



**Department of Energy**

Carlsbad Field Office  
P. O. Box 3090  
Carlsbad, New Mexico 88221

SEP 28 2011

Mr. Jonathan Edwards  
U.S. Environmental Protection Agency  
Office of Air and Radiation  
401 M Street S.W.  
Washington D.C. 20460

Subject: Transmittal of Planned Change Request for Panel Closure Redesign

Dear Mr. Edwards:

This letter and its enclosure provide the U.S. Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) panel closure redesign change request to the U.S. Environmental Protection Agency (EPA). The proposed panel closure redesign will modify Condition 1 of the Final Certification Decision for 40 CFR Part 194.

In the 12 years since the WIPP facility commenced waste disposal operations the DOE has acquired considerable experience and knowledge regarding the behavior of the repository, and the nature and behavior of disposed transuranic (TRU) waste, including the potential for generation of explosive gases. Condition 1 of the Final Certification Decision for 40 CFR Part 194 specifies that the panel closure system (PCS) to be used in the WIPP repository be "Option D" as specified in the Compliance Certification Application (CCA). The Option D specified that certain components be constructed using Salado Mass Concrete (SMC).

Large scale testing has demonstrated that using SMC cannot meet the design and performance requirements for the panel closures as specified in the CCA. The results from monitoring for explosive gases in the closed panels has established that the measured concentrations of methane and hydrogen will remain below the lower explosive limits for these gases through the operational period. Based on these results, a new panel closure design identified as Run-of Mine Panel Closure (ROMPC) has been developed.

A performance assessment (PA) has been performed to evaluate the impacts of the ROMPC on the current compliance baseline. The results of the PA show that this change has essentially the same performance as the Option D design and that the WIPP will remain in compliance with the disposal requirements in 40 CFR Part 191, Subparts B and C.

In summary DOE is requesting that EPA modify Condition 1 of the Final Certification Decision for 40 CFR Part 194 by replacing the current panel closure design with the proposed design.

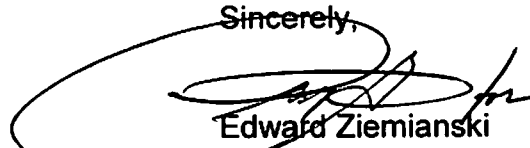
SEP 28 2011

Mr. Jonathan Edwards

-2-

If you have any questions regarding this request, please contact Russell Patterson at (575) 234-7457.

Sincerely,



Edward Ziemianski  
Interim Manager

Enclosure

cc: w/enclosures

R. Lee, EPA	*ED
K. Economy, EPA	ED
S. Ghose, EPA	ED
J. Walsh, EPA	ED
N. Elkins, LANL	ED
T. Peake, EPA	ED
P. Shoemaker, SNL	ED
F. Sharif, WTS	ED
R. Chavez, RES	ED
S. Kouba, RES	ED

CBFO M&RC

\*ED denotes electronic distribution