



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



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OFFICE OF  
AIR AND RADIATION

Dr. Inés Triay, Manager  
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U.S. Department of Energy  
P.O. Box 3090  
Carlsbad, NM 88221-3090



Dear Dr. Triay:

I am writing in response to your request (undated, but received by us in December 2002) that the Environmental Protection Agency (EPA) issue a general approval to allow experiments at the Waste Isolation Pilot Plant (WIPP) if they are not directly related to the disposal of transuranic (TRU) waste and meet certain criteria. The Agency has completed its review of this request. With this letter, we approve the request to allow the placement of experiments without prior EPA approval for individual experiments, provided that they meet the criteria described in your letter as well as meeting additional conditions imposed by us and discussed below.

Your letter requested that the Department of Energy (DOE) be allowed to implement, as they arise, some experimental activities and demonstrations that are not directly related to the disposal of TRU waste. Rather than seeking prior EPA approval, for a subset of these experiments that meet certain criteria, you suggested that DOE would use the annual Change Report as a notification mechanism. You proposed that experiments meeting the following criteria would fall under this streamlined implementation scheme:

- No ventilation changes
- No additional hazardous substances or new hazards
- No change in facility footprint (no new mining)
- No modification to waste disposal processes or impact to waste disposal operations
- Removal of all activity specific hardware and equipment upon completion of the activity.

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Futhermore, the letter emphasized that "where proposed activities involve changes that fall outside the restrictive conditions described [above] or if the demonstrations/tests will be questionable, the DOE would continue to seek specific authorization from the EPA prior to allowing [the experiments] to proceed."

We recognize that some activities which are limited in scope and complexity are unlikely to affect the mission or operations of TRU waste disposal. For such activities, a less intensive review and approval process may be reasonable. Based on our review of your request, we agree that the proposed criteria are helpful in determining which experiments need formal submission and EPA approval. However, the Agency is concerned that the addition of many experiments or non-waste disposal activities, or numerous unreviewed changes to the scope or purpose of existing experiments, could slowly erode the operational safety and long-term performance of WIPP's original purpose: safe disposal of TRU radioactive waste from weapons production. Therefore, we are cautious about any blanket approval. Furthermore, and as we have indicated in previous letters, it is still not clear whether DOE has the statutory authority to conduct the experiments it is currently conducting.

For these reasons, we believe that certain additional restrictions are necessary. Based on our experience with previously approved experiments, we believe that these restrictions, when combined with the criteria you proposed, will provide adequate assurance that experiments falling under the blanket approval could meet the EPA WIPP Experiment Review Checklist. Thus, we approve your request to allow the implementation of certain experiments at the WIPP, provided the following conditions are met:

- Three months before an experiment begins, DOE will notify EPA in writing of its location, scope, and nature. DOE will also document in the annual change report all ongoing, new, and decommissioned experiments. The annual change report notification will include the experiment's name, location, purpose, a summary of the past years activities and projected activities.
- The experiment must meet the criteria provided in your letter and restated above.
- The generic experiment approval applies only to experiments located in Room Q area, the old Core Storage Alcove, and the new experimental gallery north of the waste handling drifts. We believe these areas provides reasonable isolation from waste handling and disposal activities. The placement of experiments in any other location requires prior EPA approval.
- Experiment-related safety scenarios are required to be added to the Safety Analysis Report (SAR) so that potential impacts of the addition of numerous experiments on waste handling activities can be incorporated to assure overall safe operations of WIPP. Generic scenarios may be used to account for classes of experiments and should address known or existing hazards, such as liquid

nitrogen. The analysis should account for an increased number of experiments containing similar hazards, as could occur under this blanket approval. DOE is to identify in the annual change report the revisions to the SAR for the experiments.

We retain our discretion to require DOE to provide additional information regarding any experiment, or to submit a given experiment for separate EPA review and approval if we determine that the above conditions may not be met. Furthermore, EPA may inspect all experiments at its discretion as allowed by 40 C.F.R. 194.21.

Once again, our approval of emplacement of any experiments is based solely on technical grounds in accordance with 40 C.F.R. Part 194. Please be advised that any approval does not in any way constitute a determination that DOE has actual statutory authority under the WIPP Land Withdrawal Act to conduct such activities, nor is this letter intended to indicate in any manner the Agency's opinion on this question.

If you have any questions about this approval, please contact Betsy Forinash at (202) 564-9310.

Sincerely,



Frank Marcinowski, Director  
Radiation Protection Division

Enclosure

cc: Lynne Smith, DOE/HQ  
Cindy Zvonar, DOE/CBFO  
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