

**SOUTHWEST RESEARCH AND INFORMATION CENTER**

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October 3, 2002

Steve Zappe
New Mexico Environment Department
2905 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

RE: Seven Permit Modifications

Dear Steve,

Southwest Research and Information Center (SRIC) requests that NMED deny all of the seven requested permit modifications submitted on June 28, 2002, because they are all substantially incomplete, the activities proposed do not protect public health and the environment, and several aspects of the requests are not consistent with the regulations.

Regulations under the New Mexico Hazardous Waste Act (20 NMAC 4.1.900, incorporating 40 CFR 270.42(b) and (c)) provide that NMED may deny Class 2 or 3 modifications. SRIC requests that NMED deny each of the requested modifications.

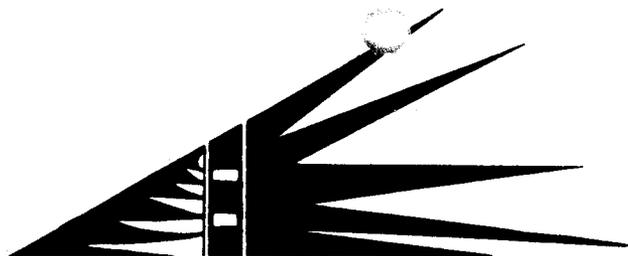
Pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42(b)(7)), NMED may deny the class 2 modification requests. SRIC believes that denial is required because the requests for six class 2 modifications (excluding the Data Management Class 3 request) are deficient under each of the three criteria -- the request is not complete, it does not meet the requirements of RCRA and the Hazardous Waste Act (HWA), and it fails to protect public health and the environment.

Add Waste Containers

The applicants' request is to "add waste containers, including direct loaded 85-gallon drums, direct loaded Ten Drum Overpacks, and 100-gallon drums." Letter from Inés Triay and J.L. Lee of June 27, 2002. See also pages 1 and 2 of the request.

That language implies that 100-gallon drums would not be direct loaded. However, the proposed language in the permit modification would allow direct loading of 100-gallon drums. See Module III.C.1.e (p. A-4), section M1-1b (p. A-20). Indeed, it appears that 100-gallon drums are *only* to be used for direct loading as they are not included as overpacks. See Section 3-1b (p. A-6, Table F-6, p. A-17). SRIC strongly objects to the erroneous description of the request, and urges that NMED inform the permittees that it cannot approve this or any request that is inaccurate.



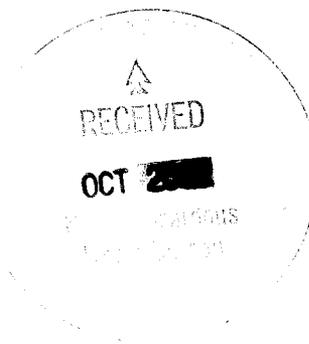


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The modification request is very substantially incomplete. While it requests approval for direct loading of ten drum overpacks (TDOP) and 85-gallon drums (and 100-gallon drums), it does not include revisions required in the permit's B attachments (Attachments B, B1, B2, B3, and B4) regarding waste characterization procedures for those containers. For example, SRIC believes that radiography will be more difficult and less accurate for TDOPs and 85-gallon drums (and 100-gallon drums). Thus, different procedures would need to be added to the permit to require adequate characterization of such containers. A complete request would include detailed data on how waste characterization, including radiography, would be conducted on the containers and demonstrate that the existing characterization procedures provide accurate results. Or the request would provide data that alternative characterization procedures would provide accurate results and propose to incorporate those procedures into the permit.

Changes in waste characterization requirements in the B attachments also require changes in the B6 checklists, which are not included in the request.

The request is also incomplete because it does not include requirements related to Drum Age Criteria (DAC). The existing DAC and proposed DAC that went to hearing on August 26-28, do not include any DAC for 85-gallon drums, TDOPs, and 100-gallon drums. It is inappropriate and contrary to the requirements of 40 CFR 264 to have waste in containers that are not adequately characterized.

