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SEP 21 1992

92-RPB-215

Mr. Paul T. Day
Hanford Project Manager
U.S. Environmental Protection Agency
Region 10
712 Swift Boulevard, Suite 5
Richland, Washington 99352

Mr. David B. Jansen, P.E.
Hanford Project Manager
State of Washington
Department of Ecology
Post Office Box 47600
Olympia, Washington 98504-7600



Dear Messrs. Day and Jansen:

RESPONSE TO THE JUNE 4, 1992, NOTICE OF DEFICIENCY FOR THE HANFORD CENTRAL WASTE COMPLEX-WASTE RECEIVING AND PROCESSING FACILITY DANGEROUS WASTE PERMIT APPLICATION

This letter transmits a Notice of Deficiency (NOD) response table addressing the 119 NOD comments received from the State of Washington Department of Ecology (Ecology) on Revision 0 of the Hanford Central Waste Complex-Waste Receiving and Processing Facility Dangerous Waste Permit Application. This permit application was submitted to Ecology and the U.S. Environmental Protection Agency for review on October 31, 1991, in accordance with Hanford Federal Facility Agreement and Consent Order Milestone M-20-12. The provision of the NOD response table fulfills Ecology's request, made in their June 4, 1992, NOD transmittal letter, that this table be submitted on or before September 12, 1992.

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Messrs. Day and Jansen
92-RPB-215

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SEP 21 1992

Should you have any questions, please contact Mr. C. E. Clark of my staff on 376-9333 or Ms. S. M. Price of WHC on 376-1653.

Sincerely,

James D Bauer

James D. Bauer, Acting Program Manager
Office of Environmental Assurance,
Permits, and Policy
DOE Richland Field Office

RPB:CEC

RE Lerch

R. E. Lerch, Deputy Director
Restoration and Remediation
Westinghouse Hanford Company

Enclosure:
NOD Response Table

cc w/encl:
R. C. Bowman, WHC
R. E. Lerch, WHC

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ENCLOSURE

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 1 of 38

No.	Comment/Response	Ecology Concurrence
1.	<p><u>Page 1-1, line 35.</u> <u>Comment:</u> The 3rd paragraph, line 6 states that module 1 will receive waste in "small boxes".</p> <p><u>Requirement.</u> Please include the size, dimensions, volume, capacity and composition of these boxes.</p> <p>DOE-RL/WHC Response: Text will be revised. The size of box that can be handled in the WRAP Facility Module 1 is limited by the capacity of the box assay and material handling systems. The systems can accommodate boxes that are a maximum of 8 feet (2.4 meters) long by 5 feet (1.5 meters) wide by 4 feet (1.2 meters) high and 7,000 pounds (3,182 kilograms) gross. The term 'small boxes' is nonspecific and could include any of several containers that do not exceed these weight and size limitations. The materials of construction of these boxes also could vary, but is restricted to noncombustible materials.</p>	
2.	<p><u>Page 1-1, line 37.</u> <u>Comment:</u> Please be more precise in what types of waste will be held at the facility. The term "other waste" should be more specific.</p> <p><u>Requirement.</u> Please denote the "other" type of waste.</p> <p>DOE-RL/WHC Response: Text will be revised. The major differences in the types of waste handled at the WRAP Facility Modules 1 and 2 are the types of containers that can be accommodated in the different modules and the surface dose rates of the containers. The WRAP Facility Module 1 will receive 55-gallon (208-liter) containers, 80-gallon (303-liter) containers overpacks, and small boxes of contact-handled waste. The WRAP Facility Module 2 will accommodate containers that are heavy, large, or have high dose rates (i.e., remote handled).</p>	
3.	<p><u>Page 1-1, line 38.</u> <u>Comment:</u> Large boxes and containers are mentioned in this sentence, but no detail is provided in reference to these.</p> <p><u>Requirement.</u> What is the size of the "large boxes", and what are the "other types of containers". Please state this information.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 2 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

DOE-RL/WHC Response: Text will be revised. The term 'large boxes' is a nonspecific term that includes all boxes that exceed one or more limitations of the WRAP Facility Module 1 box assay and material handling systems, which can accommodate containers up to a maximum of 8 feet (2.4 meters) long by 5 feet (1.5 meters) wide by 4 feet (1.2 meters) high and 7,000 pounds (3,182 kilograms) gross. The term 'other containers' is a nonspecific term that includes all containers other than standard 55-gallon (208-liter) containers or rectangular shaped containers, including 30-gallon (114-liter) containers, 110-gallon (417-liter) containers, cylinders, and casks.

4. Page 2-5, line 47. Comment: What is a "standard waste box" as mentioned in this sentence?

Requirement. Please define, and state size, dimensions, capacity and composition.

DOE-RL/WHC Response: Text will be revised. 'Standard waste box' or 'SWB' is the name of a specific box designed expressly for transport in a TransUranic PACKAGE Transporter - (TRUPACT)-2 - to the Waste Isolation Pilot Plant (WIPP) repository or another approved location. Each SWB is approximately 55 inches (139 centimeters) wide by 72 inches (162 centimeters) long by 37 inches (83 centimeters) high with round ends with either a welded or gasketed bolted lid. Each SWB is constructed of 12 gauge painted carbon steel with carbon steel reinforcement and is equipped with one or more carbon composite filtered vents. Each SWB has an empty weight of 810 pounds (368 kilograms) with a nominal capacity of 63.5 cubic feet (1.8 cubic meters) and 6,000 pounds (2,727 kilograms) gross. Additional information and sketches of the SWB are provided on pages F4-3 and F4-4.

5. Page 2-7, line 35. Comment: The term "noncompliant waste" is used in this sentence, but the definition of this waste is unclear.

Requirement. Please define the term, "noncompliant" waste. If this cannot be defined, please provide a more appropriate term. Plan specifications, detailed and actual procedures are required to be submitted.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 3 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

DOE-RL/WHC Response: Text will be revised. The term 'noncompliant' waste refers to materials that cannot be accepted for transportation or disposal at the WIPP or that cannot be accepted for disposal at the Hanford Facility without further processing. These materials include the following:

- Aerosol cans
- Reactive metals
- Chelating compounds
- Chemically incompatible materials
- Corrosives
- Explosives
- Gas cylinders not permanently vented
- High-efficiency particulate air (HEPA) filters
- Lead
- Free liquids
- Mercury
- Particulate materials
- Pyrophorics

6. Page 2-8, line 4. Comment: The "Code of Federal Regulations" is not specified in this sentence and it should be.

Requirement. In the first paragraph, line 4 please add, "Code of Federal Regulations" (49CFR), between "U.S. Department of Transportation and Washington State".

