

ISSUES FROM ALBUQUERQUE (June 7, 2005; 1:30-4:30 PM)

- **Completeness:** What does this term mean? When is completeness completed? What is the statutory time frame? Does EPA have sufficient resources to handle this endeavor?
  - **Response:** EPA noted that completeness is an administrative step it undertakes to make sure that the Agency has enough information to conduct a full technical review. EPA expects to issue its completeness decision in Summer 2005, and once that is done, EPA will have six months to complete its technical review and issue its final Recertification Decision.
  
- **Environmental and ecological conditions around the WIPP:** What is the assessment of WIPP's surrounding biota? A stakeholder had questions concerning endangered species, migrating birds, amphibians (fish, reptiles, etc.), and other small animals. Have any plants (grasses, seed samples, etc.) been showing abnormalities as well? What about night-time and off-peak hour activities and observation?
  - **Response:** DOE responded that they are required to do research and publish site environmental reports every year per WIPP requirements. These reports are included in the Compliance Recertification Application. In addition, former Environmental Evaluation Group (EEG) reports have been used extensively in developing WIPP's environmental regulations. DOE has provided interested stakeholders this information.
  
- **High-level waste (HLW):** Stakeholders are very concerned about the WIPP's potential to accept HLW waste. What is EPA's thought process for allowing HLW, including the wastes currently in question at the Hanford Site in Washington? What are the exact definitions? How can HLW (defined by its origin) ever be changed into transuranic or some other type of waste? What is the criteria? Once EPA decides on the criteria, stakeholders believe it should be proposed as a rulemaking. EPA's final Recertification Decision needs to outline this criteria.
  - **Response:** EPA noted that HLW is not allowed to come to WIPP, per the WIPP Land Withdrawal Act. DOE has included some Hanford tank waste in the Recertification Application inventory in its efforts to be more "inclusive" to any waste that could possibly go to WIPP. DOE must demonstrate that this waste is indeed transuranic (TRU) waste, as outlined in the WIPP Waste Acceptance Criteria (WAC) and as required by law. The final approval decision to allow this waste to actually come to WIPP is made by EPA. DOE is still gathering all the necessary information about the Hanford waste. As proposed by the stakeholders, the process for approving waste that may have been labeled or managed as HLW will be discussed in EPA's final Recertification Decision.  
In summary, before tank waste can come to WIPP a number of steps have to take place:
    - 1) Estimates of waste volume and characteristics are included in the performance

assessment to show that this waste does not negatively impact performance or compliance.

2) DOE is required to verify that this waste is in fact TRU and WIPP approved waste by characterizing each container. If they cannot do this DOE cannot send the waste to WIPP for disposal.

- **Unauthorized waste coming to WIPP:** Stakeholders believe that EPA needs to take a stronger stand on mistakes and unauthorized waste that has been shipped to WIPP (e.g., Los Alamos, Savannah River, Hanford, etc.). There have been mistakes in the past, and that means there will be mistakes in the future.
  - **Response:** All waste currently emplaced at WIPP is TRU waste. Errors and mistakes that the stakeholders are referring to were all procedural in nature and have been reviewed by EPA and corrected by DOE. In addition, new procedures have been put in place to catch previous mistakes regarding waste characterization.
- **“Blackout” period:** What exactly was the definition of the “blackout” period proposed by EPA and DOE in previous meetings? Stakeholders believed that there were to be no additional regulatory actions or modifications during this time, including those of the New Mexico Environment Department. This was seen as a promise, but all agencies seem to have broken that promise (i.e., the new permit modifications).
  - **Response:** The purpose of the “black out” period was to minimize changes to the activities and conditions at WIPP while EPA was evaluating WIPP for recertification. EPA and DOE have not undertaken any rulemakings or other significant changes to activities and conditions during this recertification period, as agreed to in the original “blackout” period discussion. This is the first recertification of WIPP and all parties are learning from this experience. EPA and DOE did not believe the process would take this long, and as a result other activities (i.e., our new 194 revisions) are being overlapped. State (NMED) activities, such as the new permit modifications, were never part of the original blackout agreement. NMED activities are separate and the state is not involved in EPA’s recertification process.
- **Stakeholder Karst Proposal (EPA Issue Paper #5):** Stakeholders request that EPA contact the scientists mentioned in their proposal and look at the different aspects and areas that the proposal has outlined. What about the Carol Hill report on karst? Stakeholders also request that EPA keeps them informed on any further developments. Finally, the stakeholders appreciate EPA’s efforts in taking the proposal seriously.
  - **Response:** EPA is conducting its own evaluation of the stakeholder-proposed karst-detecting techniques, magnetotellurics, and is currently looking at the other aspects mentioned in the stakeholder proposal. EPA has searched for published information about the Z Scan magnetotelluric method by the scientist mentioned in the proposal, Daniel Woods, and has found no published scientific reports.