The request is also incomplete because it states that containers may be overpacked, repair/patched or repackaged (Section M1-1c(1), p. A-21; M1-1d(2), p. A-23, M1-1e(1), p. A-24), but does not describe either the containers or processes to do such work. See also section F-4d (p. A-8). While a 55-gallon drum can be overpacked in an 85-gallon drum, or TDOP, into what container can 85-gallon or 100-gallon drums or TDOP be overpacked? SRIC also believes that procedures to determine which drums should be repaired, patched or overpacked must be much more detailed. How and where such operations would take place at WIPP should be specified. Personnel qualifications and training for such operations also must be specified. Whether repair or patching should occur must also be discussed because SRIC believes that in some situations WIPP does not have adequate capability to handle defective containers and they might have to be shipped to some other site. The August 25, 2002 incident with the shipment from INEEL is not the only possible circumstance in which containers must be returned to the generator site. Those circumstances should be specified in the permit.

Because of the many issues that are not addressed, including requirements for adequate characterization in 40 CFR 264 and adequate protection of public health and the environment, the request does not meet the requirements of RCRA and the HWA, and thus it must be denied.

Furthermore, SRIC believes that because of the complexity of the requested modification, any such request must be subject to class 3 modification procedures, including the opportunity for public hearing.

Addition of New Hazardous Waste Number - U134 (Hydrofluoric Acid)

Despite the fact that this modification request was previously rejected by NMED (p. A-12), it has been re-submitted in an incomplete and unapprovable form.

According to 40 CFR 261.33(f), U134 exhibits toxicity and corrosivity characteristics. Thus, the modification request must provide actual data that all waste with the U134 code is not corrosive or chemically incompatible, which otherwise would be prohibited at WIPP, under Module II.C.3. The assertion that hydrofluoric acid "has been complexed/neutralized and is no longer detectable in the waste stream" (p. A-12) is not actual data. And even if it is the case for U134 at the Idaho National Engineering and Environmental Laboratory (INEEL), the modification request would allow U134 in waste from any site. The permit modification is clearly incomplete in not providing data demonstrating that U134 is nondetectable and not corrosive or chemically incompatible at all sites.

The permittees assert that "INEEL will be required to show through acceptable knowledge or testing and analysis (visual inspection or similar testing) that the debris waste form does not contain liquid waste." (p. A-14). SRIC is not satisfied with that assertion given that the August 5-9 inspection at INEEL showed that waste may already have been shipped to WIPP with free liquids. Thus, SRIC believes that if U134 is ever approved as a waste code, there should be a requirement for visual examination of each drum to ensure that there are no liquids, because, based on the audit, the acceptable knowledge and radiography process at INEEL is not adequate to detect all liquids.

The incomplete and inadequate aspects of the request indicate that it does not meet RCRA and HWA requirements and is not protective of public health and the environment. The possibility of having prohibited items at WIPP is of special concern and certainly is not protective of public health and the environment. Thus, the request must be denied.

Control Charting

The request is described as allowing "the use of retrievably stored waste characterization techniques for repackaged homogenous [sic] solid waste." Page A-21.

SRIC believes that the request is based on an erroneous description of the permit's requirements. The request states that "there may be circumstances when a number of samples that exceeds the number dictated by Section B2-2a must be selected and analyzed." Page. A-32. That section does not "dictate" any specific number of samples. The section establishes "a minimum of five containers shall be sampled and analyzed in each waste stream." That minimum can be increased "as necessary to ensure that an adequate number of samples are collected to allow for acceptable levels of completeness." The permittees cannot justify changes to the permit based on erroneous rationale, and NMED should so inform them.

The request is very substantially incomplete. The request includes no information about how many containers would be affected by the change. Is it "not feasible to develop meaningful

control charts" for all homogeneous wastes? Or is it a relatively small portion of the homogeneous solids that are involved? Or is it one site that cannot do control charting and other sites can? Without at least that minimum information, SRIC does not believe that the permittees have adequately demonstrated that any change in control charting is needed.

Further, there is no definition of "when appropriate" (Module II.C.1.c, Page A-33), so the modification would establish more ambiguity in the permit. The proposed revisions to section B-3d(2) on pages A-35 and 36 do not resolve the ambiguity. There are no real criteria for the site to not use control charting. Therefore, there could be total inconsistency from one waste stream to another and from one site to another. Such a chaotic situation would likely result in inconsistent and inadequate procedures and results. Such a process is not protective of public health and the environment, and it would not result in public confidence in the reliability of waste characterization.

