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Richland Operations Office
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0048158

OCT 16 1997

97-EAP-718

Mr. Moses N. Jaraysi
Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336-6018

Dear Mr. Jaraysi:

HANFORD SITE COMMENTS ON THE MODIFICATION PACKAGE ISSUED FOR PUBLIC COMMENT ON SEPTEMBER 2, 1997, FOR THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT, DANGEROUS WASTE PORTION

Enclosed for your consideration are the Hanford Site comments on the modification package issued for public comment on September 2, 1997, for the Hanford Facility RCRA Permit, Dangerous Waste Portion (Comment Document). This Comment Document was prepared in response to a State of Washington Department of Ecology (Ecology) request for comments initiated on August 13, 1997.

The proposed modification will incorporate four units into the Hanford Facility RCRA Permit: the Low-level Burial Grounds, 200 Area Liquid Waste Complex, 242-A Evaporator, and 325 Hazardous Waste Treatment Units. The proposed modification also modifies two units: 183-H Solar Evaporation Basins and 303-K Storage Facility. Adoption of the proposed modification generally is supported; however, there are a few specific areas that merit further consideration by Ecology. The Comment Document addresses those areas that could be enhanced by additional clarification or explanation.

Incorporation of these comments into the modification, as finally adopted, will enhance efforts to meet our collective objective of ensuring the most expeditious, efficient, and comprehensive reclamation of the Hanford Facility. We request incorporation of these comments in the spirit of continuing open communication with, and responsiveness to, your organization.



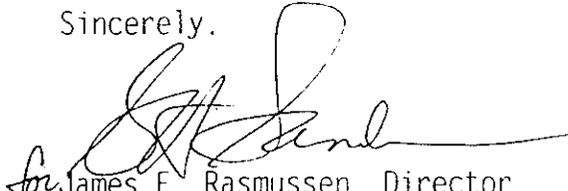
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Mr. Moses N. Jaraysi
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If you have any questions regarding the contents of this letter or the enclosure, please contact Clifford E. Clark, U.S. Department of Energy, Richland Operations Office, on (509) 376-9333; Susan M. Price, Fluor Daniel Hanford, Inc., on (509) 376-1653; or Harold T. Tilden II, Pacific Northwest National Laboratory, on 376-0499.

Sincerely,



James E. Rasmussen, Director
Environmental Assurance, Permits,
and Policy Division
DOE Richland Operations Office

EAP:ACM



William D. Adair, Director
Environmental Protection
Responsible Party for
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Kenneth C. Brog, Director
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Enclosure:
Hanford Site Comments on the
Modification Package

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**HANFORD SITE COMMENTS ON THE MODIFICATION PACKAGE
ISSUED FOR PUBLIC COMMENT ON SEPTEMBER 2, 1997,
FOR THE HANFORD FACILITY RCRA PERMIT,
DANGEROUS WASTE PORTION**

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RECEIPT

Moses Jaraysi
200 Area Unit Supervisor
Nuclear Waste Program
State of Washington
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336

I have received the following document 97-EAP-718:

HANFORD SITE COMMENTS ON THE MODIFICATION PACKAGE ISSUED FOR
PUBLIC COMMENT ON SEPTEMBER 2, 1997, FOR THE HANFORD FACILITY
RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT, DANGEROUS
WASTE PORTION

Christy Caldwell

10-16-97

Signature

Date

COMMENTS ON CHAPTER 4
Low-Level Burial Grounds, Rev. 1

1. **General Comment:** The provisions of Chapter 4 of the Permit apply only to the trenches in the LLBG that are used specifically for the disposal of dangerous and/or mixed waste.

