

September 21, 2004

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Dear People,

The groups signing this letter are greatly concerned about public health and safety of present and future generations. If filled to capacity, the Waste Isolation Pilot Plant (WIPP) would have the largest quantity of transuranic waste of any location in the world, posing a substantial threat to present and thousands of future generations.

Consequently, we view the Department of Energy (DOE) Recertification Application (RCA) and the Environmental Protection Agency (EPA) review of the RCA as being a very important matter. We appreciate EPA and DOE officials participating in the public meetings in New Mexico on July 27-29, 2004.

We believe that the RCA is substantially incomplete and flawed, so that additional information and analysis is required before EPA can make a completeness determination. Because of the substantial amount of additional information that DOE must provide, we believe that the public must have at least 60 days to provide additional comments after DOE makes its final submittals. A lesser comment period will substantially undermine public confidence in EPA's decision-making.

1. No high-level waste is permitted at WIPP. The RCA includes high-level waste (HLW) and cannot be approved as submitted.

The WIPP Land Withdrawal Act ((LWA) Public Law 102-579, as amended by Public Law 104-201)) expressly prohibits high-level waste or spent nuclear fuel at WIPP.

Section 12 states:

**BAN ON HIGH-LEVEL RADIOACTIVE WASTE AND SPENT NUCLEAR FUEL.**

The Secretary [of Energy] shall not transport high-level radioactive waste or spent nuclear fuel to WIPP or emplace or dispose of such waste or fuel at WIPP.

That prohibition directly affects EPA's authority and responsibility under the LWA. EPA has the authority to preclude HLW in its certification and recertification decisions.

Section 7(a) of the LWA establishes specific limits for the waste that can come to WIPP, including for curie limits for remote-handled transuranic (TRU) waste and limits by volume for the amount of TRU waste that can be disposed of at WIPP. EPA's certification must clearly enforce those limits. Thus, if DOE proposes to dispose of more than 5,100,000 curies of Remote-Handled (RH) TRU waste, or exceed the 6.2 million cubic feet capacity limit, or dispose of HLW, or dispose of spent nuclear fuel, EPA must not allow it.

As EPA itself has recognized in issuing 40 CFR 194, the Compliance Regulations for WIPP: “The Act [LWA] further stipulates that radioactive waste shall not be transuranic waste if such waste also meets the definition of high-level radioactive waste.... 61 Federal Register 5224, c.3.

The LWA also requires that DOE comply with “all other applicable Federal laws pertaining to public health and safety or the environment.” Section 9(a)(1)(G). The law further provides that if the EPA Administrator determines that there is noncompliance with any requirement of that Section 9(a), “the Administrator shall request a remedial plan from the Secretary, describing actions the Secretary will take to comply with such law, regulation, or permit requirement.” Section 9(c).

Thus, if the DOE is not complying with the requirements of the LWA or other federal laws, EPA should issue a determination of noncompliance. Thus, noncompliance with the LWA prohibition on HLW must result in the EPA Administrator issuing a determination of noncompliance. Rather than waiting for HLW to actually be brought to WIPP, EPA should specifically exclude HLW in its recertification decision.

Further, regarding recertification, the LWA specifically allows the Administrator to determine to not concur and to not recertify. Section 8(f)(2). Thus, the EPA cannot recertify WIPP if the RCA includes provisions that would violate the LWA.

The RCA does not specifically discuss the issue of DOE including HLW in the WIPP Inventory, and certainly provides no explanation of why wastes that have been managed as HLW at Hanford or other DOE sites meet the requirements for TRU waste. No such wastes were included in the original Compliance Certification Application. But buried in Appendix DATA, Attachment F, Annex J are four high-level waste streams from the Hanford HLW tanks. Those waste streams are RP-W013, RP-W016, RP-W754, and RP-W755.

None of those four HLW streams should be allowed at WIPP. Thus, those waste streams must be not allowed in the inventory or in the performance assessment. Since those waste streams are included in the WIPP inventory and are included in the performance assessment, the RCA is inadequate and cannot be approved until those wastes are removed from the inventory and the performance assessment and a revised performance assessment is provided to EPA.

In addition to the four HLW streams, Annex J includes two other new waste streams not included in the CCA that are HLW and cannot be allowed. Those are K-Basin sludges, RL-W445 and RL-W446. Those wastes are part of the Hanford spent fuel program, and spent fuel also is prohibited at WIPP by Section 12 of the LWA. In addition, it appears that at least some of the radionuclide values for the K-Basin sludges are clearly wrong as the Cs-137 concentration levels are about half those of its Ba-137m daughter, and the Sr-90 levels are less than half of its Y-90 daughter. Since such radionuclide problems occur with other waste streams, DOE should be required to revalidate all radionuclide information in the waste streams that have not been shipped to WIPP.

