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Date: AUG 10 2018
Refer To: N3B-18-0137

John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Clarification of Request for Certificates of Completion for Twenty-Two Solid Waste Management Units and Five Areas of Concern in the Delta Prime Site Aggregate Area

Dear Mr. Kieling:

The purpose of this letter is to clarify the basis for the request for Certificates of Completion with Controls for Solid Waste Management Units (SWMUs) 21-022(h) and 21-027(a) and Area of Concern (AOC) C-21-027 within Delta Prime Site Aggregate Area. These 3 sites were included in the request for Certificates of Completion for 27 sites within Delta Prime Site Aggregate Area submitted to the New Mexico Environment Department (NMED) on February 2, 2018 (ADEM-18-0010). This clarification is provided in response to a comment received by the U.S. Department of Energy (DOE) Office of Environmental Management Los Alamos Field Office (EM-LA) via email from NMED on May 3, 2018.

SWMUs 21-022(h) and 21-027(a) and AOC C-21-027 each have a mesa-top component, as well as a canyon-slope component. The human health risk-screening assessments for these sites contained in the NMED-approved "Phase III Investigation Report for Delta Prime Site Aggregate Area at Technical Area 21," Revision 1 (LA-UR-16-24014/EP2016-0049) (hereafter the Phase III IR) demonstrated that the mesa-top portion of these sites posed no unacceptable risk to human health under the industrial and construction worker scenarios but would pose potential unacceptable risk under the residential scenario. Contaminant concentrations on the canyon-slope portion of all three sites could pose potential unacceptable risk under the industrial scenario and contaminant concentrations on the canyon-slope portion of SWMU 21-027(a) could also pose potential unacceptable risk under the construction worker scenario. Cleanup of the canyon-slope contamination was not performed during the Phase III investigation because of concerns over the ability to safely access these areas due to the steep slope. Although cleanup was not performed, the Phase III IR indicated that there would be no human exposure to canyon-slope contamination at these sites because (1) the areas are on a steep slope/cliff, with 45- to 90-degree slopes; (2) the areas consist of unstable, highly weathered, fractured bedrock with approximately 15% to 30% soil filling

fractures and voids between rocks; (3) the slope/cliff portions of the sites are inaccessible; (4) no trail or path is available for someone to traverse if he or she were to gain access to the slope/cliff; and (5) major safety concerns arise regarding any activity on the slope/cliff because of the steepness, the unstable bedrock, and the lack of any trail.

Because the mesa-top contamination at these sites posed no potential unacceptable human-health risk under the industrial and construction worker scenarios and because there would be no exposure of human receptors to canyon-slope contamination, Certificates of Completion with Controls were requested, with the control being to restrict land use to industrial use.

At the time the Phase III IR was prepared, it was anticipated that DOE might transfer ownership of the mesa-top portion of these sites but would maintain ownership of the canyon-slope portion. The Phase III IR indicated that existing fencing would restrict access to the steep/cliff portions of the sites and would remain following transfer of the mesa top, since DOE would maintain ownership of the canyon slope. It is now anticipated that DOE may transfer ownership of the canyon slope as well as the mesa top. Therefore, DOE's future maintenance of fencing and signage as described in the Phase III IR would no longer occur because the canyon slope would also be transferred.

NMED's May 3, 2018, comment indicated that the approval of the Phase III IR was based in part on the access restrictions (e.g., fencing and signage) described in the report. DOE and Newport News Nuclear BWXT – Los Alamos, LLC (N3B) do not believe fencing and signage are necessary to prevent human exposure to canyon-slope contaminants. The primary bases for no exposure are the five points cited above. Maintenance of fencing and signage was mentioned in the Phase III IR because it was already in place and would provide additional protection against human exposure (i.e., defense in depth). The fencing and signage would not, however, be necessary to prevent exposure. Note that the fencing described in the Phase III IR was not installed to control access to the canyon slopes but was installed as security fencing to prevent access to the mesa-top portion of Technical Area 21. Following transfer of the mesa-top property, as anticipated in the Phase III IR, the fencing would then function to prevent access to the DOE-owned canyon slope, consistent with fencing on all DOE property adjacent to private property, whether potentially contaminated or not.

Section XXI.E of the Compliance Order on Consent (Consent Order) requires Certificates of Completion with Controls to contain institutional and/or physical controls needed to meet cleanup objectives. As noted above, the topography and physical condition of the canyon slope prevent access to this area and render it unsuitable for industrial use and associated construction activities, as well as recreational use (e.g., hiking and rock climbing). Although these physical conditions were evaluated with respect to the land use considered in the Phase III IR (i.e., industrial and construction worker scenarios), they would also result in no exposure via other scenarios (e.g., residential or recreational). Therefore, additional physical controls in the form of fencing and signage are not needed to meet Consent Order cleanup goals. The only administrative control needed would be restriction of land use to industrial use, as specified in the Certificate of Completion request.

The three sites were inspected by staff from NMED, DOE EM-LA, and N3B on July 19, 2018. During the site inspection, it was determined that cleanup of canyon-side contamination at SWMU 21-022(h) could be safely performed on the upper canyon slope, but not on the lower slope or at the other two sites. It is expected that SWMU 21-022(h) will not pose unacceptable risk under the industrial and residential scenarios following cleanup.

In summary, DOE and N3B withdraw the request for Certificate of Completion for SWMU 21-022(h) and request that Certificates of Completion for SWMU 21-027(a) and AOC C-21-027 not include requirements for physical controls since site conditions (i.e., steep slope/cliff) prevent human exposure to contamination left in place. Following completion of additional cleanup at SWMU 21-022(h) a request for Certificate of Completion will be resubmitted.

If you have questions, please contact Erich Evered at (505) 309-1360 (erich.evered@em-la.doe.gov) or Arturo Duran at (505) 665-7772 (arturo.duran@em.doe.gov).

Sincerely,

Joseph A. Legare
Program Manager
Environmental Remediation Program

Sincerely,

David S. Rhodes, Director
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