Because of the issues that are not addressed, including requirements for adequate characterization in 40 CFR 264 and adequate protection of public health and the environment, the request does not meet the requirements of RCRA and the HWA, and thus it must be denied.

Furthermore, SRIC believes that because of the complexity of the request and the substantial changes to waste characterization requirements, any such request must be subject to class 3 modification procedures, including the opportunity for public hearing.

Classified waste

The permit request "incorporates recordkeeping and audit requirements for classified information." Page A-41.

In fact, what the modification would do is to allow previously prohibited classified wastes to be shipped to and disposed of at WIPP and significantly change waste characterization and audit requirements. SRIC strongly objects to the erroneous description of the request, and urges that NMED inform the permittees that it cannot approve this or any request that is inaccurate.

The request to bring classified waste to WIPP and to establish a new classified information procedures appears to be contrary to the requirements of the WIPP Land Withdrawal Act. For example, Section 17(a)(1) of the law provides the State of New Mexico "with free and timely access to data relating to health, safety, or environmental issues at WIPP." Bringing classified waste to WIPP is certainly related to health, safety, and the environment, so such information must be fully available to the state and to the public. Such full information would not be available if the permit modification is approved. See, for example, limitations on access to information proposed in section B-4a(7). Page A-50. Furthermore, the permittees have not shown that they have the legal authority to bring such classified wastes to WIPP. There is nothing that SRIC is aware of in the law or DOE documents that provides the kind of security at WIPP that is required for handling classified information. In fact, DOE implicitly admits that WIPP has no such capability. Thus, SRIC believes that the modification request must be denied.

SRIC believes that there are other options that DOE has for dealing with this waste, including declassifying it and the records associated with it, crushing or otherwise modifying the shapes so that they need not be classified, and sending it to other facilities that handle classified waste, parts, and information.

The modification request also is very substantially incomplete in other respects. The request does not include the DOE "Security Plan for Shipment and Disposal of Classified Waste Material at the Waste Isolation Pilot Plant." SRIC is aware of such a document, dated October 23, 2000. The document is not referenced in the modification request, nor are its requirements for changes to the permit included in the modification request. If that Security Plan is no longer applicable, the permittees must provide an updated Security Plan. If that Plan is still applicable, the permit modification request must include and discuss other changes to the permit that will result from bringing classified waste to WIPP.

For example, the Security Plan requires changes to equipment, personnel (and training), and the waste staging at WIPP, but none of those changes are included in the permit modification request. New equipment -- an "intrusion detection system" and cameras -- would be installed in both the Waste Handling Building (WHB) and underground hazardous waste management units. New personnel -- people with Q-clearances to handle and monitor the classified wastes -- would be involved in unloading the TRUPACT-IIs, guarding the waste while it is in the WHB, moving classified waste on the facility pallets, and in dealing with security and emergency response. At least one waste storage area in the WHB would be redesignated. Thus, other sections of the permit would be changed, yet those changes are not included in the modification. SRIC believes that, at a minimum, changes would be required in Module III and Attachments C, D, E, F, H, and M of the permit.

Nonetheless, the permit modification states that "[w]aste management activities, including security waste storage and disposal, and Contingency Plan responses will remain unchanged with the incorporation of classified information." Page A-48. That statement is inconsistent with DOE's own Security Plan and must be explained and supported.

The permit modification request also does not include any information regarding the amounts and types of classified waste. Such information must be included in any complete request.

The permit request does not include how other proposed modifications would be affected. For example, the digital radiography/computed tomography modification would also seem to reveal information about classified shapes, similar to radiography. If such changes would also occur, they should be included in one request, not piecemeal changes. At a minimum, the request must discuss other such changes in recordkeeping and audit requirements.

Because of the many issues that are not addressed, including requirements in 40 CFR 264 and adequate protection of public health and the environment, the request does not meet the requirements of RCRA and the HWA, and thus it must be denied.

Furthermore, SRIC believes that because of the complexity of any classified information and waste modification request, it must be subject to class 3 modification procedures, including the opportunity for public hearing.

HalfPACT

The request would allow a new shipping container -- the HalfPACT -- to be used to transport waste to WIPP and to store waste at WIPP prior to being unloaded.

