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MEMO

To:

Steven Scharf, P.E., NYSDEC
Katy Murphy, NYSDEC
Renata Ockerby, NYSDOH
Julia Schneider, Cashin Spinelli & Ferretti, LLC
Scott Krall, Bayer
David Paule, Bayer
John Brussel, P.E., ARCADIS
David Kingsley, ARCADIS
Gregory McDermott, ARCADIS
Charles Atanasio, ARCADIS
Michael Perciballi, Posillico
Lee Kaplan, Posillico
Chris Hurst, Posillico
Marc Atamian, Posillico

From:

Andrew Enigk, ARCADIS

Date:

April 29, 2015

ARCADIS Project No.:

B0032305.2013

Subject:

Bayer MaterialScience LLC
125 New South Road, Hicksville, New York
Phase 2 Operable Unit 4 Remedial Activities
April 22, 2015 Bi-Weekly Construction Coordination Meeting Summary
Progress Report #24 (April 20, 2015 – April 24, 2015)

This memorandum summarizes items discussed during the April 22, 2015 weekly construction coordination meeting and work performed from April 20, 2015 through April 24, 2015 in connection with the Phase 2 Operable Unit 4 (OU4) remedial activities at the above-referenced Site. The remedial activities are being implemented by Bayer MaterialScience LLC's (Bayer's) remedial contractor (Posillico) with onsite construction/engineering oversight provided by ARCADIS. The work activities during the reporting period were as observed by Charles Atanasio of ARCADIS.

MEETING ATTENDEES

The following personnel attended the weekly construction coordination meeting:

- Steven Scharf – NYSDEC (call-in)
- Renata Ockerby – NYSDOH (call-in)
- Julia Schneider – Cashin Spinelli & Ferretti, LLC (CSF)(representing the Town of Oyster Bay) (call-in)
- Scott Krall – Bayer (call-in)
- David Paule – Bayer (call-in)

- John Brussel – ARCADIS (call-in)
- Andrew Enigk – ARCADIS (call-in)
- Charles Atanasio – ARCADIS

HEALTH AND SAFETY MOMENT

ARCADIS discussed distracted driving and suggested that cell phones should not be used while operating equipment or vehicles onsite or offsite. ARCADIS noted that texting and driving has become one of leading causes of automobile-related accidents in the United States. The NYSDEC added that traffic is much heavier on Long Island, NY than in other areas of the state, which makes the potential for an automobile-related accident much higher.

SAFETY/SAFE WORK PRACTICES

No incidents have occurred this week and work has proceeded safely (with no injuries over the 111 days of work completed project-to-date).

ACTION ITEMS OUTSTANDING FROM PREVIOUS MEETING

There were no outstanding action items from previous meetings.

COMPLETED WORK / WORK-IN-PROGRESS

Work activities performed by Posillico and its subcontractors during this period consisted of the following:

- Continuing to perform post-backfill and soil cover system topographic survey activities.

- Collecting samples to characterize an additional 1,000 cubic yards (CY) of general fill (run-of-bank sand/gravel) from the offsite clean fill source (Beth Moses Cemetery [BMC] located in West Babylon, New York) on April 23, 2015. Posillico collected one sample set (representing 1,000 CY of backfill) including one composite sample for semi-volatile organic compounds (SVOCs), inorganics, polychlorinated biphenyls (PCBs), and pesticides, and two discrete samples for volatile organic compounds (VOCs) in accordance with the sampling requirements in Table 5.4(e)10 of the New York State Department of Environmental Conservation (NYSDEC) document titled, “DER-10 Technical Guidance for Site Investigation and Remediation” (DER-10). Posillico submitted the fill samples to York Analytical Laboratories, Inc. for analysis. This new sample set and previous samples provide characterization data for up to 34,000 CY of general fill. ARCADIS will forward the analytical results to the NYSDEC following receipt from the laboratory and preparation of an updated data table (results are due from the laboratory on April 27, 2015).

