

**Comments to: Work Plan for Supplemental Hawthorn Group Characterization  
Cabot Carbon/Koppers Superfund Site (October 16, 2014)  
GRU, November 5, 2014**

Section 2.1, Page 2, Second Bullet:  
Replace “with” with “within”.

Section 2.1, Page 3, First Paragraph:

GRU concurs with EPA’s comment that if evidence of DNAPL contamination is found in the upper part of the UHG at a boring location, a step out location should be used to complete a boring to the middle clay layer in that area. Furthermore, if significant contamination is found in the lower part of the UHG at any location, our expectation is that there will be investigation into the LHG in that area.

Section 2.2.1, Page 4, First Paragraph:

Please clarify that the “tracer test” indicated in this work plan consist of spiking drill fluid with a conservative tracer – to a specified concentration - and monitoring the concentration of the tracer in recovered formation water during well development. Sodium bromide at approximately 500 mg/L is specified in Section A.3 of the attachment.

Section 2.2.1, Page 4, Second Paragraph:

Add ORP during the field investigations to pH, specific conductance, temperature, etc, - not as a lab measurement as shown in Table 1. Revise Table 1 accordingly

Section 2.2.2, Page 4, Fourth Paragraph:

The last sentence of this paragraph states “The scope of the proposed long term monitoring plan will be presented in the Focused Feasibility Study, which will be submitted after the investigation activities have been completed.” GRU believes that investigation of contamination at the Cabot Site is an iterative process and that additional work will likely be required after tasks identified in the October 16 work plan have been completed. Does Cabot intend to wait until all characterization is completed to start work on the Focused Feasibility Study (FFS) or to start work on the FFS after this round of characterization?

Section 2.3, Page 5, Second Paragraph:

Cabot specifies that well CFW-1 will be installed at the proposed location only if the “absence of contamination” is confirmed in the “adjacent HG wells”. GRU believes that the criteria of "absence of contamination" in the HG in order for a Floridan well to be installed is unreasonable. Beazer has repeatedly installed wells with reliable results where there was no evidence of DNAPL in the HG. GRU believes the presence of DNAPL, whether from Cabot or Koppers, is unlikely at the proposed at HG-38S/D location. We believe this criteria should be revised to indicate an aqueous concentration – such as

the criteria upon which Cabot delineated the plumes in the HG and upon which all our discussions of well locations have been, so far, based i.e.: 2,000 µg/L for phenol, 35 µ/L for 3/4-mthyl phenol, and 100 mg/L for total ketones. We propose using only Cabot-related compounds in this evaluation.

We need a backup plan in the unlikely case that the proposed location for the Floridan well is deemed unsuitable; would Cabot propose to relocate the Floridan well in the direction of HG-20S or SB-21 or where?

Section 2.4, Page 6, First Full Paragraph:

The discussion of potential cross-contamination in this section is overly simplified. The statement in this paragraph that GRU and ACEPD determined that leakage is impacting groundwater quality in the Lower Hawthorn is misleading and omits our discussion of how much of the data are inconsistent with the cross-contamination/leakage hypothesis. Per our August 12, 2014 comments, our overall conclusion was and continues to be that “we believe the information now available probably indicates some degree of leakage at HG-29D, but this may not be the sole or even the primary cause of the chemistry evident at HG-29D”.

Section 2.4, Page 6, Third Paragraph:

The work plan states that “A pressure fitting will be placed on the 10-inch isolation casing and a calculated volume of grout slurry will be pumped into the boring sufficient to bring the grout level within 10 to 15 feet of ground surface.” Please clarify; will the entire contents of the borehole (water) be forced into the formation as grout is added? Will a tremmie pipe be used to place grout in the boring from the bottom to the top, thereby displacing the water, before pressure is applied? Will grout free-fall to the bottom?

Figure 4:

The drawing of Step 1 shows the sonic drill pipe extending only to the top of grout at the Middle Hawthorn Clay. Please clarify that the intent is to drill to HG-29D total depth and to remove all well casing and screen.