This "simple" modification includes changes to 56 different parts of the permit, in some cases including multiple changes to a subsection of the permit. Several of the changes are to subsections that would also be changed by the "Add Containers" modification -- Section D-1b(1); Section E-1b; Section E-2a; Section F-1, Waste Description; Section F-1, CH Bay Operations; Section F-4d; Section G-1, Waste Handling Building Traffic; Attachment M1, List of Figures; Section M1-1c(1); Section M1-1d(2); Section M1-1e(1); Table M1-2; Section M2-2a(1); Section M2-2b; Table M2-1 -- indicating the complexity and interrelationships of the two modifications. Both modifications should be treated as Class 3 modifications due to their complexity and both modifications (as well as others) should be included in one public hearing process so that the public can adequately and effectively comment on all such modifications. As SRIC has previously stated, any class 3 modifications should be consolidated into one permit hearing so that the interrelationships of issues can be fully explored and so that public (and NMED) resources can be appropriately dedicated to one hearing, rather than being dissipated in a series of hearings.

The modification request is incomplete because it does not discuss how HalfPACTs would be handled when involved in accidents such as two recent ones which resulted in TRUPACT-II's being returned to INEEL. For example, the modification request should provide much more detail regarding required procedures in sections M1-1c(1), M1-1d(2), M1-1e(1) related to contamination problems in shipping containers.

Because of the many issues that are not addressed, including requirements of 40 CFR 264, the request does not meet the requirements of RCRA and the HWA, and thus it must be denied.

Use Radiography for newly generated waste

The permit modification request states that using radiography "actually results in an increase in waste analysis activities" when visual verification cannot be used. Page A-96. The real issue is whether the new processes would result in better and more accurate waste analysis.

The modification request is incomplete. It provides no actual documentation that the proposed change will result in as reliable or better results than other the current permit, which requires 100 percent visual examination for newly generated waste. Section B-3d(1). The need for visual examination was an important issue in the WIPP permit proceeding. Indeed, the Hearing Officer determined "that visual inspection and analysis of each and every waste container would likely improve waste characterization accuracy." Hearing Officer Report, September 10, 1999 at 87. The Hearing Officer did not require more visual examination because of concerns about worker

radiation exposure. However, that concern does not apply to newly generated waste, since the visual examination would not increase worker exposure. Given the finding that visual examination is more accurate, DOE must present incontrovertible evidence that radiography would produce results as accurate as visual examination. Without such a demonstration, the change cannot be shown to protect public health and the environment, and it must be denied.

The modification request apparently is for a new radiography process, one that is somewhat different than that included in Section B1-1 of the permit. If a different type of radiography is to be used, different permit requirements and training and auditing procedures will be needed. The specific procedures for radiography must be detailed and included in the permit. Yet none of those changes are included in the request.

In addition, the request also includes allowing using part VE and part radiography, rather than substituting radiography for all of the VE. Page A-105. But the request includes no information that such procedures are as reliable and accurate as using 100 percent VE, nor the circumstances in which a site can use that procedure instead of 100 percent VE (or 100 percent radiography).

Because of the many issues that are not addressed, including requirements of 40 CFR 264, the request does not meet the requirements of RCRA and the HWA, and thus it must be denied.

Furthermore, SRIC believes that because of the complexity of the requested modification and the substantial changes to waste characterization requirements, any such request must be subject to class 3 modification procedures, including the opportunity for public hearing.

Data Management

Pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42(c)(6)), NMED may deny the class 3 modification request. SRIC believes that the class 2 Data Management modification request as submitted is grossly inadequate and should be denied. Such a denial is consistent with NMED's denial of the original Class 2 Drum Age Criteria (DAC) request. NMED has previously said it cannot approve inadequate class 2 requests as class 3 requests. For example, at the Drum Age Criteria public hearing on August 27, 2002, you testified:

In other words, we cannot take a deficient modification request that was submitted as a Class 2 and then use the Class 3 process in an attempt to remedy that. So because the original modification request as a Class 2 was deficient, and there was nothing in the public comment that would address that, we could not elevate to a Class 3 because it was not approvable. Transcript, page 353, lines 6-12.

Further, given the difficulties of crafting a draft permit for a comparatively much less extensive and complex DAC modification, SRIC believes that NMED should not try to issue a draft permit based on the existing modification request. Instead, NMED should deny the request and identify many of the deficiencies, including those from public comment, so that the permittees can submit a revised, complete, and accurate class 3 modification request.

