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**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**  
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March 14, 1995



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**Subject: STATE OF NEW MEXICO'S COMMENTS ON THE DRAFT REMOTE-HANDLED TRANSURANIC (RH-TRU) WASTE IMPLEMENTATION PLAN**

Following are the State's comments on the draft *RH-TRU Implementation Plan*. A letter from DOE/CAO Manager George Dials, dated January 31, 1995, provided a copy of the *Implementation Plan* for our review and comment by March 15.

GENERAL COMMENTS

The myriad issues surrounding RH-TRU waste and its impact on repository operations and long-term performance have been of significant interest to the State of New Mexico for many years. Much of this interest stems from the fact that radiation levels associated with RH TRU can approach or exceed those of some high-level radioactive waste. We believe it is imperative DOE give priority attention to RH-TRU issues impacting WIPP Project operations and its long-term performance. The draft *RH-TRU Implementation Plan* only reinforces that belief.

In enacting the WIPP Land Withdrawal Act of 1992, Congress provided DOE three (3) years to complete a study on RH-TRU waste. That deadline, October 30, 1995, is rapidly approaching. Yet it appears DOE is only now beginning in earnest to perform the necessary work to meet that milestone. Of particular importance to New Mexico is the Congressional directive in the WIPP Act that requires DOE to complete the RH-TRU study "...in consultation with affected States, the [EPA] Administrator, and after the solicitation of views of other interested parties." Almost two and a half years have elapsed since the enactment of the WIPP Land Withdrawal Act, and we have seen virtually no substantive information on the contents of the RH-TRU study. We would be hard-pressed to say there has been any meaningful DOE consultation with the State on this important study thus far.

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The draft *RH-TRU Implementation Plan* requires considerable revision to make it an informative and useful document. Its treatment of **Project Baseline Assumptions** is cursory and incomplete. The **Management Approach** section does not address who the "stakeholders" are, their anticipated role, or how input will be solicited from them. In fact, the entire "Stakeholder" section is only three short sentences. Additionally, the **Project Schedule** fails to clearly identify when various elements of the study are to be completed, reviewed by stakeholders, and their input incorporated. In short, the draft *Implementation Plan* provides little in the way of useful information on how precisely the study will proceed.

### SPECIFIC COMMENTS

- *Section 1. Project Requirements*

This section states the study "...will be limited in scope to post-closure repository performance." What is the basis for this self-imposed limitation? The WIPP Land Withdrawal Act states only that the study "...shall include an analysis of the impact of RH-TRU waste on the performance assessment of WIPP." (emphasis added)

The second paragraph of this section also states the study "...will be an analysis of issues associated with RH TRU subsequent to emplacement at WIPP using the current baseline design." DOE should provide examples of some of the key "issues" alluded to here and clearly identify in a descriptive narrative what is the "current baseline design." On a related issue, it appears the WIPP Technical Assistance Contractor is scheduled to complete an "RH Strategy" by the end of this month. The next section, **Technical Approach**, should explain specifically how this RH Strategy will be used in the study. In addition, we respectfully request a copy of the "RH Strategy" be forwarded to us when it is available.

The third paragraph of this section indicates the RH-TRU study will include an analysis of the impact of RH-TRU waste on the WIPP PA "...through the SPM (System Prioritization Method) modeling process." According to DOE's own definition, SPM is a "decision analysis tool for assisting the WIPP Project in programmatic decision making relative to the suite of programs which could be pursued for an ultimate demonstration of compliance with the long-term disposal regulations." As such, the SPM modeling process does not appear to be an appropriate tool for the RH TRU impact analysis required under the WIPP Land Withdrawal Act.

Our awareness of the PA and its significance to determination of regulatory compliance leads us to believe sensitivity analysis would provide a more focused view of the contribution of RH-TRU

waste to a determination of WIPP's compliance. For this reason, please clarify in the following section why DOE believes SPM is appropriate; from where the RH TRU input parameters for running the SPM code will be derived; and whether/how the current SPM-2 runs explicitly address RH-TRU waste.

Finally, the subsection entitled "Consultation" (p. 3) should be moved to this section as it is more accurately a **Project Requirement** than part of the **Technical Approach**.

- *Section 2. Technical Approach*

The second paragraph of this section states the following: "The performance assessment will evaluate the baseline RH TRU waste configuration, including packaging, shielding, and actual waste volumes." (emphasis added) It is unclear from this statement whether Sandia will do new PA model runs for the RH TRU study or use existing ones. If the latter is the case, please specify what iteration of the WIPP PA will be used as a basis for the study.

To perform the RH TRU impact analysis, the draft *Plan* states that identification of "the waste parameters significant to the performance assessment" will be required, and that this task "will require working Sandia's modeling personnel." There is no mention of the use of current or new PA sensitivity analyses. Will such formal sensitivity analyses be used in this task? Also, please clarify how Sandia modeling personnel will be "worked."

