



The Permit Slew of 2002

A Summary

Class 2 Permit Modification Requests:

Modification package number 1:

Item 1: Addition of New Mexico Hazardous Waste Number

Item 2: Characterizing Re-Packaged Homogenous Solids as Retrievably Stored Waste with Regard to Solids Sampling

Item 3: Classified Information Record Keeping and Audit Requirements

Item 4: Addition of HalfPACTs

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Modification package number 2:

Add Waste Containers

Modification package number 3:

Update of the Waste Analysis Plan and Associated Documents with Emphasis on Data Management Requirements

Preamble

The Waste Isolation Pilot Plant (WIPP) is the only operating deep underground transuranic waste dump in the world. The permit modification requests (PMR) listed above have been submitted to New Mexico Environment Department (NMED) for their review. The PMR submittal process allows for the comment of the regulatory agencies and the public at large. It is with the latter in mind that Nuclear Watch of New Mexico is producing this document.

Never before has the Department of Energy (DOE) sent such a massive number of PMRs to be reviewed. The class 2 permit modifications have a comment deadline of October 3rd and the Remote Handled Transuranic Waste PMR has a deadline of October 30th.

To understand the differences of class 1, 2 and 3 permit modifications we recommend that you look at 40 CFR §270.42 available at <http://www.nukewatch.org/wipp>.

The points of concern offered to you here do not intend on being complete. They are general concerns that are worth noting, not the “be all and end all” of the concerns behind these modification requests.

What it All Means

We will go through all of the PMRs in the order of above. There are four permit modifications packages. Three of the four are available on the Nuke Watch WIPP page at <http://www.nukewatch.org/wipp>.

Modification package number 1:

Addition of New Mexico Hazardous Waste Number

This modification is to add the hazardous waste number U134. U134 is hydrofluoric acid, which under normal circumstances would be considered a banned substance in the WIPP hazardous waste facility permit because of the corrosive properties of the acid. In this case, however, DOE is claiming that the acid would be complexed (i.e., the acidic waste is mixed with another substance) and neutralized from previous use, and therefore not corrosive.

The reason for the request to add hydrofluoric acid to the WIPP permit is that the Idaho National Engineering and Environmental Laboratory (INEEL) has approximately 100 m³ of transuranic waste that is contaminated with hydrofluoric acid. Without the addition of hydrofluoric acid to the WIPP permit, DOE appears to be claiming that they will not be able to clean up the INEEL site to an acceptable level.

Points of Concern:

Lack of Supporting Data

DOE submitted the same PMR on June 6th, 2002. The New Mexico Environment Department rejected the original PMR on the basis that there was insufficient information supplied to allow for the permit modification to be approved. DOE once again has submitted this PMR without supporting data. Nowhere in the PMR does DOE give examples of their study of INEEL and their hydrofluoric acid contaminated wastes and they only give approximate numbers for the amount of waste that is contaminated with hydrofluoric acid.

INEEL is Not Reliable

The most recent event that has occurred is that a shipment of waste from INEEL was required to go back to INEEL after it had reached WIPP. DOE transported a waste shipment over 1300 miles across U.S. highways to get it from INEEL to WIPP. Once at WIPP, DOE found that there was a potential radiation leak within the TRUPACT II (the transuranic waste shipping container) and for the first time in WIPP's history a waste shipment had to be sent back. The Department of Energy does not know where the error occurred and are not agreeing with activists that shipments from INEEL should be stopped until a proper investigation can take place. And this is only the most recent event that INEEL has been involved with that has caused problems with WIPP. Please see the INEEL situation at <http://www.nukewatch.org/wipp/WIPP/wipparchived2.html> for more information on another incident involving INEEL; also please see WIPP Shipment Problems at <http://www.sric.org/nuclear/docs/shipmentproblems.html>. With the shroud of problems sur-

rounding INEEL it seems extremely irresponsible for DOE to want to make concessions for INEEL in order for them to cause more problems and create potential dangers to the public at large. INEEL is not interested in public safety; they are simply interested in getting the court ordered 3,100 m³ of waste out of their site by the end of December 2002.

Conclusion

As the PMR currently stands, there is no other option but to ask NMED to deny this permit modification request. There are too many unanswered questions and too many safety concerns regarding INEEL to allow this PMR to go through.

Characterizing Re-Packaged Homogenous Solids as Retrievably Stored Waste with Regard to Solids Sampling

This PMR is a request to allow generating sites to treat re-packaged wastes as retrievably stored wastes and therefore fall under the same characterization, confirmation and classification methods. DOE's rationale for this PMR is that they claim that the current WIPP permit has conflicting and apparently confusing requirements. This PMR will also give DOE facilities more flexibility as to how they characterize and confirm waste. It is worth noting that waste that is required to be re-packaged is considered newly generated waste by the WIPP permit, a fact that is not mentioned in the PMR and therefore leads to some confusion as to what the DOE confusion is about.

