



Department of Energy  
Carlsbad Field Office  
P. O. Box 3090  
Carlsbad, New Mexico 88221  
May 16, 2013



Mr. Jonathan Edwards, Director  
Radiation Protection Division  
U. S. Environmental Protection Agency  
Washington, DC 20460

Reference: U.S. Environmental Protection Agency letter to Mr. Edward Ziemianski  
from Mr. Jonathan Edwards, dated August 8, 2011

Dear Mr. Edwards:

This letter is in response to the referenced letter, announcing the U.S. Environmental Protection Agency's (EPA) approval of the Department of Energy's (DOE) change request to emplace a portion of the remote-handled (RH) transuranic (TRU) waste inventory in specially designed shielded containers at the Waste Isolation Pilot Plant (WIPP). Your approval states: "*Prior to shipping shielded containers to WIPP, the DOE must demonstrate a consistent complex-wide procedure to ensure that shielded containers containing RH waste remain below the Land Withdrawal Act surface dose rate limit for contact-handled (CH) waste of 200 millirem per hour.*"

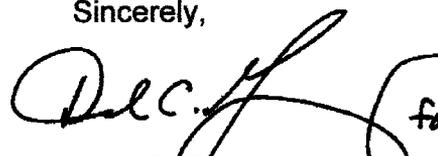
Per the EPA's request, the DOE-Carlsbad Field Office (CBFO) has issued a complex-wide procedure, CCP-TP-081, *CCP Shielded Container Assembly Loading*, to ensure that the surface dose rate from shielded containers containing an RH waste drum is less than the limit of 200 millirem per hour. This procedure is included as Enclosure 1 to this letter. Note that the Land Withdrawal Act (LWA) determination of whether a particular waste drum is CH or RH waste is made prior to the waste drum being loaded into a shielded container.

DOE-CBFO management and staff have also received email correspondence the week of April 22<sup>nd</sup>, 2013 that indicates EPA still has a concern regarding "*dose rate measurement uncertainty*". DOE-CBFO's response to this concern is included as Enclosure 2 to this letter.

As the final step for EPA approval, DOE plans to provide EPA personnel a demonstration of the standardized complex-wide dose rate measurement procedure at the Argonne National Lab during the morning of June 13<sup>th</sup>, 2013. Logistics of that visit will be finalized between CBFO National TRU Program personnel and EPA personnel that plan to attend.

If you have any questions, please call Mr. J. R. Stroble, Director of the Office of the National TRU Program at (575) 234-7313.

Sincerely,

 for Jose R. Franco  
Jose R. Franco, Manager  
Carlsbad Field Office

Enclosure

CBFO:NTP:JR:GS:13-0494:UFC 5486.00



Mr. Jonathan Edwards

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May 16, 2013

cc:

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C. Gelles, DOE HQ	ED
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\*ED denotes electronic distribution

**From:** [Lee, Raymond](#)  
**To:** [Lee, Raymond](#)  
**Subject:** RE: Draft Letter to Forward CCP's Procedure to EPA for Review  
**Date:** Monday, June 03, 2013 3:47:44 PM

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**From:** Peake, Tom  
**Sent:** Tuesday, April 23, 2013 3:17 PM  
**To:** Feltcorn, Ed  
**Cc:** Patterson, Russ (CBFO); JR Stroble; 'marcus.pinzal@wipp.ws'; 'Harris, Alton'; Ghose, Shankar; Economy, Kathleen; Walsh, Jonathan; Kouba, Steve - WRES  
**Subject:** RE: Draft Letter to Forward CCP's Procedure to EPA for Review

Ed,

Seems to be pretty good overall and I will be interested in seeing it implemented, but the procedure has a major flaw in the contact dose msmt part. It does not appear to address our statistical concerns. Please correct me if I am wrong.

The procedure does not appear to account for dose rate measurement uncertainty, and that is one of our primary concerns. I don't see us signing off on this as it stands (at least w/o additional info) because of that. We want to make sure that the dose rate really is below 200 mrem/hr. I do not want us to have to deal with measurements like the 270 mrem/hr from the Hanford drum(s) that showed up at the WIPP site a few years ago. I am really surprised that the procedure uses 200 mrem/hr and not something less.

Are there any statistics to back up the approach that says if all of the different measurements in attachment 2 of the procedure are below 200 mrem/hr then, given the 20-30% measurement uncertainty, there is 90% or higher confidence that the package is truly below 200 mrem/hr? A 200 mrem/hr measurement could really mean 240 mrem/hr with measurement uncertainty. This has to be addressed before we can concur with the procedure.

Tom