With respect to the comparison of RH- and CH-TRU waste, the draft states (p. 3, #2): "...it is estimated that the gas generation and brine and geochemical interactions issues will be solved using existing models. Please identify in the document the precise models to be used. The same paragraph goes on to say: "The issues of flammability and explosiveness will not be applicable due to the restrictions of these characteristics in the WIPP waste acceptance criteria." Does this mean to imply DOE will not be analyzing these two important issues (flammability/explosiveness), as stipulated in the WIPP Act? It is our position that, notwithstanding the WIPP WAC restrictions, DOE should still conduct the statutorily required analyses of these issues.

Finally, please explain the basis for the following assumption (p.3, #3): "The report will assume that the LWA (WIPP Land Withdrawal Act) requires the [RH/CH TRU waste] comparison be made in regards to the long term potential, and not operational phase comparisons." Our reading of the language in the LWA certainly doesn't lead us to this assumption. Moreover, a CH/RH comparison that addresses both disposal phase and post-operational phase impacts makes much sense in that the two are interrelated to a significant extent. From a cost-benefit perspective, it seems that

such a dual-purpose comparison could easily be justified by DOE and likely result in valuable insights for a host of WIPP operational considerations.

- *Section 3. Project Baseline Assumptions*

This section lists only three general assumptions for the project. It provides little or no specific information about the basis for those assumptions or about a number of other important considerations. For example, one assumption is that the "Performance Assessment (PA) model will accommodate RH parameters." However, the "PA model" actually is comprised of numerous computer models linked together. The narrative should explicitly identify the WIPP PA models and codes to be used for the study, and why DOE believes them to be appropriate and adequately quality assured. Similarly, this section of the *Implementation Plan* should indicate why the SPM code is believed to be appropriate for this effort.

One assumption listed in the draft is found under the heading of "Accuracy of Inventory Data." As you are well aware, the RH-TRU waste inventory numbers reported by DOE in the past have varied widely from year to year. Yet this section does not provide any defense of the accuracy of the RH TRU inventory data to be used in the study. In fact, the accuracy of the data is not discussed at all. This critical assumption should be developed in detail.

Finally, the section entitled **Project Requirements and Objectives** states (p. 1, 2nd paragraph) an assumption used to plan this study "...is that the primary difference between RH and CH TRU is the RH fission product inventory and the associated beta/gamma radiation." This key assumption is not even discussed in the **Project Baseline Assumptions** section, but should be addressed here. Furthermore, DOE should provide the basis for this assumption which is of paramount importance to the study.

- *Section 4. Management Approach*

While it is clear that Sandia National Laboratories (SNL) has been designated by DOE/CAO to prepare the component of the study dealing with the projected impact of RH TRU on the WIPP PA, it is unclear what entity will perform the comparison of CH- and RH-TRU waste with respect to flammability, explosiveness, etc. Is SNL also responsible for doing the CH/RH comparison? Please clarify the precise work assignments of the Project Team.

Of greater significance, the **Stakeholders** section of the draft *Implementation Plan* needs considerable attention and revision. To begin, the key "stakeholders" for this document are not identified.

The term is used generically in the current draft, without any indication of what entities and individuals are to be involved. Similarly, no information is provided on how or when their input will be solicited. This is a critical element for facilitating stakeholder participation. Because such basic issues are not addressed in the Plan and because requisite stakeholder consultations are only now commencing two and one-half years into a three-year project, we are concerned that parties external to DOE will have very little influence at this point on the RH TRU study, its structure and findings. DOE needs to take immediate, decisive action to correct this.

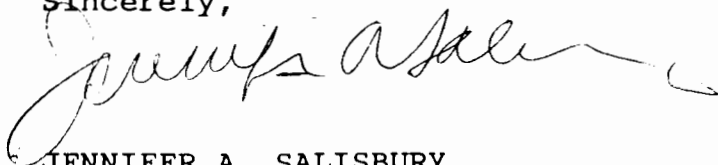
• *Section 5. Project Schedule*

In general, the schedule and milestones delineated in this section need to provide more detail on: when the two primary elements of the RH TRU study are to be made available to stakeholders; the time allotted for stakeholder review and comment on these study components; and when a complete draft of the study will be available and to whom. The current schedule indicates June 1995 is when the "Study Results" will be submitted. Submitted by whom to whom? Will stakeholders only be provided the results or the full draft study and its back-up documentation? The sections of the Plan directly relevant to stakeholder participation must be made as clear and explicit as possible.

In conclusion, it is our recommendation DOE move expeditiously toward initiating a truly meaningful dialogue with the State of New Mexico and other affected parties on this RH study. Meeting the October 30, 1995, deadline for completion of the study should not be the ultimate goal. Rather, DOE should first and foremost be concerned with completing--in consultation with affected states, EPA and others--a sound, defensible analysis of the RH TRU issues called for in the WIPP Land Withdrawal Act.

Thank you for the opportunity to present these comments. We urge DOE to address the issues raised herein as quickly as it can.

Sincerely,



JENNIFER A. SALISBURY  
Cabinet Secretary and Chair  
New Mexico Radioactive Waste Consultation Task Force

c: Task Force Cabinet Secretaries