Points of Concern:

Lack of Clarity Within the Permit Modification Request

While this PMR is designed to reduce obfuscation with respect to the WIPP permit as it currently stands, the PMR itself is lacking the clarity required to make this an accessible read unto itself. The confusion that DOE claims is not clearly explained no matter how much text they give to their concern and therefore leaves the public wondering what exactly they are attempting to accomplish. Because of this it seems clear that the PMR is not complete and therefore should be denied because of this.

Human and Environmental Safety Concerns are Not Met

The PMR wants to reduce the stringency on the requirements of characterizing and confirmation of re-packaged wastes. Currently re-packaged wastes must abide by newly generated waste standards (the logic that was behind this requirement was that if you open a drum you are exposing it to uncertain elements outside of the drum and therefore possibly changing the nature of the waste). DOE is interested in changing the current methodologies in order to take less time to characterize re-packaged wastes by having them fall under retrievably stored waste methodologies and this is neither acceptable in terms of environmental safety nor the health and well-being of the work force involved in the characterization process.

Conclusion

This permit modification must be denied for the simple fact that there are unanswered questions regarding health and safety issues and what the real reason is for why they want to change the permit.

Classified Information Record Keeping and Audit Requirements

DOE is making national security a WIPP issue with this PMR. By stating that there are several cleanup sites within the nuclear weapons complex that have shapes that are still classified, they are requesting that waste with classified shapes not have their video or the nature of the waste open to the perusal of the public. While Nuclear Watch of New Mexico is very sensitive to the responsibility of the federal government to maintain national security secrets, it seems that in this case there are a number of issues that need to be dealt with before this permit modification request should be approved.

Points of Concern:

This is Not a Class 2 Permit Modification Request

Without question this PMR is not a Class 2. Never before has WIPP had to deal with national security issues and yet in their first case they submit this PMR as a Class 2. By quickly scanning Appendix 1 of 40 CFR §270.42 there are a number of potential reasons why this should be considered a Class 3 modification. While DOE stipulates that only the video created by the visual examination process would be deemed classified, they do not even broach the subject of the potential issue that a WIPP truck be in an accident and that there is the possibility of a spill. If this were to happen who would be sent to clean up the mess? Would all officials that respond to this accident be required to have security clearance before they would be allowed to enter the contaminated crash site? Therefore, in the case of emergency response DOE must answer these questions and make it clear that either there will or there will not be changes to their emergency response plan.

Lack of Supporting Evidence

This PMR does not have enough supporting evidence to be considered complete. Nowhere in the PMR does DOE state how much waste will be considered classified, yet DOE feels that there is enough waste that a permit modification is required. How much waste is there? DOE also does not explain why this PMR is required as they do not explain why this is the only option available. Why is this modification better than destroying the classified shapes? What are the ramifications of destroying this waste in an appropriate manner? Are there not any other alternatives for this waste aside from putting them in WIPP right now?

Conclusion

Because the PMR is inappropriately classified as a Class 2 and because of the incompleteness of the PMR as a whole, NMED must deny this permit modification request.

Addition of HalfPACTs

This permit modification request is to allow the HalfPACT to be used as a means of transporting waste to WIPP. Currently the only waste package that is approved for transportation to WIPP is the TRUPACT-II. The TRUPACT-II can hold 14 55-gallon drums. A transport truck hauling WIPP waste can carry as many as 3 TRUPACT-IIs or 42 55-gallon drums of waste, however, because of weight restrictions by the Department of Transportation, many times DOE

cannot ship full TRUPACT-II's. The HalfPACTs, such as its name suggests, can hold half as many 55-gallon drums. The empty HalfPACT is also lighter than the empty TRUPACT-II and thus would not fall under the same potential weight restrictions. The rationale of the use of the HalfPACT is that by deferring the weight restriction issue, DOE will be able to ship more waste in fewer shipments.

Points of Concern:

More Documentation on Use

Overall this is a fairly cut and dry PMR. The only item that seems to need more elaboration is how often WIPP will be using the container.

Conclusion

It seems appropriate that DOE provide more documentation on why DOE deems it necessary to introduce the HalfPACT as a transportation container. An analysis of the problems DOE has had with only using the TRUPACT-II and how these problems would be rectified by the use of the HalfPACT is not an unreasonable request. Until this information is provided to the public, there seems no urgency and no requirement to use the HalfPACT, and therefore this PMR should be denied.