DOE-RL/WHC Response: Text will be revised to add "49 CFR."

7. Page 2-10, line 2. Comment: The first sentence states, "The WRAP facility will receive approximately 40 drums per day", but doesn't indicate what is contained in these drums.

Requirement. Please indicate what type of waste is contained in these 40 drums. For Example: 40 drums of mixed waste, or 40 drums of newly generated waste, etc.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 4 of 38

No.	Comment/Response	Ecology Concurrence
	<p>DOE-RL/WHC Response: Text will be revised. The currently envisioned daily drum waste receipts over the operational life of the WRAP Facility Module 1 will average approximately 16 of drums retrieved waste, 12 drums of newly generated transuranic waste, and 12 drums of newly generated low-level waste.</p>	
8.	<p><u>Page 2-10, line 21.</u> <u>Comment:</u> Fourth paragraph, line 5, concerns "noncompliant waste" which is prohibited by applicable requirements.</p> <p><u>Requirement.</u> Please cite these requirements which apply to "noncompliant waste".</p> <p>DOE-RL/WHC Response: Refer to disposition number 9.</p>	
9.	<p><u>Page 2-10, line 14.</u> <u>Comment:</u> There is a reference made to nonconforming waste and later a reference is made to noncompliant waste.</p> <p><u>Requirement.</u> A differentiation will need to be made between "noncompliant waste" and "nonconforming waste". Please denote these differences.</p> <p>DOE-RL/WHC Response: Noncompliant waste is material in waste containers that cannot be transported or disposed of without further processing. For a list of noncompliant waste, refer to disposition number 5.</p> <p>The heading on Table 3-11 will be revised to clarify the waste definitions; the term "nonconforming" on lines 1 and 2 will be changed to "noncompliant".</p> <p>Nonconforming waste includes waste containers that do not meet the waste acceptance criteria as defined in Table 3-8 or contain "noncompliant" waste items.</p> <p>References to nonconforming and noncompliant waste in Chapters 2.0 and 3.0 will be revised, as necessary, to ensure consistent terminology.</p>	
10.	<p><u>Page 2-13, lines 11 thru 22.</u> <u>Comment:</u> The explanation of the radionuclide assay is confusing.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLESeptember 12, 1992
Page 5 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

Requirement. Please be more specific on how you will be determining the difference between low level and transuranic waste.

DOE-RL/WHC Response: Text will be revised. Waste is determined to be transuranic or low level depending on whether the waste contains greater or less than 100 nanocuries per gram of alpha-emitting transuranium radionuclides [i.e., those having atomic numbers greater than 92 (e.g. uranium, plutonium, and americium) with half-lives over 20 years]. Therefore, the two factors required to determine whether waste is low level or transuranic are the activity of certain transuranium radionuclides in nanocuries and the net weight of the waste (i.e., excluding the weight of the container) in grams. The WRAP Facility Module 1 will incorporate several assay techniques for determining the activity of the transuranium radionuclides and would use container tare weight and measured gross weight to determine the net weight of the waste in individual containers.

11. Page 2-14, lines 6 thru 20. Comment: The explanation of the "container radionuclide assay" is confusing.

Requirement. Please be more specific in how you will be determining the difference between transuranic and low level waste. Give details, (including references) for assay methods.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 6 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

DOE-RL/WHC Response: Text will be revised. The WRAP Facility Module 1 will use the assay techniques of passive-active neutron spectroscopy and gamma energy spectroscopy to determine the transuranic activity in individual drums.

The passive portion of the neutron spectroscopy uses high-efficiency neutron detectors and coincidence counting techniques to quantify the number of time related neutrons that are being emitted by spontaneously fissioning isotopes such as plutonium-240. The active portion of the neutron spectroscopy uses a neutron generator to provide short (5-10 microseconds) bursts of thermal neutrons to 'interrogate' the waste. The thermal neutrons induce fissions of fissile isotopes, such as plutonium-239 and americium-241, resulting in a burst of fission spectrum neutrons being emitted by each fissioning nucleus. The cadmium shielded detectors reject the thermal neutrons but detect about 10 percent of all fission spectrum neutrons. A set of thermal flux monitors (one cadmium shielded and the other bare) also are located in the assay chamber and are used to determine the absorption index of the waste.

Gamma energy spectroscopy uses high-resolution scintillation detectors (generally sodium-iodide crystals or germanium crystals) and transmission correction systems to quantify the emissions from gamma emitting radionuclides. The transmission correction system, which matches a source to the gamma energies being measured (e.g., selenium-75 typically is used for plutonium-239), is used to measure the gamma attenuation of the waste being measured.

12. Page 2-18, line 41. Comment: It would make more sense if the conversion from psi to kilopascals was changed to kg/m/s², since pascal is a unit very rarely used, and refers to atmospheric pressure.

Requirement. Change the conversion from kilopascals to kg/m/s²

DOE-RL/WHC Response: Although there are no WAC 173-303 regulations governing the type of metric or English units to be used in a dangerous waste permit application, text will be revised to the metric unit "newtons/m²".

