



Ms. Alicia Barraza  
New York State Department of Environmental Conservation  
Division of Solid & Hazardous Materials  
Bureau of Solid Waste and Corrective Action  
625 Broadway  
Albany, New York 12233-7258

Subject:  
Bayer MaterialScience LLC  
125 New South Road  
Hicksville, New York  
USEPA ID#: NYD002920312  
ICM Additional PCB Soil Removal Work Plan Modification

Dear Ms. Barraza:

On behalf of Bayer MaterialScience LLC (Bayer), this letter responds to New York State Department of Environmental Conservation (NYSDEC) comments on the *Interim Corrective Measure Additional PCB Soil Removal Work Plan* (ARCADIS, November 2008) for the above referenced site. The NYSDEC comments addressed herein are provided in your e-mail correspondence dated November 24, 2008. The comments and Bayer's responses were discussed during a November 25, 2008 telephone conference call with the NYSDEC, Bayer, and ARCADIS.

For ease of presentation, each comment provided in your November 24, 2008 e-mail correspondence is presented below, followed by Bayer's response.

### **General Comments**

#### **Comment 1**

*The soil cleanup objectives (SCO's) found in 6 NYCRR 375-6 should be used. The end use of the property determines whether industrial or commercial values apply. If the site will be used for manufacturing and/or assembly activities, then the industrial values apply. If the site will be used for non-manufacturing and non-assembly activities, then the commercial values apply. Has the end use of this property been determined?*

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Our ref:  
B0032305.0001 #5

**Response 1**

As discussed during the November 25, 2008 telephone conference call, Bayer proposes to use the commercial soil cleanup objectives presented in 6 NYCRR Part 375-6.8(b). This will also allow for industrial use if needed.



**Comment 2**

*Specify how long the excavated soil will be staged and how much will be staged on average.*

**Response 2**

Bayer intends to minimize staging soils on-site for extended periods of time and intends to take advantage of direct-loading rail cars as much as possible. An on-site railroad spur has been recently upgraded and extended to accommodate approximately 18 rail cars on-site. The current plan is to rotate 9 cars on-site and 9 cars in transit throughout the ICM excavation activities. The rail cars will be direct loaded (where appropriate) or loaded from a temporary transfer pad adjacent to the rail cars. The rail cars will be equipped with a “burrito” liner and a cover. The lined cars will be loaded with soil and covered once full. If all 18 rail cars are loaded and off-site transporting soil, minimal excavated soil will be staged for up to approximately 1 to 2 weeks.



**Comment 3**

*On page 9, the work plan states that a detailed design for the sloping/benching system will be prepared by the selected Contractor in accordance with applicable OSHA regulations. This should be included in the most current version of the Health and Safety Plan.*

**Response 3**

As discussed, the existing ARCADIS Health and Safety Plan (HASP) addresses providing excavation sidewall support in accordance with 29 CFR Part 1926 Subpart

P (sloping, benching, steel sheetpile walls, etc.). The selected Contractor's HASP will also address the excavation sidewall support. The actual design will be a separate document that can be provided to the NYSDEC upon request, if needed.

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**Comment 4**

*Excavation Area 1: P1-S42 should be included in the excavation area as PCB concentration is borderline (49 ppm) at this location.*

**Response 4**

As discussed during the November 25, 2008 conference call, soil sampling location P1-S42 identified in the comments should actually be soil sampling location P1-S142. Soil at location P1-S142 will be removed as requested. See attached Figure 4 for Excavation Area 1 extended excavation limits and revised Table 3 for the modified soil removal volume.

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**Comment 5**

*Excavation Area 5: P1-S37 should be included in the excavation area as PCB concentration is 50 ppm.*

**Response 5**

Acknowledged. See revised Figure 4 for Excavation Area 5 extended excavation limits and revised Table 3 for the modified soil removal volume.

