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From: Jacobs, Sara <Jacobs.Sara@epa.gov>
Sent: Friday, May 17, 2013 5:43 PM
To: Hauer, Lance M (GE, Corporate)
Cc: Eugene Esplain; Chandra Manandhar; Norman, Yolande; Steckley, Deborah; Dixon, Earle, NMENV; Brooks, Janet; Wetmore, Cynthia
Subject: EPA Comments on the UNC Mill/NECR Data Needs
Attachments: Data Gap Report Comments-EPA-5-17-13.docx

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Hi Lance,

Attached are EPA's comments on the Supplemental Data Needs Evaluation and Work Plans for Removal Design for the Northeast Church Rock Mine Site Removal Action. We look forward to reviewing highlights from our comments on the Design Team call next Tuesday, May 21, 2013.

Please feel free to call if you have any questions or concerns.

Sara

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI and IX
Comments on the

SUPPLEMENTAL DATA NEEDS EVALUATION AND WORK PLANS FOR REMOVAL DESIGN
NORTHEAST CHURCH ROCK MINE SITE REMOVAL ACTION

Dated November 9, 2012, MWH

EPA has reviewed the *Supplemental Data Needs Evaluation and Work Plans for Removal Design* (11/9/2012, MWH), and has the following comments. In addition, EPA has been working with DOE and NRC to provide GE/UNC with comprehensive comments considering all the agencies design concerns. NRC's comments have been sent by NRC under separate cover. We anticipate DOE's comments will follow shortly.

In discussions with the other federal agencies, EPA has determined that in-situ testing within the tailings at the UNC Mill Site is warranted. EPA believes additional information to better define the lithology and relative moisture within the tailings would improve confidence in the design. NRC and DOE also have specific information needs. EPA requests that GE considers all comments and propose an in-situ tailing testing program and required health and safety plan.

EPA suggests conducting a CPT boring investigation to better define the lithology and relative moisture. The advantage of a CPT program is that many locations can be logged quickly. We anticipate that in-situ sampling will be needed to verify the readings on the CPT and to collect actual physical parameters of the fine tailings, the coarse tailings, and native material beneath the tailings, i.e., verify it is alluvium, zone 1 or zone 3 material and properties of the material.

Section 3.2

"The repository will be designed to accommodate +/- 20 percent volume contingency to minimize design changes during construction" EPA would like to see detail volume estimates after the data is collected. Although there is sufficient surface samples to determine the lateral extent of contamination, EPA believes there is a fair amount of uncertainty for the depth of contamination. A 20% contingency may be too low.

Section 4.2.1, page 4-1, Section 5.2.1, page 5-1 and Figure 5-1

The proposed borings may be sufficient to better estimate the volume of clean soils on site, but would not likely be adequate to delineate the boundary of contaminated soil. Please confirm that the actual boundary of clean soils will be determined during excavation. If this information would be used for delineation purposes, then a plan for additional borings would be necessary to "step-out" or "step-in" dependant on the results of the initial borings.

Also, two borings for the purpose of delineating clean soils are included on Figure 5.1 north and west of Vent Hole 6. While the narrative discusses the location of the other borings (around the shafts and on the road), the narrative in the above sections does not include the two borings referenced above. Please clarify the discrepancy between the information included on the map and the description in the narrative.

Section 5.2.3

The sampling plan for refining the volume of PTW is based on the premise that the sampling conducted in the RSE found all the locations where PTW is located. However, the historic boring locations were not systematically located on a grid but were randomly selected. (For example, pond 2 has only one boring). A random system may

find all the PTW locations. Therefore, the proposed boring locations are useful for delineating the volume of known PTW; but may not capture all the volume.

How will the PTW investigation derived waste be handled?

Section 5.2.4

As a general suggestion and for tracking purposes it would likely be helpful to maintain a central database regarding the nature, volume, location, and disposition of all materials that need to be moved, processed, or otherwise handled during the RA. A similar database should be maintained for structural elements such as shafts, vent holes, building slabs (if any remain), etc.

Section 5.2.6

EPA requests that the archaeologist consult with the local community prior to performing the cultural surveys to acquire local knowledge about the current cultural resources. In addition, the archaeologist may need to conduct a community meeting to inform the community what a survey entails and to request information from the community of any concerns they have of their local cultural resources.

Section 5.3.2

EPA requests that you document the state of the radon barrier prior collecting samples.

Section 5.3.5

Under Section 106 of the National Historic Preservation Act, consultation with the New Mexico State Historic Preservation Officer (SHPO) may be necessary for this type of sampling on private land in the State of New Mexico. This sampling event would require additional information and at least some discussions with the New Mexico State Department of Cultural Affairs, Historic Preservation Division to determine whether or what level of consultation would be necessary. EPA requests that the local community be consulted prior to performing any sampling.

Section 5.3.6

EPA requests that the biologist consult with the local community prior to performing any vegetation surveys to acquire local knowledge about the current resources. In addition, the biologist may need to conduct a community meeting prior to the surveys to inform the community of what a survey is and how it will be utilized.

Table 2-1.

Excavation of the Red Water Pond Road was taken to the Quivira Mine Site and is not part of the waste for disposal at the UNC Mill site under this action. Please revise accordingly.

Table 3-1

Cover permeability. The permeability of the cover should be less than or equal to the base of the additional waste, not the natural subsoil. However, EPA would consider an equivalent design that achieves the same minimal infiltration as the low permeability layer.

AVM SOP2

The SOP refers to static gamma surveys on an 80-ft grid, and scan radiation (walkthrough surveys) along transects. The procedures discussed in this section appear to be specific to a technique developed to complete post-excavation Interim Status Surveys for the Interim Removal Actions prior to completion of a MARSSIM final status survey after

the NECR Mine Site cleanup action. It does not appear that surface gamma surveys are proposed as part of the supplemental data collection efforts described in this document and these procedures are not consistent with a MARSSIM final status survey process. Please delete the references to the Interim Removal Actions and the associated procedures developed for the Interim Status Surveys from this SOP or explain how they relate to this data collection effort.

AVM SOP-4

This SOP suggests a 5-minute count will be used to measure field gamma activity levels in soils evaluated ex-situ, is this correct?

MWH SOP 31, Part 4

The equipment decontamination SOP does not specify how equipment will be surveyed to determine that it has not been contaminated. Presumably, a survey for gross alpha activity will be conducted. EPA suggests that MWH/UNC explain the procedures and equipment used to perform these surveys and the criteria for determining whether they may be released from the site. For example, will wipe samples be collected? If so, at what frequency? From what locations? What is the release level?