2. **Condition III.4.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION,**

Requested Action: Delete "The Permittees shall comply with all the requirements set forth in the *Low Level Burial Grounds, Rev. 1*, as found in Attachment 34, including the amendments specified in Condition III.4.B. Enforceable portions of the application are listed below; all subsections, figures, and tables included in these portions are also enforceable unless otherwise stated:" and replace with "The permittees shall comply with all the requirements set forth in the Low Level Burial Grounds, Rev. 1, as found in Attachment 34, including the amendments specified in Condition III.4.B. By approving this permit application, Ecology hereby grants an exemption from the dangerous waste landfill liner/leachate collection system requirements for disposal of reactor compartments in trench 94 of the 218-E-12B Burial Ground, as requested in Appendix 4D below. Enforceable portions of the permit application are listed below; all subsections, figures, and tables included in these portions are also enforceable unless otherwise stated:"

Comment Justification: This language clearly reflects Ecology's approval of the request for exemption from landfill liner/leachate collection system requirements for the disposal of reactor compartments in Trench 94 of the 218-E-12B Burial Ground.

3. **Condition III.4.A., Appendix 4D.**

Requested Action: After "Request for Exemption from Lined Trench Requirements at 218-E-12B Burial Ground Trench 94" add "(Section 5.0)"

Comment Justification: The request for exemption from lined trench requirements for the disposal of reactor compartments in Trench 94 of the 218-E-12B Burial Ground is found in Section 5.0 of the permit documentation included as Appendix 4D, *Request for Exemption from lined trench requirements at 218-E-12B Burial Ground Trench 94*. All other information provided in this document supports this request, and is not intended for inclusion in the Permit.

4. **Condition: III.4.B.e. Page 4-1, line 21 -27:** Delete and replace with "Mixed waste disposed in containers may not contain free liquids or have greater than 10% void space. There are waste shipments containing condensed liquid vapor and greater than 10% void space which will require disposal. These waste shipments will meet a performance standard for packaging to prevent releases to the environment. Free liquids are further addressed in Appendix 3A, Section 1.2. If greater than 10% void space is present in any container, it must be crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill."

Requested Action: Delete this condition and replace with "Mixed waste disposed in containers may not contain free liquids and the containers may not be less than 90 percent full. There are waste shipments of containers which contain condensed liquid vapor and are less than percent full which will require disposal. These waste shipments will meet a performance standard for packaging to prevent releases to the environment. Free liquids are further addressed in Appendix 3A, Section 1.2. If any container is less than 90 percent full, it must be crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill".

Comment Justification: The regulatory requirement as stated in 40 CFR 264.315 states "Unless they are very small, such as an ampule, containers must be either: (a) at least 90% full when placed in the landfill; or (b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill." The regulations do not use the term "void space".

COMMENTS ON CHAPTER 4
Low-Level Burial Grounds, Rev. 1

5. **Condition:** III.4.B.h. Page 4-2, line 32: The word "Ecology" is added before the word "approved."
- Requested Action:** Delete this condition.
- Comment Justification:** The dangerous waste regulations do not give Ecology approval authority when a container needs to be moved somewhere other than a TSD unit to be opened.
6. **Condition:** III.4.B.n. Page 4-4, line 4 - 8: Delete and replace with "Testing for free liquids shall be performed IAW Appendix 3A, Waste Analysis Plan, for mixed wastes accepted for storage and disposal in the LLBG."
- Requested Action:** Delete "IAW" and replace with "in accordance with"
- Comment Justification:** Unfamiliar abbreviations should be avoided.
7. **Condition:** III.4.B.p. Page 4-22, line 2: The word "When" is deleted and replaced with "The systems shall be."
- Requested Action:** Delete this condition.
- Comment Justification:** There is no regulatory requirement that requires the pumps be operated in automatic mode. Automatic mode may actually increase personnel requirements, requiring system surveillances that may not otherwise be required during back shifts and on weekends/holidays. Increased operational efficiency can result from operating pumps manually, only when required, rather than in an automatic mode.
8. **Condition:** III.4.B.q. Page 4-22, line 11: The sentence "If raincovers as described in Section 4.5.3.1.1 are used on lined trenches, then the primary leachate collection system is allowed to be placed in the manual operation mode during weekends and holidays provided that the secondary leachate collection system continues to be operated automatically and discharges to the primary leachate collection system."
- Requested Action:** Delete this condition.
- Comment Justification:** With Condition III.4.B.p deleted, this condition is unnecessary.
9. **Condition:** III.4.B.r. Page 4-30, line 49: Deleted "after 25-year storm event" and replaced with "within 7 days of significant runoff events and maintenance to repair any damage found within 60 days of discovery."
- Requested Action:** Delete "and maintenance to repair any damage found within 60 days of discovery" from the condition.
- Comment Justification:** There is no regulatory requirement for the 60-day repair requirement.
10. **Condition:** III.4.B.u. Page 6-1, line 34: Delete the remainder of the sentence beginning with the words "as soon as practical" and replace with "within 24 hours, except for the Reactor Compartments."
- Requested Action:** Delete this condition.
- Comment Justification:** There is no regulatory requirement for the 24-hour requirement. By forcing the operation to cover waste within 24 hours, valuable landfill space will be wasted to backfill material. This increases the overall cost of disposing of mixed waste, without providing any significant benefit.