- Collecting samples to characterize an additional 2,000 CY of topsoil from the offsite topsoil source (Pinelawn Cemetery [PC] located in Farmingdale, New York) on April 23, 2015. Posillico collected two sample sets (each set representing 1,000 CY of topsoil) with each set including one composite sample for SVOCs, inorganics, PCBs, and pesticides, and total organic carbon (TOC), and two discrete samples for VOCs in accordance with the sampling requirements in Table 5.4(e)10 of DER-10. ARCADIS observed the sampling activities at the fill source. Posillico submitted the fill samples to York Analytical Laboratories, Inc. for analysis. These new samples and previous samples provide characterization data for up to 10,000 CY of topsoil. ARCADIS will forward the analytical results to the NYSDEC following receipt from the laboratory and preparation of an updated data table (results are due from the laboratory on April 27, 2015).

- Continuing installation of the site-wide soil cover system and demarcation layer below the system. Approximately 2,496 CY of imported topsoil from PC were placed during this reporting period to establish the 4-inch top layer of the soil cover system. Approximately 43% of the soil cover system topsoil placement had been completed by the end of this reporting period.

- Collecting samples to characterize the waste sediment that was removed from the frac tanks and placed in four 55-gallon drums. The sediment samples were submitted for laboratory analysis for PCBs and RCRA hazardous waste characteristics, including ignitability, corrosivity, reactivity, and Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP SVOCs, and TCLP metals, to support the waste profile (in response to a request from the proposed disposal facility). Because some of the sediment originated from decontaminating equipment used to handle soil containing >50 part per million (ppm) PCBs or from dewatering the section of the material staging area used to stockpile soil containing >50 ppm PCBs, the sediment will automatically be transported offsite for disposal as a Toxic Substances Control Act- (TSCA-) regulated PCB waste/New York State (NYS) listed hazardous waste (i.e., at the Chemical Waste Management [CWM] Chemical Services LLC landfill located in Model City, New York).

- Continuing washing of truck tires before trucks exit the Site each trip and cleaning of the street with a street sweeper every night after work activities are complete for the day.

- Continuing erosion/sedimentation control measures inspection, maintenance, and documentation.

- Public Service Enterprise Group, Inc. (PSEG) Long Island removed the inactive overhead electric lines onsite and cut the tops off the utility poles so they could not be reused. Verizon is expected to remove the only remaining overhead line onsite and complete removal of the utility poles.

PROPOSED WORK ACTIVITIES

Posillico's two-week "look ahead" schedule is included as Attachment A and summarized below:

- Continue importing general fill and topsoil.
- Continue backfilling excavations and conducting in-place compaction testing.
- Install erosion control matting along the side slopes of the rainwater runoff sumps after placement of topsoil.
- Continue installation of the site-wide soil cover system.
- Transport the drums containing sediment from the frac tank offsite for disposal.
- Coordinate removal of the utility poles at the Site.
- Continue tire washing and street cleaning.
- Continue erosion and sedimentation control measures inspection, maintenance, and documentation.

OPEN DISCUSSION

- Posillico anticipates finishing the remedial construction during the week of May 4, 2015. Continued rainfall and wet conditions at the fill sources and onsite continued to cause delays with import and placement of the general fill and topsoil.
- ARCADIS noted that geese have been observed at the Site and that a nest with eggs was observed in Sump #1. ARCADIS was waiting for Posillico to propose its means/method for handling the area with the nest but anticipates working around the nest. Following the conference call, ARCADIS walked the site and noticed five additional active nest locations. All of the nest locations, except for the nest in Sump #1, were in areas that could be worked around (e.g., generally along the onsite railroad spurs or eastern property boundary) and then addressed at the end of the remediation.
- CSF inquired about the progress of the Environmental Easement (EE). Bayer indicated it and New South Road Realty (NSRR) had completed reviewing the EE, and Bayer wanted to discuss with the NYSDEC adding supplemental language to the EE (regarding allowable restricted future site uses).

ACTION ITEMS

- Bayer indicated it would hold a conference call with the NYSDEC and NSRR during the week of April 27, 2015 to discuss the EE.

