Department of Energy
Carlsbad Field Office
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JUN 2 2 2018

Ms. Lee Ann B. Veal, Director
Radiation Protection Division
Environmental Protection Agency
Center for Federal Regulation
Arial Rios Building
1200 Pennsylvania Ave. N.W.
Washington, DC 20460

Subject: Plans to Change the Methodology for Calculating the Volume of Record for Disposal of Transuranic Waste at the Waste Isolation Pilot Plant

Dear Ms. Veal:

The purpose of this letter is to inform the U.S. Environmental Protection Agency (EPA) that the U.S. Department of Energy (DOE) plans to change the methodology for calculating the WIPP Land Withdrawal Act (LWA) volume of record (VOR) for disposal of contact-handled (CH) transuranic (TRU) waste at the Waste Isolation Pilot Plant (WIPP) facility. Historically, the DOE has determined the volume of CH TRU waste disposed, for comparison to the total capacity limit of transuranic waste for the LWA, based on the volume of the outermost container emplaced in the WIPP repository. The historical approach overestimates the volume of CH TRU waste because the method includes the void space inside an overpack as CH TRU waste volume.

In the future, DOE will determine the VOR for emplaced CH TRU waste as follows:

1. If the waste is not overpacked, the VOR will be based on the volume of the WIPP-approved container;
2. If the waste is overpacked, the VOR will be based on the sum of the volumes of the containers inside the overpack container;
3. For pipe overpacks and criticality control overpacks, the VOR will be based on the inner container volume of the (single) pipe component.

This approach provides a more appropriate estimate of the volume of TRU waste emplaced in the WIPP repository. The WIPP Waste Data System (WDS) will be used to track the VOR for waste emplaced at the WIPP facility. The WDS meets the requirements of the DOE's *Quality Assurance Program Document*, as implemented by Nuclear Waste Partnership LLC (NWP). Any future changes to the WDS that may be required for the new methodology for CH TRU waste will be performed and verified using the relevant procedures in the NWP Quality Assurance Programs.

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The DOE has conducted a qualitative assessment to address the potential impacts of changing the methodology for tracking waste volume on long-term repository performance. The assessment in Enclosure A documents that the potential release of radionuclides with respect to legislated limits in the LWA is not expected to be substantially different under the proposed change to the volume of record.

If you have any questions concerning the planned change to the methodology for tracking the volume of TRU waste in the repository, per the LWA, please contact Michael R. Brown at (575) 234-7476.

Sincerely,

Todd Shrader, Manager
Carlsbad Field Office

Enclosure

cc:
T. Peake, EPA ORIA *ED
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*ED denotes electronic distribution

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