Response to sampling methodology comments on LCP ISM Work Plan
Chris Saranko
to:
Galo Jackson
04/19/2011 04:59 PM
Cc:
Kirk Kessler, "Gupta, Prashant K"
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To: Galo Jackson/R4/USEPA/US@EPA

Cc: Kirk Kessler <KKessler@envplanning.com>, "Gupta, Prashant K" <Prashant.Gupta@Honeywell.com>

History: This message has been forwarded.
Dear Galo,

Since we will begin the implementation of the ISM fieldwork tomorrow, we wanted to provide you with responses to the agency comments that pertain specifically to the proposed sampling methodologies. Specific EPA comments are shown below followed by our responses. I think you'll see from the responses that we are generally on the same page.

Please let me know if you have any questions. I understand that you'll be down at the site tomorrow to observe some of the sampling work. Kirk will also be there and able to discuss any of our responses that you might have questions about.

Best Regards,
Chris

EPA Comment

No sampling Data Quality Objectives (DQOs) were included in the Work Plan. Targeted levels of precision or confidence for the mean concentrations and other statistical parameters should be identified in the systematic planning process. The degree of precision required to support the decision, expressed as percent relative standard deviation' (RSD) of replicate samples from a sampling unit, should be specified as part of the DQOs, such that:

%RSD = 100 (s) / x
where
s = standard deviation
x = sample mean (mean of replicate IS results)

EPA suggests a RSD of 30% or less. At RSDs greater than 35%, the data distribution starts to become non-normal and confidence in the representativeness of the sample results diminishes? If the RSD is greater than 35%, re-sampling may, but not necessarily, be required.

Honeywell Response

Honeywell will revise the Work Plan to include a discussion of DQOs. Honeywell also notes that in the event the RSD exceeds 35%, it may be necessary to perform additional sampling.

EPA Comment

Section 2.5, Page 6. It is not clear from this section or the SOP attached as Appendix A whether soil aliquots will be mixed in the field and/or in the laboratory and whether the soil will be ground prior to analysis. EPA recommends that the soil sample should be mixed and sieved by the laboratory (Section 11.4.4 of the SOP) prior to laboratory sub-sampling. Please revise Section 2.5 for clarity.

Honeywell Response

Processing of the multi-increment samples will be done by the laboratory. The samples will be air-dried, sieved, and mixed prior to sub-sampling and analysis. The laboratory selected for this task (TestAmerica Sacramento California) is versed in ISM sampling preparation protocols. Section 2.5 of the Work Plan will be revised to clarify this point.

EPA Comment

Section 3.1, pg 7; Section 4.2, pg 11. The text discusses the use of Ziploc storage bags for storage and transport of soil samples. Region 4 procedure is generally to use amber glass jars for soil samples that are to be analyzed for organic constituents. If plastic bags are to be used, the analysis of trip blanks would help to ensure that no constituents of interest are released from the plastic bag, and that any released plastics components do not interfere with the lab analyses for the constituents of interest.

Honeywell Response

Pre-cleaned 2.5 liter amber glass jars provided by the laboratory will be used to store and transport the multi-increment samples to the laboratory. The Work Plan will be revised accordingly.

EPA Comment

Section 3.1. The handling of sample increments should be explained in greater detail for clarity. For example, it is difficult to tell if there will be 100 Ziploc bags containing increments that get combined into one

sample, or whether each sample (of x increments) will be collected in a single bag.

Honeywell Response

The individual increments associated each multi-increment sample will be deposited immediately after collection into a sample-specific 1 liter wide-mouth amber glass jar. Once all of the increments associated with that sample have been collected, the amber jar will be sealed (with a sample custody seal) and temporarily stored in a refrigerator on site unit it is shipped to the laboratory. Section 2.5 of the Work Plan will be revised to clarify this point.

EPA Comment

Figure 5d-proposed ISM sampling units for Quadrant 4. Based on the orange marker indicating a high detection of Aroclor 1268 on the eastern portion of the quadrant, collection of some additional soil samples in this portion of Quadrant 4 appears to be warranted. If the soil in the area of this detection was previously removed, this should be stated in the text.

Honeywell Response

Honeywell assumes that the orange marker described in this comment is the one to the immediate south of the soil cap covering the footprint of the former cell building. That sample (Sample ID 96207-M76) was a post-excavation sample collected along the northern sidewall of an excavated/backfilled area (excavation was in excess of 3ft in depth at this location) and the sample location abuts the cell building cap. We have attached a figure showing the location of this sample along with the various removal action area polygons. Additional text will be added to the work plan to explain this data point.

EPA Comment

Please indicate in the Work Plan that GPS coordinates will be recorded and made available for the location of each increment. Each increment location should be tied to its unique sample number in the database.

Honeywell Response

Honeywell understands that the primary rationale behind this comment is a desire to develop a visual representation of the sampling density within each sampling/decision unit that will be helpful in conveying information about this sampling event to the public. Honeywell will place a flag at the specific location where each increment is collected. Different color flags will be used to distinguish between the replicates within a sampling unit. If deemed necessary, GPS coordinates can later be established for the individual ISM increment locations.

EPA Comment

A proposed schedule (with relative or absolute dates) should be added to the Work Plan.

Honeywell Response

Because Honeywell plans to initiate fieldwork next week, including a schedule with absolute dates in the Work Plan could result in some confusion since the dates of the field work would likely occur prior to delivery of the final Work Plan. Therefore, Honeywell proposes that the schedule presented in the work plan will show anticipated milestone dates such as completion of the field work, laboratory testing, and Data Report submittal.