Those waste streams from Hanford are part of DOE's program to "reclassify," actually rename, HLW. One of DOE's tactics is to call such wastes "incidental to reprocessing" so that, according to DOE, they are not HLW. However, a federal district court judge has ruled that DOE program to be invalid. Natural Resources Defense Council v. Abraham, 271 F.Supp.2d 1260 (D. Idaho 2003).

EPA must not allow high-level waste or "renamed" HLW at WIPP. EPA must not ignore a federal court decision that bars wastes from Hanford and other tanks to be classified as TRU (or low-level waste). Such wastes cannot be included in the WIPP inventory or performance assessment, and EPA cannot allow such wastes to come to WIPP.

EPA has the authority to exclude those HLW streams from the WIPP inventory. EPA has the authority to require DOE to submit a performance assessment that does not include those HLW streams. EPA must exercise that authority in its recertification completeness determination and its recertification decision.

## 2. The RCA Inventory is deficient and incomplete.

In addition to the HLW problems, the Inventory included in Appendix DATA, Attachment F, Annexes I and J is deficient and incomplete in other ways. Included in Annex I is waste stream IN-Z001, which were not included in the CCA. Waste stream IN-Z001 is named "RFP Buried TRU Waste at INEEL (Pre-1970)." The waste stream is estimated to contain 55,800 cubic meters of waste. Those wastes have previously been excluded because DOE has long claimed that pre-1970 buried TRU waste would not come to WIPP. But, as the waste stream description states: "All of this TRU waste and soil will be retrieved and some of it will be treated, in accordance with the Settlement Agreement of 1995, the Record of Decision in 1998, and the U.S. District Court ruling of April 1, 2003." Since there is a court decision requiring that this TRU waste be disposed (presumably at WIPP, since there is no other TRU waste repository), there is no basis for the waste stream to not be included in Annex J and in the RCA performance assessment (PA). Since that amount of waste constitutes about one-third of the total WIPP inventory, it is totally inappropriate to exclude that waste from the RCA PA, and the RCA is grossly incomplete with that waste stream.

Another result of including that INEEL buried waste stream (which actually should be considered as multiple waste streams) is that the RCA contains several substantial inaccuracies, including in Chapter 4. For example, Section 4.1.3 of the RCA states that "the volume identified by the TRU waste sites is less than the available volume of the repository, 175,564 m<sup>3</sup> (6.2 million ft<sup>3</sup>)." On the contrary, including just the IN-Z001 waste stream results in the CH-TRU inventory exceeding the volume limits. Thus, both the CH and RH inventories exceed the volume limits for WIPP.

The RCA PA is incomplete and must be redone to incorporate the actual waste streams that DOE intends to dispose at WIPP in the inventory. Since both the CH and RH inventories exceed the volume limits, the PA must be redone to use the maximum volume that would have the greatest impact on the PA. Taking the entire inventory, DOE must

include in the PA those waste streams that have the greatest effect on the PA to ensure that PA shows that WIPP will not exceed the containment requirements, not matter which specific waste streams are disposed at WIPP. Otherwise, DOE must be required to include in Annex J only those waste streams that meet the volume limits and additional waste streams that would result in exceeding the volume limits must be placed in Annex I and EPA must not allow those waste streams to be disposed at WIPP.

The inventory also is incomplete because it does not include a discussion of the waste that is less than 100 nanocuries per gram (nCi/g) that has been emplaced at WIPP and future waste streams that it plans to dispose at WIPP that are <100 nCi/g. It is known that DOE has sent drums of waste that are less than 100 nCi/g and are thus not actually TRU waste. The RCA includes no discussion of the amounts of such waste nor the basis on which DOE determined that such wastes were TRU. The RCA also does not identify the amounts of such wastes that it intends to dispose at WIPP in the future. It appears that some waste streams in Annex J are not TRU waste and also cannot be allowed at WIPP. EPA should require DOE to provide a legal and technical basis of why such wastes should be allowed at WIPP and the waste types and amounts that it intends to ship to WIPP in the future.

In its RCA decision, EPA must describe its legal and technical basis for allowing such waste at WIPP. Alternatively, we support an EPA RCA determination that precludes such non-TRU waste.

The LWA clearly specifies that WIPP is solely for “the safe disposal of radioactive materials generated by atomic energy defense activities.” Section 2(20). Chapter 4 of the RCA also includes various sites that do not produce defense waste, so they cannot ship to WIPP. For example, West Valley, ARCO Medical Products, and Lawrence Berkeley Lab are clearly non-defense waste, and GE-Vallecitos and Babcock-Wilcox-NES are also non-defense sites, so those sites and their wastes should be excluded.