COMMENTS ON CHAPTER 4
Low-Level Burial Grounds, Rev. 1

15. **Comment Justification:** This permit condition deleted "Therefore, revisions made to portions of the (Cont.) contingency plan documents that are not governed by the requirements of WAC 173-303 will not be considered as a modification subject to review or approval by Ecology." and incorporated four new sentences. The language as written in the Contingency Plan accurately describes the situation.

Deleting this sentence is not consistent with the other units in this modification (200 Area Liquid Waste Complex, Chapter 5; 242-A Evaporator, Chapter 6; and the 325 Hazardous Waste Treatment Units, Chapter 7.)

16. **Condition:** III.4.B.qq. Page 11-3, line 30: The following text is inserted:

"Filled trenches shall be inspected, at minimum, every three months, and deficiencies corrected within 90 days of discovery.

For existing regulated units which are completely filled, a closure plan shall be developed and integrated with surrounding SWMU corrective action plan. A corrective action plan shall also be developed for SWMU 218-W-4B. The compliance schedule for several identified units is shown below. The remaining units not identified below shall be reviewed during the 10 year Sitewide permit review to determine an appropriate compliance schedule.

Sept. 30, 1998: Submit a workplan to investigate releases to the environment from 218-W-4B, southern filled SWMU portion of 218-E-12B, southern filled portion of 218-E-10, and 218-W-3A.

Sept. 30, 1999: Implement an approved Ecology workplan for 218-W-4B, southern filled SWMU portion of 218-E-12B, southern filled portion of 218-E-10, and 218-W-3A.

Sept. 30, 2001: Complete implementation of the Ecology approved workplan.

Trench 31 and 34 shall have a closure plan meeting the requirements of WAC 173-303 submitted during the Sitewide permits 10-year review. Trench 94 shall not be required to develop a closure plan at this time provided the Reactor Compartments are visually inspected and maintained. A closure plan requirement for Trench 94 will be reviewed at the 10 year review of the Permit."

Requested Action: Delete this condition and replace with "The permittees and Ecology shall conduct a study design workshop for the LLBG. The workshop will follow the interim final EPA document "Guidance for Planning for Data Collection in Support of Environmental Decision Making Using the Data Quality Objectives Process" (EPA QA/G-4, 1993). By mutual agreement of all parties the DQO process may be altered to accommodate unique characteristics of the LLBG. This process will start by March 2, 1998 and conclude by August 31, 1998.

The workshop shall be used to develop appropriate near and long-term actions to be taken under the Low Level Burial Grounds Closure Plan. The actions shall be cost effective and designed to minimize adverse environmental impacts from disposal of waste during the active life of the Burial Grounds and after closure. The plan and associated work schedule will be submitted to Ecology by September 30, 1998 and October 15, 1998 respectively. Ecology will issue a final decision on the work schedule by November 13, 1998. The plan and associated work schedule will be incorporated into the final permit by a Class I permit modification in the fourth quarter of fiscal year 1998."