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**Comment 6**

*Excavation Area 11: Two sampling points adjacent to this area, P1-S8 and P1-S11, had high total VOCs. Total VOCs at P1-S8 were high for depths ranging from 0 to 4.5' bgs. Total VOCs at P1-S11 were high for depths ranging from 0 – 2.5' bgs.*

*These two areas can be addressed as part of the excavation Area 11, or as separate areas (see revised Figure 4).*

**Response 6**

As suggested by the NYSDEC, the soil in and around soil sampling locations P1-S8 and P1-S11 (to be identified as Excavation Area 14) will be removed to a depth of 4.5 feet. The limits of Excavation Area 14 are shown on revised Figure 4. A sidewall and bottom verification sample will be collected from each of the three sampling locations suggested by the NYSDEC in Comment 10. The sidewall samples will be collected from a depth of 2.0-2.5 feet below ground surface (bgs) and the bottom samples will be collected from a depth of 4.0-4.5 feet bgs. The proposed sampling locations and sampling intervals are identified in attached Table 4, and the additional soil removal volume is reflected in revised Table 3.



**Comment 7**

*Excavation Area 12: The sampling point adjacent to this area, P1-S25, had high total SVOCs (890 ppm) in surface soils (0 – 0.2'). These SVOC's included carcinogenic PAHs which should be removed.*

**Response 7**

Soil in and around sampling location P1-S25 (to be identified as Excavation Area 15) will be removed to a depth of 1 foot bgs. The limits of Excavation Area 15 are shown on revised Figure 4, and the additional soil removal volume is identified on revised Table 3. Proposed surface soil and bottom verification samples will be collected from each of three sampling locations suggested by the NYSDEC in Comment 10 and shown on revised Figure 4. The surface soil samples will be collected from a depth of 0.0-0.2 feet bgs and the bottom samples will be collected from a depth of 0.5-1.0 feet bgs. The proposed sampling locations and sampling intervals are identified in attached Table 4.



**Comment 8**

*Excavation Area 13: It is not clear why excavation in this area stretches from P1-S103 to P1-S132, except that these points are the only two where PCB concentrations fall below 50 ppm. Would it be more practical to decrease the excavation area and include several verification samples?*

**Response 8**

The limits of Excavation Area 13 have been decreased as suggested and are shown on revised Figure 4. The reduced soil removal volume is reflected in revised Table 3. These limits are contingent on the results of additional verification sampling. A sidewall and bottom verification sample will be collected from each of the four sampling locations suggested by the NYSDEC. The sidewall samples will be collected from a depth of 0.5-1.0 feet bgs and the bottom samples will be collected from a depth of 1.5-2.0 feet bgs.

**Comment 9**

*What is the justification for doing verification sampling before excavation? It is normally done after excavation.*

**Response 9**

As discussed on the November 25, 2008 conference call, Bayer has proposed pre-excavation verification soil sampling to minimize potential costs incurred from heavy equipment down time due to waiting on analytical results before receiving approval to backfill. In addition, pre-excavation verification sampling allows backfilling immediately after soil removal, which minimizes potential for snow and water accumulation in the excavations, increases overall site health and safety (minimal open excavation areas), and expedites the schedule for the ICM activities.



**Comment 10**

*It appears that only sidewall verification samples are being proposed, since there are already analytical results for vertical delineation of soils. However, some of the excavation areas are large and there are not enough verification samples to adequately verify that PCB contaminated soils from the bottom and sides have been removed. At some of the excavation areas, additional verification samples are needed for the sidewalls and bottom. See the Revised Figure 4 which shows additional sampling locations with dark pink circles and additional areas in dark pink outlines.*

**Response 10**

As discussed during the November 25, 2008 conference call, additional sidewall and bottom verification soil sampling will be performed at the locations indicated on the figure provided in the November 24, 2008 e-mail correspondence. See revised Figure 4 for the additional verification soil sampling locations and Table 4 for the proposed sampling locations and sampling intervals.