SRIC agrees that electronic data management should be encouraged, including making more data more accessible to the public. SRIC also agrees that eliminating some redundancies is useful. However, we also note that sometimes reiterating and emphasizing is important, so some so-called redundancies may be useful and necessary. SRIC does not oppose the concepts behind many of the proposed changes in the request. However, the specific elements of the request should be corrected and improved through a new class 3 modification request.

Among SRIC's concerns:

1. Confusing additions

For example, the permittees propose a new seven-part Permit Condition II.C.5. Pages B-2 & 3. That new condition is not included on Page A-2 as part of the Table of Changes and explanation. Any change should be included and explained in the Table of Changes. The request does not indicate that the permit already contains Condition II.C.5 - Derived Waste. The request should specify how that existing condition will be renumbered, if the proposed new condition is approved.

The proposed new condition is also incomplete and confusing. New condition II.C.5 states that the "[p]ermittees shall provide access to the website and WWIS...." Is this access to the Secretary, to the generator/storage sites, to the public? **SRIC supports providing access to the general public through a read-only, password-protected system.** Such a system should be specified in the new condition. Additionally, which "website" must be specified.

2. Confusing deletions

For example, all of the figures in Attachment B are proposed for deletion. Pages A-2 & A-16. However, the title "List of Figures" is not proposed for deletion (page B-iii), even though if there are no figures. Thus, it is confusing why the list of figures and page B-77 are not proposed for deletion.

3. Inappropriate editorial changes

For example, on page A-2, permittees state that an editorial change is "that acronyms are defined at first use and used thereafter." As a general matter, SRIC agrees with such an editorial procedure. However, in a long document with many pages between the first use and subsequent uses, such a procedure can leave the reader not knowing what the acronym is. Additionally, there are times when the acronym should be repeated. For example, in Attachment B, AK is first used on page B-8. Section B-3b on page B-23 begins the more detailed discussion of AK. That section should be entitled, "Acceptable Knowledge (AK)" for ease of reference to the acronym. See also, section B3-9 on page B3-27. Similarly, section B-3c on page B-24 should be entitled, "Radiography and Visual Examination (VE)."

4. Additions needed

A. Public access to the WWIS. As mentioned above, and as SRIC as previously requested, basic WWIS reports -- Waste Emplacement, Shipment Summary, Repository Summary, and Nuclide -- should be publicly available. SRIC requests that public read-only, password protected access be available. As with the existing permit, that access would be

controlled by the permittees' Data Administrator. Section B-4b(1)(i); proposed section B-6b, page B-38.

B. Timely audit reports. Existing section B-4b(1)(iii) and proposed section B-5 require site audits at least annually. Based on actual experience that some sites do not promptly meet audit requirements, SRIC advocates that the permit be revised to incorporate a provision that a site that doesn't complete its audit within 30 days of its anniversary date or submit its final audit report within 60 days of the audit would lose its status as an approved site, until NMED approved the final audit report.

Additional information needed in an adequate modification request

A. Documentation of improvement. Permittees first general explanation of why the modification is needed is that electronic review will "minimize human error" (page 4). However, the request provides no information about the level and types of human error that have so far occurred. Such information should be provided, and how specific deficiencies will be addressed by the electronic system. SRIC is especially interested in the performance of existing operators, technical supervisors, independent technical reviewers, and QA officers, in order to have a baseline understanding of how the "new" Independent Technical reviewer will enhance the system.

B. Documentation is needed to demonstrate that elimination of the waste stream characterization package, as described on page 5, will not reduce characterization information provided to permittees or to NMED. The discussion should also include information about how the existing package is used and how its elimination will not reduce reporting requirements. The discussion should include how each of the manual and electronic systems address the elimination of the package.

C. Documentation is needed to demonstrate that eliminating the quarterly repeat of data review, as described on page 5, will not reduce reporting requirements to the permittees or to NMED. The discussion should also include information about how the existing quarterly package is used and how its elimination will enhance the process. The discussion should include how each of the manual and electronic systems address the elimination of the package.

Thank you for your careful consideration of, and response to, these comments.

Sincerely,



Don Hancock