- The NYSDEC's project manager indicated he would check with a representative from the NYSDEC Division of Fish and Wildlife regarding any recommendations for addressing the geese/nests observed onsite to allow work to proceed with limited interruption.

ATTACHMENTS

- Attachment A: Posillico's Two-Week "Look Ahead" Schedule
- Attachment B: Weekly Site Photos
- Attachment C: Excavation/Backfilling Progress Table
- Attachment D: Soil Cover System Progress Figure

Please notify Mr. Andrew Enigk of ARCADIS at 315.671.9548 within 5 days of receiving this memorandum if you believe that any portion of this summary does not accurately reflect work performed during the reporting period or if additional items should be recorded in this summary. If modifications are made, a revised memorandum will be distributed.

Attachment A

Two-Week Look Ahead Schedule

PROJECT : **Bayer- Hicksville** **JOB #: 07042**

DATE/TIME: **4/17/2015** **BY:** Chris Hurst

	Activity Description & Location	LABOR	OPER	OTHER	Week of: 04/27/15 M	T	W	T	F		Week of: 5/4/15/2015 M	T	W	T	F		EQUIPMENT/MATERIALS NEEDED	PROD RATE PER SHIFT PLAN	ISSUES
	Survey		1			x		x			x	x		x	x				
	import backfill material				x		x	x				x					excavator		
	Import topsoil				x	x	x	x	x		x	x	x				payloader		
	topsoil sumps install erosion blankets				x	x					x	x					John Deere 850 DZ.		
																	dirt roller		
	Install Site wide Cap- Fill and topsoil	3	2			x	x	x	x		x	x	x	x	x				
SUBCONTRACTOR	MTGroup - Compaction testing			1				x	x		x	x							
	HTC landscape/ hydro seed							x			x	x	x	x	x				
PLAN B WORK																			

	General Issues / Change Orders	Ball In Court
1		
2		
3		

Attachment B

Weekly Site Photos

Weekly Progress Report #24 (April 20, 2015 – April 24, 2015)

Weekly Site Photos

Weather conditions at the site (i.e., rainfall) causing general fill and topsoil placement delays.

Posillico stockpiling topsoil until the rainfall stopped and conditions were favorable for grading.

Weekly Progress Report #24 (April 20, 2015 – April 24, 2015)

Weekly Site Photos

Posillico accepting a topsoil delivery (southwest corner of the Site) where the soils were dry and stable for truck access.

Posillico spreading topsoil across the southwest portion of the Site.

Weekly Site Photos

Posillico cleaning truck tires prior to the trucks leaving the Site.

Posillico placing washed crushed limestone in the bottom and topsoil on the sides of Sump #2.

Weekly Site Photos

Posillico placed topsoil on the sides of Sump #1 but did not complete the bottom due to nesting geese.

Topsoil placement completed across the southwestern portion of the Site.

Weekly Site Photos

Posillico spreading topsoil across the northeast corner of the Site.

Posillico finishing placement of topsoil across the northeast corner of the Site.

