW-28S	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-29S	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-33S	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-34	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-35S	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-36S	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-37S	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-35AQ	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-36AQ	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-37AQ	2	Flushmount	OK	OK	OK	OK	OK	OK		

Quarterly Well Inspection Report

Monitoring Wells	Diameter Inches	Finish	Collar	Lid	Plug	Lock	Tag	Casing	Comments	Action Items
MW-53S	4	Flushmount	OK	OK	OK	OK	OK	OK		
MW-53D	4	Flushmount	OK	OK	OK	OK	OK	OK		
MW-101	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-102	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-103	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-104	2	Flushmount	OK	OK	OK	OK	OK	OK		
MW-105	2	Stickup	NI	NI	NI	NI	NI	NI	Not accessible due to high vegetation and ground flooding	Clearing and grubbing will take place during the next sampling event
MW-106	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-201	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-202S	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-202D	2	Stickup	OK	OK	OK	OK	OK	OK		
MW-203	2	Stickup	OK	OK	OK	OK	OK	OK		
OW-6	2	Stickup	OK	OK	OK	OK	OK	OK		
OW-7	2	Stickup	OK	OK	OK	OK	OK	D	PVC inside well casing is detached	Exerise care when removing plug for sampling so as not to detach casing
PZ-1	2	Stickup	OK	OK	OK	OK	OK	OK		
PZ-3	2	Flushmount	OK	OK	OK	OK	OK	OK		
PZ-4	2	Stickup	OK	OK	OK	OK	OK	OK		
RW-1R	6	Vault	OK	OK	OK	OK	OK	OK		
R-3D	10	Stickup	OK	OK	X	X	OK	OK	Large metal plate covering well and PVC pipe sticking out of well	Evaluation and possible repair planned for next field event in November

Notes:

X = Item missing

B = Bolt missing

D = Damaged

OK = Acceptable condition

NI = Not Inspected

Blue shading indicates that well is part of the annual monitoring program

Field Technicians:

Dan Wheeler, Pia Tapiawala, Sarah LaRoe

SVE/VER Product Measurement Checklist

Recorded By: Dan Wheeler

Date: 09/15/23

DTP	DTW					DTP	DTW	
0.0	0.01		SVE-1	1 sock		VER-1	0.0	3.52
0.0	1.62		SVE-2			VER-2	0.0	3.61
0.0	0.90		SVE-3			VER-3	0.0	3.33
0.0	1.49		SVE-4	1 sock		VER-4	0.0	3.27

To Entrance/Exit



NOTE:

SVE wells are closer to the side of the road.
VER-1 and SVE-1 are both 4" wells. All others are 2" diameter.



Indicates absorbent sock in well.

Comments:

Absorbent sock at 25% capacity
sock not replaced at VER-2

Attachment 2

RIVERBANK AND PARKING LOT

INSPECTION FORM

HARRIMAN, NEW YORK

DATE: 15-September-2023

INSPECTION (Check): ANNUAL

INSPECTOR Dan Wheeler, Pia Tapiawala, Sarah LaRoe

QUARTERLY X

	STATUS	COMMENTS
A. General condition of cover material	<u>Good</u>	<u>Riverbank cover in good condition, no signs of erosion, no white material showing. High vegetation covering the area (pictures included).</u>
B. Settlement of covered area	<u>Moderate</u>	<u>Potholes present in the parking lot area and pavement cover remains intact. Approximately 30 potholes (pictures included).</u>
C. General condition of silt fence	<u>N/A</u>	<u>Silt fence has been removed from stream bank per NYSDEC approval on January 12, 2016.</u>

Representative Stream Bank Photos – September 15, 2023





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Representative Parking Lot Photos – September 15, 2023





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Attachment 3

FORMER DRUM EXCAVATION AREAS INSPECTION FORM

HARRIMAN, NEW YORK

DATE: 15-September-2023

INSPECTION (Check): ANNUAL

INSPECTOR: Dan Wheeler, Pia Tapiawala, Sarah LaRoe

QUARTERLY X

STATUS

COMMENTS

A. AREA F

Good

Area F covered heavily in high vegetation.

B. BUILDING 53 AREA

Good

Building 53 area covered heavily in high vegetation.

Representative Area F and Building 53 Area Photos – September 15, 2023





Attachment 4

SITE FENCE INSPECTION FORM

HARRIMAN, NEW YORK

DATE: 15-September-2023

INSPECTION (Check): ANNUAL

INSPECTOR: Dan Wheeler, Pia Tapiawala, Sarah LaRoe

QUARTERLY X

	STATUS	COMMENTS
A. Perimeter Fence around NEPERA Facility	<u>Fair</u>	Most of the fence is generally in good condition. Dense, thick vegetation is providing an acceptable barrier to minimize unauthorized entry. One area of the fence has been identified for repair in November 2023. <u>Inspected gates were locked and secure.</u>
B. Perimeter fence around NEPERA Parking Lot	<u>Fair</u>	Fence is in fair condition. One area of the fence has been identified for repair in November 2023. Inspected gates were locked and secure. <u></u>
C. Perimeter fence around lagoon area	<u>Fair</u>	Fence in fair condition, southern section of the fence cut in <u>two areas.</u>