13. Page 2-20, line 34. Comment: Impervious as stated in Webster's Dictionary means, "incapable of being penetrated or affected." There will always be some effect when dealing with hazardous substances.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 7 of 38

No.	Comment/Response	Ecology Concurrence
	<p><u>Requirement.</u> Delete "impervious", and choose a more appropriate term.</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
14.	<p><u>Page 2-21, line 21.</u> <u>Comment:</u> Add the letter "s" to water.</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
15.	<p><u>Page 2-23, line 21.</u> <u>Comment:</u> This section deals with recycling of materials after decontamination.</p> <p><u>Requirement.</u> Please describe in this sentence, how materials will be segregated for recycling.</p> <p>DOE-RL/WHC Response: The 'decontamination' has been deleted from the project scope. The text will be modified to reflect this change when the HCWC-WRAP Facility Dangerous Waste Permit Application is revised.</p>	
16.	<p><u>Page 2-24, line 27.</u> <u>Comment:</u> Inappropriate use of the word "reasonable".</p> <p><u>Requirement.</u> Change the word "reasonable" to "reasonably".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
17.	<p><u>Page 2-24, line 30.</u> <u>Comment:</u> Replace "of" with "to".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
18.	<p><u>Page 2-29, line 19.</u> <u>Comment:</u> "Ensures" is used in the wrong context.</p> <p><u>Requirement.</u> Delete the "s" on "ensures" to read "ensure".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 8 of 38

No.	Comment/Response	Ecology Concurrence
19.	<p><u>Page F2-8.4, line 33.</u> <u>Comment:</u> What is "Quest"?</p> <p><u>Requirement.</u> Please define the word "quest".</p> <p>DOE-RL/WHC Response: QUEST is an acronym which stands for 'Quality Environmental Safety Tracking System.' Text will be revised to add QUEST to the Acronym List.</p>	
20.	<p><u>Page 3-1, line 14.</u> <u>Comment:</u> Waste must also be certified as HW or EHW under WAC 173-303-75.</p> <p><u>Requirement.</u> Please add this citation to this section.</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
21.	<p><u>Page 3-2, line 10.</u> <u>Comment:</u> The word "analysis" is plural and should read "analyses".</p> <p><u>Requirement.</u> Please change to reflect this.</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
22.	<p><u>Page 3-2, line 36.</u> <u>Comment:</u> There is no citation listed for the U.S. Department of Transportation containers.</p> <p><u>Requirement.</u> Please provide the cite for the U.S. Department of Transportation approved containers used for the transportation of waste.</p> <p>DOE-RL/WHC Response: Text will be revised to read "49 CFR 173."</p>	
23.	<p><u>Page 3-2, line 39.</u> <u>Comment:</u> First paragraph, line 8 states, "The waste will be transported to the WRAP facility where the waste will be opened, sorted, sampled, etc." The waste will not be opened, the container carrying the waste will be opened.</p> <p><u>Requirement.</u> Please modify the sentence to indicate this or delete the word opened.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 9 of 38

No.	Comment/Response	Ecology Concurrence
	DOE-RL/WHC Response: Text will be revised.	
24.	<p><u>Page 3-3, line 25.</u> <u>Comment:</u> A reference is given to the RSWIMS database.</p> <p><u>Requirement.</u> Please define "RSWIMS database" and if applicable, provide.</p> <p>DOE-RL/WHC Response: Text will be revised. The acronym 'RSWIMS' will be spelled out the first time used. The acronym RSWIMS is identified in the Acronym List of the HCWC-WRAP Facility Dangerous Waste Permit Application. In addition, the text will be modified to reference Appendix 3B (Richland Solid Waste Information Management System Records For Retrieved Waste).</p>	
25.	<p><u>Page 3-4, line 50.</u> <u>Comment:</u> See comment #19</p> <p>DOE-RL/WHC Response: Refer to disposition numbers 6 and 20.</p>	
26.	<p><u>Page 3-5, line 21.</u> <u>Comment:</u> WAC 173-303-806 applies to all dangerous waste facilities required to have a final facility permit.</p> <p><u>Requirement.</u> Please change the text to indicate this requirement.</p> <p>DOE-RL/WHC Response: Text will be revised to read WAC 173-303-630(7)(c).</p>	
27.	<p><u>Page 3-7 through 3-15.</u> <u>Comment:</u> SW-846 was revised in 1990.</p> <p><u>Requirement.</u> All citations referring to SW-846 (EPA 1986) must be changed to SW-846 (EPA 1990). Please also note any changes which may be applicable using the updated version of SW-846.</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
28.	<p><u>Page 3-7, line 19.</u> <u>Comment:</u> Waste designation falls under WAC 173-303-070.</p> <p><u>Requirement.</u> Please denote this citation in the text.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 10 of 38

No.	Comment/Response	Ecology Concurrence
	DOE-RL/WHC Response: Text will be revised.	
29.	<p><u>Page 3-9, line 52.</u> <u>Comment:</u> The second paragraph, line 3 states that plastic disposable equipment will be used for sampling. It would be more cost effective and much less wasteful, to use stainless steel equipment which has been sterilized and individually packaged. Once the equipment has been used, it can be placed in a plastic baggie and then transported back to the lab or other facility for decontamination. Plastic equipment is not as sturdy as the stainless steel and can break while taking samples.</p> <p><u>Recommendation:</u> Stainless steel equipment should be used.</p> <p>DOE-RL/WHC Response: The text uses the term 'disposable' equipment, which is not synonymous with 'plastic' equipment. The use of disposable equipment is intended to minimize the cross-contamination of samples. Whether stainless steel equipment is more cost effective and less wasteful depends on the quantities and types of materials and manpower required to decontaminate, radiologically survey, repackage, and transport the sampling equipment back to the user. The types of materials to be used for sampling should not be restricted by the dangerous waste permit, but rather be determined by periodic evaluation of such considerations as cross-contamination, durability, waste minimization, and cost.</p>	
30.	<p><u>Page 3-10, line 13.</u> <u>Comment:</u> Characterization of the waste will depend on the "type of waste" contained in the drums. "Type of waste" is more descriptive than "variability of waste".</p> <p><u>Requirement.</u> Please change "variability" to "type of waste".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
31.	<p><u>Page 3-10, line 14.</u> <u>Comment:</u> "Regulatory threshold" is not the term used by the regulators. "Detection limits" is the standard term used in labs across the nation.</p> <p><u>Requirement.</u> Change "regulatory threshold" to "detection limits".</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 11 of 38