Carol Hill's report is currently being reviewed and DOE will e-mail the stakeholders information regarding the reviewer's (John Lorenz's) previous work in the field and his resume. EPA agreed to touch base monthly with stakeholders regarding the karst proposal. EPA will contact the Z Scan magnetotelluric expert, Daniel Woods, identified in the stakeholders' proposal.

- **“Falsified” Information:** Stakeholders passed out a handout regarding their claim of Dr. Mercer's “falsified data” in a USGS report. Will EPA use this information in its completeness determination?
  - **Response:** EPA is currently waiting on DOE to get this data from USGS. There is currently additional information relating to hydraulic tests that occurred prior to the final findings being published. USGS will have this report ready by March 2006. EPA does not consider this to be a completeness issue because there is an overwhelming amount of data currently available regarding the Magenta flow rates. All of these data (WIPP Hydraulic Reports 1-9) have been available since the original Certification Decision. DOE will send these reports to interested stakeholders.
  
- **Additional groundwater and karst issues:** Stakeholders brought up the topic of Lawrence Barrows' testimony regarding karst at WIPP. There is also additional information on Yucca Mountain about the coercion of scientists to conceal their data. This must be addressed. Dr. Richard Phillips also published a report based on six months of research. This report showed that there were surprise springs that formed from water recharge. There were also plutonium traces in water from the Rustler Formation, which is probably again due to recharge. Increases in Culebra water levels have also been found.
  - **Response:** EPA has not seen Mr. Barrows testimony. EPA will make sure to review the Phillips report and other issues that have been raised. As a side note, in 1990 EPA went with Dr. Phillips on a field trip to the WIPP area and did not agree with his arguments. EPA will look into sending information about this subject to interested stakeholders. The increases in Culebra water levels are most likely due to potash activities, and this water is possibly discharging in Laguna Grande. Water from potash affluent flows into the Nash Draw. This information will be reviewed as part of EPA's technical (not completeness) review of the Recertification Application.
  
- **National Academy of Science (NAS) statements:** The NAS recently made statements regarding water flow & discharge. What is EPA's conclusion?
  - **Response:** Water flow goes in a north → south direction. EPA disagrees with stakeholders' (and Dr. Phillips' & Dr. Snow's) conclusions that water flow goes from south to north, based on its review.

ISSUES FROM ALBUQUERQUE (June 7, 2005; 6:30-9:30 PM)

- **Hanford Tank Waste:** Fact sheet #3- Hanford Tank Waste- what buried waste at INL is included in the inventory?
  - **Response:** EPA is requiring DOE to perform a new PA, including updating the inventory to include buried waste at INL. There is a subset of the INL buried waste identified for possible disposal at WIPP.

Is the Hanford tank waste liquid?

- **Response:** There are many HLW tanks at Hanford, but only TRU will come to WIPP. The waste currently in the tanks does contain some liquid. However, in order for the tank waste to be sent to WIPP, it must meet the WIPP Waste Acceptance Criteria (WAC). The WIPP WAC states that TRU waste must be not be more than 1 percent liquid.

Is DOE sure that only TRU waste from Hanford has gone to WIPP? Are they sure no HLW has been sent?

- **Response:** DOE has gone through the history, and records indicate the Hanford waste currently disposed of at WIPP has come from the plutonium purification process, not the plutonium end process – which is not HLW. DOE noted that the Hanford tanks have been “managed, not classified” as HLW, but they are TRU. DOE encourages the public to participate in waste characterization process.

- **New PA:** What is the timing of the new reports/Performance Assessment (PA)?
  - **Response:** DOE is working on a stand-alone document with supports the new PA. Analysis reports will be coming from Sandia and should be on DOE’s website by the middle of September.

Annex I of the CRA lists a number of sites with different types of waste. Are these included as potential future waste in the new PA? Why is INL buried waste included and others not?

- **Response:** DOE sees the waste inventory as an estimate-- good faith effort. Waste streams identified in Appendix I have been identified by DOE for possible future disposal at WIPP. INL buried waste is TRU waste and was therefore included in the inventory.

In CRA Tables F38 (Non-Defense TRU Waste)/F39 (Possible Future Waste for WIPP), are waste streams in those 2 tables included in the revised PA?

- **Response:** No
- **Supercompacted Waste:** Regarding supercompacted waste (reference from DOE/EPA correspondence), does the revised PA deal with it differently than original CRA PA?