Comment Justification: The following are concerns with this Permit Condition: (1) Some deficiencies that take longer than 90 days to correct. (2) The closure plan is an inappropriate place to discuss corrective actions, and (3) The proposed corrective action seems to be overly broad in that it would appear to apply to management activities that have only involved radioactive (non-mixed) waste.

COMMENTS ON CHAPTER 4
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11. **Condition:** III.4.B.v. Page 6-2, line 17: Deleted "on a schedule that helps" and replaced with "within 14 days or less, unless otherwise specified by Ecology, to."
- Requested Action:** Delete this condition and replace with "Abnormal conditions identified by inspections must be corrected on a schedule that protects workers, the public, and the environment."
- Comment Justification:** There is no regulatory requirement for the 14-day requirement. Changing the condition will make the paragraph more consistent with WAC 173-303-145 (3) on mitigating and controlling spills and discharges into the environment.
12. **Condition:** III.4.B.w. Page 6-2, line 19: Added "If subsidence is discovered within the LLBG, the subsidence shall be stabilized within 90 days and control measures established within 14 days to minimize precipitation and runoff from accelerating contaminant migration."
- Requested Action:** Delete this condition.
- Comment Justification:** There is no regulatory requirement for this condition. Subsidence should be dealt within a manner that protects human health and the environment.
13. **Condition:** III.4.B.aa. Page 6-3, line 37: Deleted "longer" and replaced with "within 30 days."
- Requested Action:** Delete this condition.
- Comment Justification:** There is no regulatory requirement for the 30-day requirement. Requirements such as this, and the documentation must accompany them, that contribute to the high cost of the Hanford cleanup.
14. **Condition:** III.4.B.bb. Page 6-3, line 44: After "supervisor" added "but no later than 60 days".
- Requested Action:** Delete this condition.
- Comment Justification:** There is no regulatory requirement for the 60-day requirement. Requirements such as this, and the documentation that must accompany them, contribute to the high cost of the Hanford cleanup.
15. **Condition:** III.4.B.ll. Page 7-1, line 12-14: Delete and replace with "All revisions to the building emergency plan will be considered Class 1 modifications except modifications which change a dangerous waste spill or release response procedure or removes equipment from the emergency equipment list. In addition to the requirements set forth in appendix 7A, the LLBG operating organization shall provide a report to Ecology within 15 days of any incident which results in a release of mixed waste to the environment or injury/suspected chemical overexposure to any employee at the facility. The report shall review and evaluate the cause of the incident and a description of the corrective actions taken to prevent reoccurrence. This condition shall apply until such time that the Permit Contingency Plan is modified to further address and clarify the reporting requirements to Ecology."
- Requested Action:** Delete this condition.

**COMMENTS ON CHAPTER 4
Low-Level Burial Grounds, Rev. 1**

19. **Condition:** III.4.B.c. Page 3-1, line 41-43: Delete and replace with "Free liquids as described in Appendix 3A, Section 1.2 will not be accepted at the Low-Level Burial Grounds."

Requested Action: Delete this condition.

Comment Justification: Provisions of Appendix 3A, Section 1.2, provide adequate protection of human health and the environment. Deleting the free liquids' provision of Appendix 3A, Section 1.2, contradicts the verbiage included in Condition III.B.e.

**COMMENTS ON CHAPTER 4
Low-Level Burial Grounds, Rev. 1**

17. **Condition:** III.4.B.tt. Page 11-17, line 19: An extension for closure of post-August 19, 1987, regulated mixed waste is granted provided compliance with the schedule of activities outlined in Section 11.3.

Requested Action: Delete this condition.

Comment Justification: This condition allows the requested extension provided a list of activities proposed in Condition III.4.B.qq are carried out. This list of activities needs to be negotiated and agreed to before acceptance.