No.	Comment/Response	Ecology Concurrence
	<p>DOE-RL/WHC Response: The term 'regulatory threshold' is used appropriately. In determining if a measured value of a material is close to the regulatory threshold - not detection limits - more samples will need to be analyzed to determine if this material is regulated or not regulated. If the threshold values are well above or well below threshold values, fewer samples will need to be analyzed.</p>	
32.	<p><u>Page 3-10, line 23.</u> <u>Comment:</u> What are variables as used in this context? Are "variables" the same as "analytes".</p> <p><u>Requirement.</u> Please define variables.</p> <p>DOE-RL/WHC Response: Text will be revised. Variables will be replaced with analytes.</p>	
33.	<p><u>Page 3-10, line 29.</u> <u>Comment:</u> The last sentence in the third paragraph states that, "Should a maximum chemical contamination level be required, the location of the highest likely chemical contamination will be chosen for sampling purposes". since sampling is done to determine levels of contamination, it would be difficult to predetermine which areas would be more or less likely to contain contaminants. Especially since the waste is contained in drums. This determination would be made after sample analyses.</p> <p><u>Requirement.</u> Please explain if the determination to take more samples will be done before or after sample analyses.</p> <p>DOE-RL/WHC Response: Additional sampling after analyses is not anticipated. The last sentence of the third paragraph on page 3-12 will be deleted. It is correctly noted that a sample representing the highest contaminant concentration is not likely to be obvious during sampling.</p>	
34.	<p><u>Page 3-12, line 50.</u> <u>Comment:</u> Is "waste profiling" the same as "waste characterization"?</p> <p><u>Requirement.</u> Please define waste profiling, and if similar to characterization, state differences between the two, give details. Ecology must approve any deviation from the regulations.</p> <p>DOE-RL/WHC Response: Text will be revised to read "waste characterization".</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLESeptember 12, 1992
Page 12 of 38

No.	Comment/Response	Ecology Concurrence
35.	<p><u>Page T3-10, line 1.</u> <u>Comment:</u> Where were values for the "Vapor Phase Concentration" found?</p> <p><u>Requirement.</u> Please specify this information.</p> <p>DOE-RL/WHC Response: This information (references) are identified in Appendix 3D.</p>	
36.	<p><u>Page T3-11, line 2.</u> <u>Comment:</u> How is the term "disposition" used in this case? Is the meaning "to dispose of" or "to transfer" to another part of the facility or area?</p> <p><u>Requirement.</u> Please explain the meaning of disposition as used here.</p> <p>DOE-RL/WHC Response: Table T3-11 is used to determine the action needed to complete the disposition of noncompliant waste with regards to treatment, repackaging, etc. Current text is satisfactory.</p>	
37.	<p><u>Page T3-11, line 18.</u> <u>Comment:</u> If pyrophorics are a noncompliant item and treatment capability is unavailable, is a treatment process being developed for these items?</p> <p><u>Requirement.</u> Explain if a treatment capability is being developed, and if not how will these items be handled in the long term. Give complete details and expected length of time until a treatment capability will be available.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 13 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

DOE-RL/WHC Response: The term 'pyrophorics' was used in the permit application for consistency with the WIPP Waste Acceptance Criteria. Waste considered 'pyrophoric' includes materials that exhibit the WAC 173-303-090 reactive characteristic. 'Pyrophoric' materials are prohibited from newly generated waste and it is expected that most 'pyrophoric' materials in stored waste already will have undergone oxidation and hence converted to a stable form before receipt at the WRAP Facility Module 1. This is due to the fact materials packaged and stored under ambient conditions were exposed to atmospheric concentrations of oxygen, which would be sufficient for oxidation reactions to occur. Therefore, it is anticipated that 'pyrophoric' materials will be encountered only rarely, and in these instances, only when these materials are packaged in sealed containers within the containers.

Whenever items suspected of being pyrophoric are discovered, the container would be returned to permitted storage outside of the WRAP Facility Module 1. If these items are detected inside 55-gallon (208-liter) containers, the container might be opened and the item transferred to another container. It is anticipated that treatment for these materials will be available in the WRAP Facility Module 2A beginning in the year 2000.

38. Page T3-13.3, line 9. Comment: The citation referring to the "Book Method" is incomplete.

Requirement. Please complete the citation as 173-303-070.

DOE-RL/WHC Response: Text will be modified.

39. Page T3-18.1, line 3. Comment: Is sludge the only expected matrix?

Requirement. Please indicate if there are other expected matrices, such as water, soil, oil, etc.

DOE-RL/WHC Response: The following waste types will be tested for the constituents listed on Table 3-18: solidified aqueous waste, sludges, soil and soil like materials, solidified organic waste, liquids, and crushed and powdered like material. In addition, the headspace gases collected from waste containers will be tested for the parameters listed in the second column on Table 3-18 as noted. The heading for this table will be changed to more accurately depict the waste analysis to be performed.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 14 of 38

No.	Comment/Response	Ecology Concurrence
40.	<p><u>Page T3-19.1, line 11.</u> <u>Comment:</u> For the "static acute fish toxicity test", there is no publisher listed.</p> <p><u>Requirement.</u> Please specify that Ecology publishes, "Biological Testing Methods".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
41.	<p><u>Page 4-2, line 16.</u> <u>Comment:</u> The word "amendable" is used in this sentence. "Amendable" is not a word according to Webster's Dictionary.</p> <p><u>Requirement.</u> Please choose a more appropriate word or change the context of the sentence to use the word "amend" or "amended".</p> <p>DOE-RL/WHC Response: Text will be revised to read: "Containers received at the WRAP Facility will be limited (by dose rates) to containers that can be contact handled (Chapter 2.0, Section 2.1.3)."</p>	
42.	<p><u>Page 4-4, line 14.</u> <u>Comment:</u> The 2nd paragraph, last sentence states, "Characterization of the dangerous waste will be based on the actual mass of the waste itself and will not consider the mass of any packaging material". The characterization of the dangerous waste should be determined by concentration rather than mass. Different components contain different masses, so characterization by mass is inappropriate. Characterization is dependant upon the concentration of an analyte present in the soil, water or other matrix whichever is appropriate.</p> <p><u>Requirement.</u> Please change the wording of the sentence to reflect how the dangerous waste will be characterized without using "mass" as a descriptive term.</p> <p>DOE-RL/WHC Response: Text will be revised. The sentence on lines 14-15 on page 4-4 will be changed to read: "Characterization of the dangerous waste will be based on analysis of samples of the waste only; the package materials will not be included in the waste determination."</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 15 of 38