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**Comment 11**

P1-S8 and P1-S11 should be analyzed for VOCs and P1-S25 should be analyzed for SVOCs.

**Response 11**

Volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) sidewall and bottom verification soil samples will be collected from the locations indicated on the figure provided by the NYSDEC with the November 24, 2008 e-mail correspondence (Excavation Areas 14 and 15). In addition, surface samples will be collected from two additional locations in Excavation Area 15 to further verify the horizontal limits. See revised Figure 4 for the additional verification soil sampling locations and Table 4 for the proposed sampling locations and sampling intervals. Based on the proposed additional verification samples, collection of additional samples from locations P1-S8, P1-S11, and P1-S25 should not be needed.

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**Comment 12**

*If additional sidewall samples are required, then bottom verification samples should also be collected as appropriate.*

**Response 12**

Acknowledged.

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**Comment 13**

*As activities will take place during winter time, it is possible that standing water in the excavation areas will freeze. Explain how this will be handled.*

**Response 13**

Based on historical on-site excavation activities, water accumulation is not anticipated during the ICM soil removal activities. The site consists of primarily sandy soils that readily allow water infiltration. However, provisions have been made to handle water that accumulates in excavations, if any. Water will be pumped into a temporary on-site storage tank. A sample of the water would be collected to evaluate potential handling requirements.

If water accumulates and freezes within the excavation, the ice will be broken into pieces, removed from the excavation(s), and placed in a tank/container (suitable for freezing temperatures) or on the soil staging area (equipped with an impermeable liner sloped to a collection sump). Once the ice melts, it will be handled as described above for the water. The ice will be melted using a suitable heating device, if needed, or allowed to thaw as weather permits.

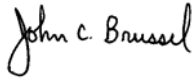
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We await NYSDEC approval of the responses and proposed actions identified above. Bayer is prepared to implement the proposed ICM soil removal activities within approximately one month following NYSDEC approval.

Please do not hesitate to contact Ramon Simon of Bayer at 281.383.6149 or the undersigned at 315.671.9441 if you have any questions or require additional information.

Sincerely,

ARCADIS



John C. Brussel, PE  
Principal Engineer

Copies:

Mr. Paul Olivo, United States Environmental Protection Agency  
Ms. Katy Murphy, New York State Department of Environmental Conservation  
Ms. Renata Ockerby, New State Department of Health  
Mr. Robert Weitzman, Nassau County Department of Health  
Mr. Wayne Baldwin, Bayer MaterialScience LLC  
Mr. Ramon Simon, Bayer MaterialScience LLC



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**Tables**

**TABLE 3  
POTENTIAL SOIL REMOVAL VOLUMES**

**ICM ADDITIONAL PCB SOIL REMOVAL WORK PLAN MODIFICATION  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

<b>Excavation Area No.</b>	<b>Excavation Depth (feet)</b>	<b>Approximate Surface Area (SF)</b>	<b>Removal Volume (CY)</b>
1	4	3,085	457
2	28	556	577
3	32	987	1,170
4	2	935	69
5	2	2,440	181
6	4	6,578	975
7	4	1,156	171
8	2	1,426	106
9	4	2,937	435
10	8	424	126
11	6	2,820	627
12	4	4,100	607
13	2	1,537	114
14	4.5	531	89
15	1	345	13
	<b>Totals</b>	<b>29,857</b>	<b>5,715</b>