18. **Condition:** III.4.B.jjj. App. 3A, page 1-5, line 30 - 52: Delete and replace with the following:

"1.1.2 PROCESS FOR REDUCING THE PHYSICAL SCREENING FREQUENCY:

After a generator's frequency has been adjusted due to poor performance or initial frequency established, their physical screening frequency can be reduced in accordance with the following:

1. The physical screening frequency will be stepped down in three steps based upon the ability of the generator to quickly implement their CAP or demonstrate their ability to appropriately manage waste (as applicable). At no time shall the physical screening frequency be reduced below the 5% for onsite generators or 10% for offsite generators.

STEP 1) Reduce frequency by 66% the first month.

STEP 2) Reduce frequency established in Step 1 by 50% or the minimum allowable whichever is greater.

STEP 3) Reduce frequency to the minimum allowable.

2. The reduction will be determined during the monthly evaluation process, however the following minimum criteria must be met prior to reduction of the frequency:

5 containers from the streams in question must pass verification, and

The TSD documents their evaluation of the CAP or new generator's waste management program has been implemented and is effective.

If the frequency was increased based upon conformance issues upon receipt of the waste, the CAP must be fully implemented prior to the customer returning to the minimum physical screening frequency. However, wastestreams from the same generator which did not have conformance issue upon receipt at the LLBG may be returned to the minimum verification frequency if it is determined by the LLBG operating organization that it is unlikely that the specific conformance issue will affect the generator's other wastestreams."

Requested Action: Delete the last sentence and replace with "However, waste streams from the same generator which did not have a conformance issue upon receipt at the LLBG and the waste streams that have been cleared during the monthly review may be returned to the minimum verification frequency if it is determined by the LLBG operating organization that it is unlikely that the conformance issue will affect the generator's other waste streams."

Comment Justification: This condition, as written, does not offer DOE-RL the flexibility needed to adjust verification frequencies based upon improved performance. The condition, as written, will require additional verification of waste streams which no longer exhibit the same performance issues which originally caused the frequency adjustment. Modification of this condition will help ensure that DOE-RL does not perform needless verifications.

COMMENTS ON CHAPTER 7
325 Hazardous Waste Treatment Units

1. **Condition:** III.7.B.d., For all shipments of dangerous waste to or from this TSD unit, the Permittees shall comply with Conditions II.P. or II.Q. of this Permit regarding dangerous waste shipment manifesting and transportation, regardless of the volume of the shipment.

Requested Action: Delete this condition.

Comment Justification: The 325 HWTUs will be required to comply with II.P. and II.Q. requirements, as applicable, by inclusion into the Hanford Facility RCRA Permit. A special permit condition is not needed to assure compliance. The use of the special condition confuses the issue and may imply that all onsite shipments must be documented, even if excluded from coverage by existing conditions II.P. and II.Q.

2. **Condition:** III.7.B.j., Telephone number(s) for a point-of-contact at each of the three units of the HWTUs shall be provided in the Waste Analysis Plan (i.e., Unit Description) and provided to the Department within 30 days of the issuance of this Permit.

Requested Action: Delete this condition.

Comment Justification: This information is not required by the Dangerous Waste Regulations, Hanford Facility Permit requirements, or for other units in Modification C. Maintaining this information will require frequent revisions to the permit that increases cost of permitted operations. Contact points are identified elsewhere in the permit application, and other staff contacts can be provided informally.

3. **Condition:** III.7.B.k., Process knowledge and analytical data that are used for waste characterization, LDR determination, and/or treatment shall be documented and placed in the Operating Record.

Requested Action: Add "activities at this TSD unit" after the word "treatment".

Comment Justification: Provide clarification for generator records maintained in the unit-specific portion of the facility operating record for waste designated under LDR requirements at the TSD unit.