No.	Comment/Response	Ecology Concurrence
43.	<p><u>Page 4-4, line 41.</u> <u>Comment:</u> Some citations are given for conformance to storage requirements. Please be more specific with these citations. The WAC cite for this section is more appropriately written WAC 173-303-630.</p> <p><u>Requirement.</u> Please be specific when quoting citations.</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
44.	<p><u>Page 4-12, line 16.</u> <u>Comment:</u> Since absorbents will be used to remove small spills. How will these absorbents be removed after use, and where will they be disposed of after collection.</p> <p>DOE-RL/WHC Response: Absorbents used in controlling small spills will be managed in accordance with applicable federal, state, and local regulations. The details of response actions will be described in the building emergency plan, which will be prepared after final design and operating parameters have been established.</p>	
45.	<p><u>Page 4-13, line 36.</u> <u>Comment:</u> Reference is given to the emergency plan in appendix 7A, but this document does not exist.</p> <p><u>Requirement.</u> Please send a copy of the building emergency plan so that it may be reviewed for comment.</p> <p>DOE-RL/WHC Response: The building emergency plan for the WRAP Facility will be provided in a future permit application modification. The building emergency plan for the WRAP Facility will be prepared before initial operation of the unit and after the final design and operating parameters have been established.</p>	
46.	<p><u>Page 4-15, line 20.</u> <u>Comment:</u> A citation is not listed for the 30 inch aisle spacing in this sentence.</p> <p><u>Requirement.</u> Please list WAC 173-303-630 as the cite for the 30 inch aisle spacing requirement in the temporary storage area. Since WAC 173-303-630 specifies that at least a thirty inch separation is required, Ecology requires that a 36 inch separation between aisles be used at this facility.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 16 of 38

No.	Comment/Response	Ecology Concurrence
<p>DOE-RL/WHC Response: The WRAP Facility will comply with the aisle space requirements for containers specified in WAC 173-303-630. Text will be revised. The following phrase will be added to the last sentence in Section 4.3.5 "in accordance with the provisions in WAC 173-303-630(5)(c)." Ecology has no authority to require a 36-inch aisle space.</p>		
<p>47. <u>Page 4-15, line 28.</u> <u>Comment:</u> Will the double bagged and taped closed waste be stored in drums?</p>	<p><u>Requirement.</u> Please indicate if the waste which is double bagged and taped closed will also be packed into drums.</p>	
	<p>DOE-RL/WHC Response: The double plastic bagging and taped closure refers to the internal packaging of waste before the waste is placed in containers.</p>	
	<p>Waste that is double bagged will be packed into containers. Text will be revised. The first sentence of Section 4.4 will be changed to read: "Newly generated and retrieved waste might be double bagged in plastic if deemed necessary; the bags will be taped closed and packed into containers."</p>	
<p>48. <u>Page 4-15, line 35.</u> <u>Comment:</u> What is meant by "lag storage"?</p>	<p><u>Requirement.</u> Please define the term, "lag storage". If anything is stored over 90 days, full permitting requirements will be enforced.</p>	
	<p>DOE-RL/WHC Response: Text will be revised. The term 'lag storage' refers to the queuing of containers, which will be required to facilitate operations. For example, incoming vehicles will be unloaded and the containers placed in the Receiving Area lag storage. These containers will be transferred from this lag storage area into the Nondestructive Examination/Nondestructive Assay Areas as quickly as the containers can be processed. Although it is envisioned that containers will not remain in lag storage areas over 90 days, the lag storage areas throughout the WRAP Facility Module 1 will be designed to meet RCRA storage permitting requirements.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 17 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

49. Page 4-16, line 8. Comment: This section states that reactive waste is not anticipated to arrive at the WRAP facility. It also states that if waste is found to be reactive, it will not be accepted at the site. There is a discrepancy later which states that if the waste is found to be reactive, it will be deactivated and repackaged. This section further states that the waste will be returned to storage.

Requirement. Please indicate if reactive waste will or will not be accepted at the WRAP facility, and if stored to await future treatment, where and how waste will be stored.

DOE-RL/WHC Response: Text will be revised. Newly generated waste that is known to have reactive materials (because of information provided on the waste tracking forms) will not be accepted at the WRAP Facility. However, waste retrieved from the Low-Level Burial Grounds might not be as well characterized; hence, if reactive materials are in such waste, the materials would not be identified until after characterization in the WRAP Facility.

Subsequent storage of reactive waste will be in a permitted storage building at the Hanford Central Waste Complex, in an area designated for storage of reactive materials. Details of the storage units are provided in the *Hanford Central Waste Complex-Radioactive Mixed Waste Storage Facility Dangerous Waste Permit Application (DOE-RL-91-17)*, submitted to Ecology and the EPA on October 31, 1991.

50. Page 4-16, line 33. Comment: Regarding storage of ignitable waste; how can this waste be stored, if an appropriate treatment capability and storage area has not yet been developed? Is the waste being stored at the RMW storage area?

Requirement. Please state where the waste will be stored.

DOE-RL/WHC Response: Text will be revised. Ignitable waste will be stored at a permitted storage building at the Hanford Central Waste Complex, in an area designated for ignitable materials. Details of the storage units are provided in the *Hanford Central Waste Complex-Radioactive Mixed Waste Storage Facility Dangerous Waste Permit Application (DOE-RL-91-17)*, submitted to Ecology and the EPA on October 31, 1991.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 18 of 38

No.	Comment/Response	Ecology Concurrence
51.	<p><u>Page 4-19, line 42.</u> <u>Comment:</u> The 2nd paragraph states that valves will be designed to fail in a safe condition.</p> <p><u>Requirement.</u> What type of procedures were followed and what kind testing was done to ensure that these valves will fail in a safe condition? Design information must be provided.</p> <p>DOE-RL/WHC Response: The use of tanks at the WRAP Facility has been deleted from the design. Therefore, any NODs addressing the section on tanks are not applicable. The WRAP Facility Dangerous Waste Permit Application, when revised, will reflect this modification.</p>	
52.	<p><u>Page 4-20, line 13.</u> <u>Comment:</u> Regarding epoxy sealants and water stops; will the compounds contained in these stops be documented and available for easy access in case of an accidental spill? This would be done as a safeguard to ensure that the stops are indeed compatible with the waste spilled.</p> <p><u>Requirement.</u> Please indicate the accessibility of the documentation regarding the composition of these seals, and provide information on seals composition.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
53.	<p><u>Page 4-20, line 37.</u> <u>Comment:</u> What is meant by the servicing process?</p> <p><u>Requirement.</u> Please explain the last sentence regarding the "servicing process".</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
54.	<p><u>Page 4-20, line 37.</u> <u>Comment:</u> The word "preclude" in the last sentence should be replaced with "prevent".</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLESeptember 12, 1992
Page 19 of 38