**Notes:**

1. SF=square feet.
2. CY=cubic yards.

**TABLE 4  
PROPOSED VERIFICATION SOIL SAMPLING LOCATIONS**

**ICM ADDITIONAL PCB SOIL REMOVAL WORK PLAN MODIFICATION  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

Sampling Interval (feet bgs)	Sampling Locations												
	Excavation Area 1	Excavation Area 2		Excavation Area 3	Excavation Area 4		Excavation Area 5						
	VS-P1-S12	VS-P1-S13	VS-P1-S14	VS-P1-S15	VS-P1-S16	VS-P1-S17	VS-PS-S1	VS-PS-S2	VS-PS-S18	VS-PS-S19	VS-PS-S20	VS-PS-S21	VS-PS-S22
0.5-1.0	--	--	--	--	--	--	PCBs	PCBs	PCBs	--	--	PCBs	PCBs
1.5-2.0	PCBs	--	--	--	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs
3.5-4.0	PCBs	--	--	--	--	--	--	--	--	--	--	--	--
13.5-14.0	--	PCBs	PCBs	--	--	--	--	--	--	--	--	--	--
15.5-16.0	--	--	--	PCBs	--	--	--	--	--	--	--	--	--
27.5-28.0	--	PCBs	PCBs	--	--	--	--	--	--	--	--	--	--
31.5-32.0	--	--	--	PCBs	--	--	--	--	--	--	--	--	--

Sampling Interval (feet bgs)	Sampling Locations												
	Excavation Area 6						Excavation Area 7				Excavation Area 8		
	VS-P1-S3	VS-P1-S4	VS-P1-S23	VS-P1-S24	VS-P1-S25	VS-P1-S26	VS-P1-S5	VS-P1-S6	VS-P1-S7	VS-P1-S8	VS-P1-S27	VS-P1-S28	VS-P1-S29
0.5-1.0	--	--	--	--	--	--	--	--	--	--	PCBs	PCBs	--
1.5-2.0	PCBs	PCBs	PCBs	--	--	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs
3.5-4.0	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	--	--	--

Sampling Interval (feet bgs)	Sampling Locations														
	Excavation Area 9				Excavation Area 10					Excavation Area 11	Excavation Area 12	Excavation Area 13			
	VS-P1-S9	VS-P1-S30	VS-P1-S31	VS-P1-S32	VS-P1-S10	VS-P1-S33	VS-P1-S34	VS-P1-S35	VS-P1-S11	VS-P1-S36	VS-P1-S37	VS-P1-S38	VS-P1-S39	VS-P1-S40	
0.5-1.0	--	--	--	--	--	--	--	--	--	--	PCBs	PCBs	PCBs	PCBs	
1.5-2.0	PCBs	PCBs	--	PCBs	--	--	--	--	--	PCBs	PCBs	PCBs	PCBs	PCBs	
2.5-3.0	--	--	--	--	--	--	--	--	PCBs	--	--	--	--	--	
3.5-4.0	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	PCBs	--	PCBs	--	--	--	--	
5.5-6.0	--	--	--	--	--	--	--	--	PCBs	--	--	--	--	--	
7.5-8.0	--	--	--	--	PCBs	PCBs	PCBs	PCBs	--	--	--	--	--	--	

Sampling Interval (feet bgs)	Sampling Locations					
	Excavation Area 14			Excavation Area 15		
	VS-P1-S41	VS-P1-S42	VS-P1-S43	VS-P1-S44	VS-P1-S45	VS-P1-S46
0.0-0.2	--	--	--	SVOCs	SVOCs	SVOCs
0.5-1.0	--	--	--	SVOCs	--	--
2.0-2.5	VOCs	VOCs	VOCs	--	--	--
4.0-4.5	VOCs	VOCs	VOCs	--	--	--

**Notes:**

1. PCBs = indicates sample will be submitted to TestAmerica of Shelton Connecticut for laboratory analysis of polychlorinated biphenyls (PCBs) using United States Environmental Protection Agency (USEPA) SW-
2. VOCs = indicates sample will be submitted to TestAmerica of Shelton Connecticut for laboratory analysis of volatile organic compounds (VOCs) using USEPA SW-846 Method 8260.
3. SVOCs = indicates sample will be submitted to TestAmerica of Shelton Connecticut for laboratory analysis of semi-volatile organic compounds (VOCs) using USEPA SW-846 Method 8270.
4. -- = Sample will not be collected from the designated interval.

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**Figure**