4. **Condition:** III.7.B.l., Shipments of waste shall not be accepted from any onsite generator without LDR information, if applicable, accompanying each shipment. The TSD unit staff shall obtain, from the onsite generator, the information necessary to determine the following: waste code, treatability group (i.e., wastewater versus non-wastewater), subcategory, treatment standard, identification of underlying hazardous constituents for certain characteristic waste, and whether the waste meets the specified treatment standard(s). A member of the TSD unit staff may sign the LDR certification as a representative of the generator.

Requested Action: Delete the second sentence "The TSD unit staff shall obtain, from the onsite generator, the information necessary to determine the following: waste code, treatability group (i.e., wastewater versus non-wastewater), subcategory, treatment standard, identification of underlying hazardous constituents for certain characteristic waste, and whether the waste meets the specified treatment standard(s)." and replace with "The TSD unit staff shall obtain, from the on-site generator, the information necessary to comply with WAC 173-303-380(1)(k) and -380(1)(o)."

Comment Justification: Ecology has written this condition to specify what must be maintained in the TSD unit operating record regarding Land Disposal Restriction (LDR) information. The second sentence of this condition is incorrect with respect to EPA's LDR regulations in 40 CFR 268.7 as well as Ecology's regulations at WAC 173-303-380(1)(k) and (o). The condition is incorrect because EPA eliminated the need to provide the "treatment standard" as part of the information during the third-third final rule (55 FR 22668). Revising the second sentence provides a condition consistent with the regulations and will minimize future permit modifications as federal land disposal restriction information requirements change.

COMMENTS ON CHAPTER 14
303-K Storage Facility Closure Plan

1. **Condition:** V.14.B.g.2., Section 7.4 Support for Ecology during Sampling

Delete lines 29 through 32 on page 16 ("Split samples of concrete and soil may be collected, if requested, for Ecology. If split samples for Ecology are collected as part of this sampling effort, then the . . . ") and replace with the following: "Split samples of concrete and soil will be collected for Ecology from each sampling location. The . . . "

Requested Action: Delete this condition.

Comment Justification: As written, permit condition V.14.B.g.2 makes the collection of split samples for Ecology to be an enforceable permit condition. The permittees would be responsible for an Ecology action. This is not an appropriate permit condition. If Ecology decides not to collect split samples or is unavailable to provide the required sample containers, chain of custody, etc., then not collecting split samples would be a permit violation. The purpose of the section in the sampling and analysis plan is to inform the personnel collecting samples that they may be collecting split samples if requested by Ecology. This sampling and analysis plan text does not place any limitations or restrictions on Ecology.

2. **Condition:** V.14.B.h., If any analytical result for any sample specified in the Sampling and Analysis Plan exceeds the MTCA Method B cleanup level, then characterization of the lateral and vertical extent of the contamination shall be required and the Department shall pursue corrective action for this TSD unit.

Requested Action: Delete this condition.

Comment Justification: Condition V.14.B.h. eliminates the use of soil background in reaching closure at the 303-K Storage Facility. Eliminating the use of soil background contradicts the strategy outlined in Section 6.0 of the 303-K Storage Facility Closure Plan. The strategy in Section 6.0 was accepted as an enforceable section under Condition V.14.A. and has been used in all TSD closures to date. The use of soil background is also an allowable method under Condition II.K.

Condition V.14.B.h. contradicts the requirements of condition V.14.B.d. that requires the permittees to request Ecology's approval of alternative action levels (i.e., cleanup performance standards), that or must identify interim measures to address the concern. Condition V.14.B.h requires that if the MTCA Method B cleanup levels are exceeded, then corrective action shall be pursued.

Condition V.14.B.h states that corrective action will be pursued if the MTCA Method B cleanup levels are exceeded. The sampling and analysis plan invoked in Condition V.14.B.g identifies that the Hanford Sitewide background levels will be used for two of the constituents of concern (arsenic and beryllium). Background levels for these constituents of concern were chosen specifically because the naturally occurring concentrations are higher than the MTCA Method B cleanup values.