No.	Comment/Response	Ecology Concurrence
55.	<p><u>Page 4-21, line 51.</u> <u>Comment:</u> Types of waste should be considered with regards to the moisture barrier, during the design process. Compatibility and reactivity of the waste to the barrier needs to be considered.</p> <p><u>Requirement.</u> Reevaluate design considerations in regard to moisture barriers.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
56.	<p><u>Page 4-21, line 35.</u> <u>Comment:</u> The word "erosions" in the title is a typo.</p> <p><u>Requirement.</u> "Erosions" in the title should be changed to "erosion".</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
57.	<p><u>Page 4-21, line 35.</u> <u>Comment:</u> Although corrosion rates are not yet able to be determined, erosion rates should be discussed in this section. Tanks need to be ultrasonically tested for shell thickness before tank set up and a built-in mechanism for non-destructive testing of the shell needs to be installed to check for corrosion.</p> <p><u>Requirement.</u> Discuss corrosion and erosion rates, and explain design considerations and testing methods.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
58.	<p><u>Page 4-21, line 39.</u> <u>Comment:</u> More research needs to be done on compatibility of decontamination solutions and tanks. The corrosion rates need to be determined and other than stainless steel tanks may need to be used.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
59.	<p><u>Page 4-22, through 4-23.</u> <u>Comment:</u> There is mention in these sections of what type of waste is not anticipated to be at the facility, but it doesn't mention what is to be there.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 20 of 38

No.	Comment/Response	Ecology Concurrence
	<p><u>Requirement.</u> State what type of waste is anticipated to be received at the facility and specify the particulars of this waste.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
60.	<p><u>Page 4-23, line 23.</u> <u>Comment:</u> Tanks expected to collect waste that is not mixed or radioactive will not be marked before startup of the facility.</p> <p><u>Requirement.</u> These tanks should be appropriately labeled before startup of the facility regardless of the contents, per WAC 173-303-630.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
61.	<p><u>Page 4-23, line 39.</u> <u>Comment:</u> If the tank ventilation systems will be designed appropriate to the degree of hazard contained in the tank, how can that degree be determined if as stated in the above paragraph, line 3, there is limited characterization of returned waste?</p> <p><u>Requirement.</u> State how waste will be characterized and from that information, how the degree of hazard will be determined.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
62.	<p><u>Page 4-24, line 1.</u> <u>Comment:</u> If the tanks are vented within the WRAP facility and not into the outside atmosphere, explain how gases are leased and pressure relieved.</p> <p><u>Requirement.</u> Explain how gases are released and pressure relieved. Provide details on offgassing and what types of air emission controls will be used.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
63.	<p><u>Page 4-25, line 26.</u> <u>Comment:</u> Corrosion protection concerns should be considered at the time the tank is being designed. The type of waste which will be put in the tank should be determined ahead of time, and that will determine design.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 21 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

Requirement. State whether the corrosion protection requirements were determined during the design phase.

DOE-RL/WHC Response: Refer to disposition number 51.

64. Page F4-4. Comment: How was this box determined to be a "standard box"?

Requirement. State requirements for determining what a standard box is.

DOE-RL/WHC Response: 'Standard waste box' or 'SWB' is the name of a specific container that is designed expressly for transport in the TRansUranic PACKage Transporter (TRUPACT)-2 to the WIPP repository. Refer to disposition number 4.

65. Page 6-1, line 42. Comment: The type of fence which will surround the radiation zone is a "chain link" fence.

Requirement. Add "link" to "chain" for the type of fence in the radiation zone.

DOE-RL/WHC Response: Text will be revised to read: "In addition, the WRAP Facility will be designated a radiation zone; therefore, all entrances to the WRAP Facility will be controlled or locked when the unit is unoccupied."

66. Page 6-4, line 23. Comment: Provisions being made to appropriately respond to emergency situations are not enough, a detailed emergency response plan must be submitted.

Requirement. An emergency response (contingency) must should be implemented.

DOE-RL/WHC Response: Refer to disposition number 45.

67. Page 6-4, line 33 and 42. Comment: "Annunciate" is used improperly in these sentences.

Requirement. Delete "annunciate" and replace with activated".

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 22 of 38

No.	Comment/Response	Ecology Concurrence
	DOE-RL/WHC Response: Current text - annunciate - is appropriately used on Page 6-4, Line 33. Text will be revised on Page 6-4, Line 42 to read 'activate.'	
68.	<p><u>Page 6-4, line 45.</u> <u>Comment:</u> Please be more descriptive regarding the "emergency distribution system" (uninterruptible power supply). Will this system be implemented during emergency situations only or at all times?</p> <p><u>Requirement.</u> Please describe the systems operation. Is it diesel, battery, etc. and when it will be implemented. Provide design details for this systems operation.</p> <p>DOE-RL/WHC Response: Text will be revised. The WRAP Facility communication system will be provided with battery backup power. Battery backup also will provide uninterruptible power for the computer system and the egress lighting. Any design details for backup power systems will be provided at the completion of detailed design.</p>	
69.	<p><u>Page 6-8, line 17.</u> <u>Comment:</u> Please be more specific with the WAC citations regarding this section.</p> <p><u>Requirement.</u> Designate specifically which section of 173-303 you are referring to.</p> <p>DOE-RL/WHC Response: Text will be revised to read "WAC 173-303-806".</p>	
70.	<p><u>Page 6-8, line 34.</u> <u>Comment:</u> The section regarding "water supplies" mentions that procedures will be used to prevent the contamination of ground water.</p> <p><u>Requirement.</u> Please provide information on the types of procedures which will be implemented to prevent the contamination of natural water supplies. Provide details on runoff, and what types of discharges are present. How will these discharges be controlled?</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 23 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

DOE-RL/WHC Response: Text will be revised. The WRAP Facility Module 1 location slopes from west to east. Run-on from higher ground west of the WRAP Facility will be directed by a drainage ditch around the north and south sides to lower ground on the east side. Drainage on the north side will flow from the ditch through culverts under the east and west parking lot access roads. Drainage on the south side will be directed by a ditch on the south side of the truck maneuvering area until the ditch flow line meets the existing grade. The approximate elevations of these features (with respect to sea level) are as follows: high ground 718 feet (219 meters); bottom of the ditch (west side of WRAP Facility) 711 feet (217 meters); finished floor 715 feet (218 meters); and lower ground 690 feet (210 meters). In addition, those portions of the WRAP Facility in which waste containers will be handled will have a 6-inch (15.24-centimeter) concrete curb.

