

Proposed Independent Technical Peer Review of the Corrective Measures Study of the Mixed Waste Landfill

WERC: A Consortium for Environmental Education and Technology Development has been asked to perform a technical peer review of the Corrective Measures Study (CMS) for the Mixed Waste Landfill (MWL) located on Sandia National Laboratory's property per the request of the U.S. Department of Energy, Albuquerque Operations Office (DOE).

On October 11, 2001, the New Mexico Environment Department (NMED) directed the DOE and Sandia National Laboratories/New Mexico (SNL/NM) to conduct a CMS pursuant to Module IV, Section N.2 for the MWL in Technical Area 3 at SNL/NM. DOE has requested WERC perform an independent technical peer review of the CMS to ensure that the appropriate set of technologies was considered. Furthermore the technical peer review is tasked to ensure that each of the chosen alternative technologies were evaluated based on the HSWA Module criteria of technical, environmental, human health, institutional concerns, and cost.

WERC will serve as the facilitator for the review and use its network of experts to conduct the technical peer review of the CMS. The independent technical review panel will consist of members with a high level of expertise and qualifications in the areas of fate and transport, groundwater, landfill performance, radioactive waste disposal, health, physics, and analytical chemistry. The review shall be conducted in a manner that will help improve the technical quality of the CMS. This review shall focus on how each alternative is evaluated including its compliance with the HSWA requirements (as set forth in Sections N, O, P Q and S of Module IV of the SNL/NM RCRA permit), as well as assessing the technical credibility, the reasonableness of its engineering judgments, and thoroughness of options considered for final remedy. The review shall be completed in such a way that comments and suggestions can be readily incorporated into the CMS. If an option is lacking in detail or depth of evaluation the panel will note specific areas that need to be expanded and give specifics of what is missing, questionable or incorrect.

WERC proposes the following six steps to complete this task.

1) Contact key stakeholders and review approach with the stakeholders. The key stakeholders who were identified for the 2001 MWL peer review will be contacted to identify possible technical panel members and their qualifications. The stakeholders will also be appraised of:

- the intent of the technical peer review;
- the process of reviewing and evaluating the CMS;
- the process of nominating technical reviewers;
- the planned approach for incorporating stakeholders technical input related to CMS into the interim and final reports; and

- the process to be used in publishing the technical peer review panel's findings and disseminating the final report.

2) **Create a technical peer review panel.** WERC intends to assemble a list of experts from its network of professionals and from stakeholder recommendations. These individuals will be selected based on their knowledge and expertise in the areas of groundwater, fate and transport, landfill performance, radioactive waste disposal, health, physics, and analytical chemistry. From this list, WERC will select between four and seven individuals to serve on the technical peer review panel. The final decision on the selection of the panel members will be made by the WERC Executive Director.

3) **Review the CMS.** The panel will independently review the CMS. They will assemble for a meeting where all technical information providers, who have been selected, will present the technical information. At this meeting, the review panel will have the opportunity to ask detailed questions regarding the technical data, methodology, and documentation of the CMS. This meeting will be open to the public. The stakeholders will be asked to direct their questions in writing to the facilitator of the review. The panel will then discuss relevant technical issues that need to be further clarified or expanded upon. The panel may request additional information from the DOE, SNL, and other presenters as needed. The panel will once again review the CMS along with additional information requested and prepare their comments and recommendations for the interim report.

4) **Issue interim report.** The panel, with administrative assistance from WERC staff, will prepare an interim report on the independent technical peer review of the CMS. The interim report will elaborate on the validity of the information provided from a technical perspective and will present recommendations and conclusions related to the thoroughness of the study. A copy of the interim report will be given to each panel member for review. DOE and other interested parties will also receive a copy of the interim report and will have five working days to review the interim report for factual accuracy. After receiving technical comments, a final meeting of the panel (some panel members may be present via phone) will occur during which the members will discuss the interim report and make recommendations for changes needed to enhance, clarify or resolve issues on the CMS. Changes to the interim report will be made as deemed necessary.

5) **Issue final report.** WERC will prepare a final report that documents the entire process as well as technical findings, and other issues identified in the interim report. An electronic copy and hard copies will be provided to DOE/SNL.

6) **Present findings.** The independent technical peer review panel (some panel members may be present via phone) will present their findings and recommendations to DOE/SNL. This meeting will be open to the public.

WERC intends to complete this review within 45 working days after receipt of the CMS and the implementation of a contract between DOE and the Regents of NMSU.

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