Use of Radiography for Newly Generated Waste

As things currently stand, DOE sites are required to do visual examinations of newly generated or re-packaged wastes to verify the acceptable knowledge of that waste prior to shipping the waste to WIPP. DOE is requesting that the use of radiography be offered as an option to be used instead of visual examination as DOE has found that radiography is a more efficient manner of verifying acceptable knowledge in some cases.

Points of Concern:

Efficiency Does Not a Permit Modification Make

While DOE claims that there are times where it is difficult to implement visual examination of the waste, they never state why it is difficult. They emphasize the fact that the use of radiography will assist in making the verification process much more efficient. Again, however, they never explain why radiography will be more efficient.

Conclusion

Until further information can be supplied this PMR should be denied.

Modification package number 2

Add Waste Containers

In this PMR, DOE wants to add direct loaded ten drum overpack, 85-gallon drum overpack and the 100-gallon drum to the permit as additional waste storage containers, dump containers and payload containers for WIPP.

In the case of the ten drum overpack, DOE wants to change the permit so that the ten drum overpack may be used as a directly loaded container rather than simply an overpack container. (An overpack container is one that is used in the case of a storage container that is in poor condition and needs extra containment to prevent leaks. E.g., if a 55-gallon drum were found to have a weak structure, DOE would be required to overpack that 55-gallon drum as a preventative measure. A direct load is when the waste is placed in the container without the use of extra containment. E.g., a 55-gallon drum is considered a directly loaded container.)

In the case of the 85-gallon drum overpack, DOE wants to allow this container to be a payload container (i.e., a container that can be used in a TRUPACT-II for transportation to WIPP), and they want to remove the title of overpack to the 85-gallon drum designation. They also want to allow the 85-gallon drum overpack to be used as a direct load container rather than simply an overpack.

For the 100-gallon drum, DOE wants to add this container as an acceptable storage container, and an acceptable disposal container.

As it currently stands now, the only disposable and transportable containers for WIPP are the 55-gallon drum, the 100-gallon drum (when contained in a ten drum overpack), the standard waste box and the ten drum overpack.

Points of Concern:

The Permit Modification Request is Incomplete

DOE apparently does not understand that a PMR is not to be submitted if it has a wish they would like to see become a reality. In order for a PMR to be considered DOE must back up its request with reasons. With such a massive request, such as this, DOE gives only three paragraphs of discussion. In these three paragraphs there is no mention as to why they require that this modification take place. Without substantial explanation as to why they require this modification, there is no reason why NMED should accept this PMR.

Direct Loading of 85-Gallon Drum

DOE states, correctly, that the 85-gallon drum is not an acceptable shipping container as stated in the TRUPACT-II Authorized Methods of Payload Control (TRAMPAC). The question that must be asked then, is why they would want to start direct load of the 85-gallon drum when there is no definite option that the waste that is loaded into the 85-gallon drums will ever be transported from the generating site. If the revision of the TRAMPAC does not occur, then what will DOE do with the 85-gallon drums that they have prepared?

Radiography

DOE does not investigate the fact that by using these new containers there are questions regarding confirmation and characterization of waste through radiography. As it seems clear that radiography will be affected then this should also affect the classification of this PMR and it adds further evidence that this PMR is incomplete.

Conclusion

This is not an acceptable PMR. It is incomplete and may very well be misclassified. DOE claims that this PMR falls under a class 2 but there are so many changes that DOE's rationale does not appear logical. We believe that this modification request is a Class 3. There is more at stake with this PMR than just adding new containers. Therefore we believe that NMED needs to investigate the classification matter in more detail before they even consider working with this PMR.

Modification package number 3

Update of the Waste Analysis Plan and Associated Documents with Emphasis on Data Management Requirements

There are a number of items in this PMR. The list includes the following:

1. Add the option for electronic data review, validation, and verification;
2. Revise reviewer responsibilities;
3. Eliminate the Waste Stream Characterization Package;
4. Eliminate quarterly repeat of data review, validation, and verification;
5. Clarify data management inconsistencies;
6. Reorganize data management portions of Attachment B and Attachment B3 [of the Permit];
7. Add the option for use of barcodes in lieu of sample tags or labels;
8. Add the option for use of electronic rather than hard copies of records; and
9. Associated changes, such as referencing information rather than repeating it.

The DOE purpose of this PMR is to give more efficiency and less redundancy to both the DOE workers and the Permit itself.