The only liquid discharge from the WRAP Facility Module 1 will be sanitary sewage, which will be directed to a septic tank and tile field in accordance with a Washington State Department of Health Septic System Permit.

71. Page 6-9, line 38. Comment: Standby power is to be used in case of a power failure.

Requirement. Please identify the source of standby power.

DOE-RL/WHC Response: The *Conceptual Design Report Waste Receiving and Processing Facility Module 1*, on which this revision of the permit application was based, provided diesel generators for standby electrical power based on a perceived need to maintain ventilation services to certain equipment for operator safety. Safety analyses performed after completion of the conceptual design report have determined that operators would not be endangered by a loss of ventilation systems, and standby electrical power therefore is no longer required. When the permit application is revised, this modification will be reflected.

72. Page 6-11, line 45. Comment: special processing area equipment are rated as "intrinsically safe", not "hazardous location" rating.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 24 of 38

No.	Comment/Response	Ecology Concurrence
	<p>DOE-RL/WHC Response: This paragraph states that all electrical equipment in the WRAP Facility Module 1 will meet the National Electrical Code requirements for the specific Hazardous Location and Atmospheric Group in which that equipment is located. Compliance with the National Electrical Code requirements pertaining to Hazardous Location and Atmospheric Group might involve the use of intrinsically safe circuits, apparatus, and wiring.</p>	
73.	<p><u>Page 6-12, line 48.</u> <u>Comment:</u> There is a typo in this sentence.</p> <p><u>Requirement.</u> "Safety" should be changed to "safely".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
74.	<p><u>Page 6-12, line 48.</u> <u>Comment:</u> Will the repackaged waste be stored within the WRAP facility, or at another area on the Hanford Site?</p> <p><u>Requirement.</u> State where this waste will be stored.</p> <p>DOE-RL/WHC Response: Repackaged waste awaiting further treatment will not be stored in the WRAP Facility Module 1. This waste will be stored at the Hanford Central Waste Complex. Text will be revised.</p> <p><u>Chapter 7 cannot be reviewed since the contingency plan is not available.</u></p>	
75.	<p><u>Page 8-2, line 28.</u> <u>Comment:</u> First bullet states, "Operating and maintaining the WRAP facility in compliance with U.S. Department of Energy directives, approved safety analysis reports, and other applicable policies and procedures".</p> <p><u>Requirement.</u> Please add to this statement, "in accordance with established operating procedures, policies, and Federal and State regulations".</p> <p>DOE-RL/WHC Response: Text is appropriate as stated. The second bullet covers the statement recommended from Ecology.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 25 of 38

No.	Comment/Response	Ecology Concurrence
76.	<p><u>Page 8-16, line 18.</u> <u>Comment:</u> The Quality Assurance Manager as stated in the first bullet is to comply with U. S. DOE approved requirements. Ecology and EPA standards must also be followed.</p> <p><u>Requirement.</u> Add, "Quality assurance will follow permit requirements set by Ecology and EPA", and give details on how they will be followed.</p> <p>DOE-RL/WHC Response: The quality assurance responsibilities are as outlined in the contractor's charter and reviewed and approved by Quality Assurance management. In addition, the DOE Orders require regulation compliance. This text is verbatim from the 616 NRDWSF Dangerous Waste permit Application, which has been accepted by Ecology.</p>	
77.	<p><u>Page 10-3, line 4.</u> <u>Comment:</u> Line 3 states that the WRAP facility will not exercise direct control over the quantities accepted for packaging and a certification.</p> <p><u>Requirement.</u> The WRAP facility has responsibility for certification and inspection of all materials coming into the facility. Provide detailed information on how these controls will be implemented.</p> <p>DOE-RL/WHC Response: This section of the permit application refers to waste minimization. The paragraph in question states that the WRAP Facility Module 1 can only implement waste minimization controls on waste that is handled at the WRAP Facility. Waste minimization activities at other units are not within the scope or control of the WRAP Facility.</p>	
78.	<p><u>Page 10-3, line 28.</u> <u>Comment:</u> How is the required level of decontamination determined? Are standards used?</p> <p><u>Requirement.</u> Please state how the level of decontamination is found, and state requirements and standards if used.</p> <p>DOE-RL/WHC Response: Design changes to the WRAP Facility Module 1 have resulted in elimination of the decontamination capability, except on an emergency basis. Any decontamination of equipment will be performed in a separate unit. The WRAP Facility Dangerous Waste Permit Application, when revised, will reflect this modification.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 26 of 38

No.	Comment/Response	Ecology Concurrence
79.	<p><u>Page 10-3, line 39.</u> <u>Comment:</u> How will the decontamination solutions be disposed?</p> <p><u>Requirement.</u> State how and where these solutions will be disposed.</p> <p>DOE-RL/WHC Response: Any decontamination solutions generated at the WRAP Facility will be treated, stored, and/or disposed of at a permitted TSD unit.</p>	
80.	<p><u>Page 11-1, line 11.</u> <u>Comment:</u> Second paragraph, line 1 states, "Because it is planned that the WRAP facility will be clean closed, etc".</p> <p><u>Requirement.</u> Replace, "it is planned" with, "It is assumed that the facility will be clean closed because containment is above ground, any spills will be immediately cleaned and the contaminated soil will be removed from the area."</p> <p>DOE-RL/WHC Response: The "it is planned" will be retained to have consistency with text on page 11-9 and other permit applications (e.g., Hanford Waste Vitrification Plant Dangerous Waste Permit Application). The rest, "because containment..." will be added to the end of the last sentence of the first paragraph.</p>	
81.	<p><u>Page 11-3, line 4.</u> <u>Comment:</u> The first sentence states that, "Closure activities will entail decontamination and/or removal and disposal of the structure". Section 11.1.1.1 states in the third bullet, line 3 that the decontaminated building structure will remain for use as required by Hanford Facility operations. Is the structure going to remain or be removed? As these two sections are written, there seems to be a contradiction of what will be happening.</p> <p><u>Requirement.</u> Please be specific and if the structure will remain, delete the section which states that it will be removed.</p> <p>DOE-RL/WHC Response: The intent of the sentence is...if the building cannot be decontaminated, the building might have to be removed. The "and/or" is because the sentence refers to both structures and equipment. Structures and/or equipment might be decontaminated and removed, or decontaminated and remain. There is no contradiction with Section 11.1.1.1. No change is required.</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 27 of 38