- **Response:** EPA responded that the revised PA does not deal with supercompacted waste differently. During EPA's Advanced Mixed Waste Treatment Program (AMWTP) review, DOE did an analysis that showed that the characteristics of the supercompacted waste were reflected in the PA.
- **WIPP Capacity:** The Hanford tank waste is excluded by law from coming to WIPP. But since the buried waste at INL is TRU and should be going to WIPP, does WIPP really have the capacity to store all of the TRU waste? DOE should honor its agreement with the State of Washington to bring buried waste to WIPP.
  - **Response:** DOE responded that buried INL waste will be coming to WIPP. The law prohibits HLW from coming to WIPP. If DOE determines that Hanford tanks are TRU, then DOE can consider bringing that waste to WIPP with EPA approval. The PA has been done very conservatively, and the PA inventory estimate shows what waste streams may possibly come to WIPP, but it is not an indicator of whether it that waste will come to WIPP.

Is WIPP an option for West Valley waste? What are other options for the West Valley waste?

- **Response:** DOE indicated that WIPP is a possible place for the West Valley waste. Deciding where waste will go is an ongoing process for DOE, and WIPP has not been eliminated as a potential option.
- **Inventory/RH:** There is a dramatic change in the inventory from the CCA to CRA– for Oak Ridge (OR) specifically. It seems that OR has reduced the amounts of TRU it will send to WIPP? There doesn't seem to be a discussion of that in the CRA. Will there be more analysis completed regarding the RH at OR? EPA should be asking more questions about RH waste at OR. Does DOE have a projection of the first 2 or 3 sites for RH approval?
  - **Response:** DOE noted that LANL and OR would likely be the first two sites to seek approval to ship RH to WIPP. As stated previously, DOE's determination of where waste will be disposed and the amounts of waste at each site is an ongoing process.
- **TRU Determinations:** In 1978, WIPP was defined as being for defense-related waste. There are currently 20 different waste streams. Does DOE really know if they are all defense-related or not? If not, why not? DOE should plan sooner; early '80s- DOE redefined the definition of TRU from 10 nanocuries per gram (nCG)- to 100 nCG. It is very expensive to treat/dispose of low level waste (LLW-alpha emitting). How much LLW is at WIPP?
  - **Response:** The DOE legal department has to approve TRU waste determinations. DOE does the TRU defense determination close to the time sites plan to ship the waste to WIPP.

- It's a matter of resources and priority of which site is shipping waste streams. For the TDOP, DOE is approved to combine drums from the same waste stream and average them to 100nCi/gm. There is no packaging of any LLW for shipment to WIPP.
- What is TRU? Non-TRU? LLW? HLW? Defense vs. non-defense all definitions through the process/change in regulations has become more blurred. Regarding truck inspections, 1 out of 5 safety definitions seem to be slipping. There are many concerns about transportation (I-40) and health issues. WIPP sited in NM because it's a poor state, not because it's the best location.
- **Mobile Unit:** Did DOE bring the mobile unit from Argonne East to LANL?
  - **Response:** DOE responded that the decontamination volume reduction system (DVRS) has always been at LANL, never at Argonne East.
- **KARST: Stakeholders urged EPA/DOE to read the CARD briefs from their lawsuit.** What about the Larry Barrows' 1985 report on karst? SNL concealed Barrows' work, whereas EEG published his work. What about the Carol Hill report? DOE culture is "bury and conceal." The Supplementary Environmental Impact Statement (SEIS) II report designated Culebra as one of two contaminate pathways. What about slant drilling into WIPP? DOE calculations aren't realistic. Why doesn't EPA presume karst does exist and then prove that it doesn't?
  - **Response:** Wendell Weart, manager of Sandia (70-80s, retired) indicated that karst was the most pervasive subject at Sandia at the time. Barrows left of his own volition. Sandia management supported Barrows and let him do studies. Analysis of the WIPP PA on the actual affect on the Culebra pathway indicated that there are no releases into these units. Cuttings and tailings drive releases. There is very little radioactivity that gets to Culebra to move anyway. EPA concluded that 10,000 years of containment was a sufficient time period. EEG convened meetings to discuss release potentials in detail and concluded that DOE had reasonably proven that releases will be limited.
- **Station A:** What is the current status?
  - EPA feels confident the major issues have been resolved. Hard copies of reports for Station A provided, as requested, to WIPP stakeholders

Has DOE reviewed testimony of Steve Zappe? Lokesh Chaturvedi? Security personnel at WTS? Has DOE noted discrepancies in depositions for CARD lawsuit re: Station A?

- **Response:** EPA has not seen these and would like to have them.

Would EPA like to see an independent analysis of Station A

- **Response:** EPA: yes
- **RH Waste:** When does EPA expect to certify RH waste? When will DOE ship?

- **Response:** EPA has approved the general framework, but has not looked at any site plans yet. NMED hasn't acted on the permit modification for RH waste, but after they have finished that review, Los Alamos National Laboratories and Oak Ridge will be reviewed for RH shipments.
  
- **Miscellaneous:** In the CRA discussion of Panel 1 and emplaced waste (fig. 3-4 schematic), figure needs more updated info.
  - **Response:** EPA noted to use Appendix Data, Attachment F in the CRA.