Electronic Data Review, Validation and Verification:

The point of this item is to use an “automated electronic system to complete the review, validation, and verification responsibilities of the Technical Supervisor, Quality Assurance (QA) Officer, Site Project QA Officer, and Site Project Manager (SPM).” By doing this, DOE believes that the process will be more reliable, that it will be easier to manage large volumes of data, and that transfer of data will be faster if there is a problem that needs to be reconciled.

Points of Concern:

While DOE states that this will be a more efficient use of time, it does not go into any detail as to how. DOE states that the electronic method will undergo testing before it becomes a standard operating procedure, however it seems prudent to perform a trial run of this process before it is incorporated into the Permit. This trial should be executed while the standard data review, validation and verification processes are still in place. Only after this trial is completed to the satisfaction of the Environment Department and the public should DOE be able to submit a PMR with this item in mind. In addition to this, DOE does not go into any detail about the security of this electronic method. A recent DOE Inspector General (DOE-IG) report stated that DOE’s “cyber security” was lacking in many ways. How is DOE planning to prevent “hack-

ing” into this system? Hacking into this system and potentially disabling the system would stop DOE in its tracks, yet they make no mention of it.

Revise Reviewer Responsibilities:

DOE wants to change the responsibilities of the Site Project Quality Assurance Officer, and add them to the Independent Technical Reviewer’s responsibilities. The main change is that the Quality Assurance Officer would relinquish the duty of ensuring proper headspace gas sampling and sampling of homogeneous gravel and soils. These duties would then be taken over by the Independent Technical Reviewer.

Points of Concern:

The PMR item does not explain the need for this in any way. If there is no real need for this change then no change should be made.

Eliminate the Waste Stream Characterization Package:

“This PMR proposes to eliminate the Waste Stream Characterization Package because the information required for the Waste Stream Characterization Package is already found in the Waste Stream Profile Form and the Characterization Information Summary.”

Points of Concern:

Again, this PMR item does not explain the rationale behind the change. It is understood that the Waste Stream Characterization Package information can be found in other reports, however this does not explain the need to remove the Waste Stream Characterization Package entirely.

Eliminate quarterly repeat of data review, validation, and verification

DOE believes that because data review, etc, can be found in other required reporting then it may be removed.

Points of Concern:

No rationale, again, is given as to why this is a required change to the permit.

Data Management Consolidation:

DOE wants to make changes to the permit in order to avoid inconsistencies within the permit.

Points of Concern:

By removing portions of the permit to streamline data management, DOE is potentially opening the door to the errors it is trying to avoid. By double checking the data that they have found and recorded in one document, they are forcing themselves to maintain consistency. By removing this “requirement” then inconsistencies could find their way into their data management simply by the lack of confirming their data that they are inputting.

Reorganize data management portions of WIPP HWFP:

DOE feels that there are portions of the WIPP Permit that are possibly confusing for the reader to understand and to utilize.

Points of Concern:

There are some pretty extraordinary changes that DOE wants to make to the Permit. DOE

states that this is in order to make the Permit more user-friendly, but there is no evidence to suggest that it was confusing to begin with.

Add the option for use of barcodes in lieu of sample tags or labels:
No need to give an explanation of this item since the title says it all.

Points of Concern:

As the item states, this is a request to use barcodes in lieu of, i.e., instead of, using sample tags. This is entirely the wrong approach. The use of barcodes is generally a fine idea, however they should not be used in lieu of, they should be used in addition to sample tags. There are many issues at stake when using barcodes. The information for the code could be improperly entered into the barcode database, (how many of us have gone to the grocery store to see that our frozen dinner is ringing up as an energy drink?) among many other problems that could occur. In addition to this, the use of sample tags give the worker immediate knowledge of what that drum contains – no need to decipher a bar code when you can read it in plain writing.

Add the option for use of electronic rather than hard copies of records:

DOE wants to switch from the continued use of paper records to only electronic records. DOE's intent is to reduce the amount of paper used throughout the WIPP circle.

Points of Concern:

It seems foolhardy to remove a very useful tool of archiving data through the use of paper. We are certainly interested in the chance to save a tree, however it seems prudent to maintain their paper records as well as electronic records.

Consolidation of Redundant Text:

DOE wants to take text that is repeated several times throughout the Permit and change it so that the permit makes reference to it as opposed to repeating the text over again.

Points of Concern:

While this is good in theory, DOE is notorious for its lack of proofreading and making certain that all potential errors are corrected. The changes DOE wishes to make should be denied as a part of this PMR and re-submitted with further opportunity for NMED, and the public to review their changes.

Overall Points of Concern for the Permit Modification Request package 3:

There are too many problems with this PMR to be approved by NMED. NMED should deny this PMR. The PMR is simply incomplete in all of the items and further information should be provided if DOE wishes to re-submit this modification request.

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