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Task Order No. 067-ROBE-0416

BVSPC Project 049067
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September 21, 2017

Mr. Scott Miller, Remedial Project Manager
US Environmental Protection Agency, Region 4
61 Forsyth Street S.W.
Atlanta, Georgia 30303
Via Email

Subject: Review of “Pre-Design Investigation Work Plan”
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Dear Mr. Miller:

Black & Veatch Special Projects Corp. (Black & Veatch) has completed its review of the “Pre-Design Investigation Work Plan” document, prepared by Geosyntec Consultants (Geosyntec) and dated September 2017. Black & Veatch provides the following observations and comments on the information submitted:

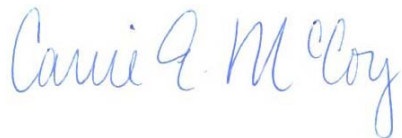
1. Section 3.3 – A table that summarizes the boring locations, boring types and the analyses to be performed at each location would be extremely helpful to the reviewer and help ensure that the field staff collect the correct samples from the correct locations. Additionally, a table that summarizes the proposed mix designs and soils to be used for each would also be helpful.
2. Section 3.3.1 – Black & Veatch recommends that all barrier wall confirmation borings be extended at least 4 feet into the middle clay to confirm that there is a sufficient layer to key the barrier wall into. If a 4-foot thick continuous and competent clay layer is not identified in a boring, Black & Veatch recommends collecting soils from the proposed key interval for permeability testing.
3. Section 3.3.1 - Please describe the method that will be used to mix the soils to obtain a composite sample. How will you ensure that a homogenous mix has been achieved?
4. Section 3.3.1 – Black & Veatch suggests that, if encountered, samples of NAPL-impacted soils be collected for index and engineering properties analysis. The successful mix design should also be run using these NAPL-impacted soils to verify that NAPL encountered during installation of the barrier wall will not adversely affect the performance of the barrier wall. If NAPL-impacted groundwater can be obtained, completing a test of the successful mix design with the NAPL-impacted groundwater will also verify the performance of the selected mix in the presence of NAPL. Additionally, Black & Veatch recommends that permeability testing be completed on undisturbed samples from the middle clay from several locations along the barrier wall alignment.

5. Section 3.3.1 – In the event that the borings installed are found to have NAPL impacts directly above or in close proximity to the Hawthorn Group middle clay, it would be beneficial to collect soil samples from both the impacted materials and the middle clay for laboratory analysis of the site contaminants of concern (COCs) and the leaching potential from each in order to assess to what degree the contaminants are leaching into and through the middle clay.
6. Section 3.4 – Please include a map with the locations of the wells that will be used for the step drawdown test, including backup wells.
7. Section 3.4 – There is no mention of the other alternate aquifer hydraulic testing activities mentioned in Geosyntec’s “Remedial Design Work Plan”, dated August 10, 2017. Please include in this report as well and define under what circumstances these alternate activities will be conducted. Black & Veatch believes that the proposed 6-inch extraction wells and step-drawdown and constant pumping tests will yield beneficial information needed to complete a robust design.
8. Section 3.5 – Black & Veatch recommends that all groundwater used in the barrier wall mix design for both the mixing fluid and the permeant be analyzed for site COCs prior to its use in testing. This will help to ensure that the concentrations in this groundwater are representative of expected conditions and to eliminate this as an unquantified variable in the event that the results obtained indicate that alternate water sources need to be evaluated.

If you have any questions about this transmittal, please contact me at (770) 521-8127 or by electronic mail at McCoyCE2@bv.com.

Sincerely,

BLACK & VEATCH SPECIAL PROJECTS CORP.



Carrie E. McCoy, PE
Project Engineer

cc: Geoffrey Krieger, EPA Contracting Officer
Luis Flores, EPA Project Officer
Gina Montgomery, BVSPC RAC II Program Manager
John Jenkins, BVSPC Task Order Manager