3. The RCA is deficient because it does not specify which waste streams will be shipped to WIPP and the PA does not explicitly include all such waste streams.

DOE has shipped waste to WIPP that were not included in the CCA. Classified waste streams from Rocky Flats and waste containers with less than 100 nanocuries per gram of transuranics from Savannah River and Los Alamos are examples of such waste. However, the RCA is incomplete because it does not specifically delineate those waste streams. The RCA also does not provide a legal and technical basis for such waste streams to be disposed at WIPP.

EPA must require that DOE provide that information before the RCA can be deemed complete. In addition, EPA must require submission of a new PA that includes such waste streams. Moreover, EPA must clarify in its RCA decision the basis that it will allow such waste streams to be disposed at WIPP. If waste streams not included in Annex J are to be allowed at WIPP in the future, EPA must, at a minimum, require DOE to submit a new PA that incorporates those additional waste stream(s) before allowing such wastes to be shipped to WIPP. In addition, any such new PA must be made

available for public comment. We further believe that any such new PAs should be considered a rulemaking.

4. The Performance Assessment is incomplete and inadequate.

In addition to problems with the inventory and the PA already noted in #2 and #3 above that make the PA inadequate and incomplete, there are other serious deficiencies in the PA. Examples of deficiencies include drilling rate, lack of modeling of air drilling, including stuck pipe and gas erosion, and inadequate ground water modeling.

While the drilling rate used has increased by 1,335 boreholes or more than 12 percent above the rate used in the CCA (Table DATA-A-1), the rate is clearly inadequately low. There is no question that additional oil and gas wells and other boreholes are being drilled throughout the Delaware Basin, including boreholes that have been drilled during the past two years since the September 2002 cutoff date for information. Thus, the RCA is clearly incomplete and inadequate by using a drilling rate this is demonstrably inadequate. DOE should be required to either update the drilling rate or to use a drilling rate double that currently used to demonstrate that such a drilling rate would not lead to a compliance problem.

While the RCA does include some information on air drilling in Appendix DATA, Attachment A, it does not include adequate modeling of the effects of air drilling. The PA should be revised to include effects of air drilling and stuck pipe and gas erosion scenarios.

While the RCA mentions the continuing changes in Culebra water levels (p. 2-102 and Appendix DATA, Attachment B), DOE has not still not explained the complex ground water levels and movements, so that the modeling of ground water flow times, transmissivities, porosities and related parameters cannot be relied upon. We suggest that DOE be required to develop alternative ground water models that better account for actual data. In addition, additional investigations of possible karst conditions should be required.

5. Additional examples of incomplete or inaccurate information.

From the beginning of the RCA, there are clear errors and misleading information. For example, on page 1-3, DOE states that WIPP is subject to “ongoing technical oversight” by the National Academy of Sciences (NAS), Environmental Evaluation Group (EEG), and the New Mexico Governor’s Radioactive Waste Task Force. That statement is demonstrably false and misleading. The EEG was defunded by DOE as of April 30, 2004 and no longer exists. The lack of EEG’s participation in the RCA review creates a serious problem that should not have occurred. As a result, we believe that a longer public comment time is needed and that EPA should devote additional contractor resources to providing more independent review of the RCA. Further, there is no ongoing NAS WIPP Panel, and the recommendations of the most recent NAS Panel – *Improving the Characterization Program for Contact-Handled Transuranic Waste Bound for the Waste Isolation Pilot Plant*, January 2004, have generally been rejected and not

implemented by DOE. The Governor's Task Force rarely meets. DOE should be required to correct the statement.

The same page of Chapter 1 also states that "DOE has involved the public in the decision-making process throughout the compliance demonstration process." Since none of our groups has been included by DOE in the RCA development, we do not believe that statement is correct. EPA should require DOE to document its public involvement process.

Virtually all of the scheduled activities regarding passive institutional controls (PIC) has been delayed (pages 7-70 to 7-76). We do not agree that DOE has provided adequate information or basis for the delays. In addition, it is a substantial concern that some of the elements of the PIC markers are now deemed to be "impractical" by DOE, though it has provided no adequate basis for the conclusion. We believe that EPA should require that additional work be done on the PIC system rather than allowing on-going delays.

Given that DOE's policy is to "accelerate cleanup" including at WIPP, if DOE is able to implement that program, WIPP would be filled to capacity up to 20 years earlier than currently scheduled. The RCA is incomplete because it includes no discussion of the "accelerated cleanup" program and its possible impacts on WIPP and closure activities, including the PIC system.

Thank you for your careful consideration of these comments.

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