Attachment C

Excavation/Backfilling Progress Table

TABLE 1
EXCAVATION AND BACKFILL TRACKING
UPDATED THROUGH APRIL 24, 2015

PHASE 2 OPERABLE UNIT 4 REMEDIAL ACTION
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Operation	Design Volume (CY)	Estimated Volumes[1] (CY)				Percent Completed
		Previous Totals	Current Week Totals	Total to Date	Remaining Volume	
Excavation						
"A" Group Excavation Areas						
PCB-Impacted Soil (>50ppm)	167	167	0	167	0	100%
Non-Hazardous Waste Soil	201	201	0	201	0	100%
Subtotal:	368	368	0	368	0	100%
"B" Group Excavation Areas						
PCB-Impacted Soil (>50ppm)	218	218	0	218	0	100%
Non-Hazardous Waste Soil	183	183	0	183	0	100%
Subtotal:	401	401	0	401	0	100%
"C" Group Excavation Areas						
PCB-Impacted Soil (>50ppm)	227	227	0	227	0	100%
Non-Hazardous Waste Soil	5,538	5,538	0	5,538	0	100%
Concrete	400	0	0	0	400	0%
Subtotal:	6,165	5,765	0	5,765	400	94%
PCB-Impacted Soil (>50ppm) Subtotal:	**612**	**612**	**0**	**612**	**0**	**100%**
Non-Hazardous Waste Soil Subtotal:	**5,922**	**5,922**	**0**	**5,922**	**0**	**100%**
Total:	**6,534**	**6,534**	**0**	**6,534**	**0**	**100%**
Backfill						
Run-of-Bank Gravel						
Phase 1 "A" Group Excavation Areas	5,327	4,849	0	4,849	478	91%
Phase 1 "B" Group Excavation Areas	1,384	1,326	0	1,326	58	96%
Phase 2 "A" Group Excavation Areas	368	321	0	321	47	87%
Phase 2 "B" Group Excavation Areas	401	401	0	401	0	100%
Phase 2 "C" Group Excavation Areas	5,765	5,163	0	5,163	602	90%
Soil Cover System	18,200	11,030	0	11,030	7,170	61%
Subtotal:	31,445	22,690	0	22,690	8,355	72%
Topsoil						
Soil Cover System	7,192	600	2,496	3,096	4,096	43%
Total:	**38,637**	**11,759**	**2,496**	**25,786**	**12,451**	**67%**

Notes:
1. Excavation and backfill volumes are estimates based on field observations and measurements.
2. CY = Cubic Yards.
3. PCB = polychlorinated biphenyls
4. ppm = parts per million

Attachment D

Soil Cover System Progress Figure

PROGRESS LEGEND

- 8-INCH CAP BASE AND DEMARCATION LAYER COMPLETED (PENDING VERIFICATION OF DESIGN DEPTH AND LIMITS AND COMPACTION TEST RESULTS)
- 8-INCH CAP BASE AND DEMARCATION LAYER COMPLETED (DESIGN DEPTHS AND LIMITS AND COMPACTION TEST RESULTS REVIEWED)
- 4-INCH CAP TOP SOIL COMPLETED (PENDING VERIFICATION OF DESIGN DEPTH AND LIMITS)
- 4-INCH CAP TOP SOIL COMPLETED (DESIGN DEPTH AND LIMITS REVIEWED/ MINIMUM CAP DEPTH OF 12 INCHES SURVEYED)
- SEEDING COMPLETED

LEGEND:

- CHAIN LINK FENCE
- NEW CHAIN LINK FENCE
- PROPERTY BOUNDARY
- LIMITS OF PROPOSED CAP INSTALLED TO ONE-FOOT ABOVE PRE-REMEDIATION SURROUNDING GRADES
- PERIMETER OF PROPOSED PHASE 2 OU4 AND PREVIOUS EXCAVATION AREAS
- SURVEY CONTROL POINT

ICM INTERIM CORRECTIVE MEASURE

OU OPERABLE UNIT

NOTES:

1. BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION. PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
2. EXISTING SAMPLING LOCATIONS WERE SURVEYED BY ARCADIS, INC. BETWEEN FEBRUARY 2004 AND MARCH 2014 EXCEPT FOR SB-324, SB-332, SB-334, SB-335 AND SB-336 WHICH ARE BASED ON FIELD TIE-DISTANCE MEASUREMENTS ONLY.
3. LOCATIONS OUTLINED IN GRAY ARE FORMER SITE FEATURES.
4. THE DISTANCE BETWEEN THE FENCE LINE AND PROPERTY BOUNDARY IS BASED ON A PRELIMINARY PROPERTY BOUNDARY SURVEY COMPLETED BY MUNOZ ENGINEERING AND LAND SURVEYING, P.C. IN JANUARY 2014.

XREFS: 32305X05 32305X00
IMAGES:

50' 0 50' 100'
1"=50'

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING:

USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

ARCADIS
ARCADIS OF NEW YORK, INC.

BAYER MATERIALSCIENCE LLC • HICKSVILLE, NEW YORK
REMEDIAL DESIGN ADDENDUM

PHASE 2 OU4 SOIL COVER SYSTEM PROGRESS UPDATE
WEEK ENDING 04/24/2015

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