No.	Comment/Response	Ecology Concurrence
82.	<p><u>Page 11-6, line 1.</u> <u>Comment:</u> Operational practices for spills should also follow WAC 173-303-145.</p> <p><u>Requirement.</u> Please add that operational practices will also follow WAC 173-303-145.</p> <p>DOE-RL/WHC Response: A reference to the spill procedure section will be added. (Section 2.7)</p>	
83.	<p><u>Page 11-6, line 21.</u> <u>Comment:</u> Please note that the most recent edition of SW-846, is (EPA 1990).</p> <p><u>Requirement.</u> This citation needs to be corrected throughout the entire document.</p> <p>DOE-RL/WHC Response: The SW-846 citations will be updated.</p>	
84.	<p><u>Page 11-6, line 21.</u> <u>Comment:</u> First paragraph, line 5 states that lab analyses will be performed in accordance with SW-846.</p> <p><u>Requirement.</u> Please add, "EPA CLP protocols will be used for clean closure sampling events."</p> <p>DOE-RL/WHC Response: The WAC 173-303 clearly states that laboratory procedures for analysis and quality control should be based on SW-846 test methods, not contractor laboratory program procedures. No change is required.</p>	
85.	<p><u>Page 11-6, line 28.</u> <u>Comment:</u> Additional QA samples need to be taken.</p> <p><u>Requirement.</u> Add between "equipment blanks", and "field blanks", "matrix/spike and matrix/spike duplicates".</p> <p>DOE-RL/WHC Response: "and analyses" will be added to the first sentence after "sampling". "matrix/spike, and matrix/spike duplicates" will be added to the end of the second sentence.</p>	
86.	<p><u>Page 11-6, line 33.</u> <u>Comment:</u> Log books will need to be submitted for the sampling records.</p> <p><u>Requirement.</u> Add "log books" after "field notes".</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 28 of 38

No.	Comment/Response	Ecology Concurrence
	DOE-RL/WHC Response: Field notes refers to the log book. 'Log books' will replace 'field notes' in the text.	
87.	<p><u>Page 11-6, line 44.</u> <u>Comment:</u> Replace the definition of field duplicate with the EPA definition for these samples. It is more accurate.</p> <p><u>Requirement.</u> Replace the old definition with this: "Field duplicates are two separate samples collected at the same time and place under identical circumstances and treated exactly the same throughout field and laboratory procedures. Their analyses give a measure of the precision associated with samples collection, preservation and storage as well as with laboratory procedures."</p> <p>DOE-RL/WHC Response: This definition will be replaced with the definition from SW-846, Update 1.</p>	
88.	<p><u>Page 11-7.1.</u> <u>Comment:</u> Add "as a sample" after "to the laboratory".</p> <p>DOE-RL/WHC Response: "As a sample" will be added to the text.</p>	
89.	<p><u>Page 11-7, line 4 and 6.</u> <u>Comment:</u> The definition for "wipe samples" and "blanks" need to be separated, and the definition for blanks as below, needs to be included.</p> <p><u>Requirement.</u> Separate the definition of "wipe samples" from the definition of "blanks". As the definition for "blanks" use, "an artificial or clean 'sample' designed to monitor the introduction of artifacts into the measurement process. The blank is taken through all appropriate steps of the process."</p> <p>DOE-RL/WHC Response: This is intended to be an explanation of how blanks will be handled for the wipe samples. It was not intended to provide definitions for blanks and wipe samples. No change is required.</p>	
90.	<u>Page 11-7, line 14.</u> <u>Comment:</u> The definition for trip blanks should be more precise.	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 29 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

Requirement. After "containers shipped to the field" add, "without being exposed to sampling conditions".

DOE-RL/WHC Response: The next sentence states that the containers are returned unopened. No change is required.

91. Page 11-7, line 16. Comment: Two definitions need to be added to the "Field Quality Control" section.

Requirement. To the definitions in "field Quality Control" add: "Matrix spike-a target or nontarget parameter added to the sample, either in the field or in the laboratory to determine the recovery efficiency of the analytical methods."

Add the definition: "Matrix/spike duplicate analysis-in matrix/spike duplicate analysis, predetermined quantities of stock solutions of certain analytes are added to a sample matrix prior to sample extraction/digestion and analysis. Samples are split into duplicates, spiked and analyzed. The relative percent recovery between the samples as calculated and used to assess analytical precision. Percent recoveries are calculated for each of the analytes detected."

DOE-RL/WHC Response: These normally are not prepared by contractors in the field. These definitions will be added to Section 11.1.4.7.3. "Laboratory Quality Control."

92. Page 11-7, line 26. Comment: The Wrap facility will follow specifications as required by the site-wide permit.

Requirement. Add, "The program will now meet the quality control criteria of SW-846 and the Statement of Work as specified in the site-wide permit. Attachment "A" is a copy of the SOW laboratory requirements.

DOE-RL/WHC Response: There is no Hanford Site Permit to follow; therefore, the section will stand as is. The program will continue to meet the criteria as specified by regulation and the Tri-Party Agreement.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 30 of 38

No.	Comment/Response	Ecology Concurrence
93.	<p><u>Page 11-7, line 29.</u> <u>Comment:</u> Any alternative methods used, must meet with prior approval.</p> <p><u>Requirement.</u> Please state that any alternative methods used must receive approval by Ecology and EPA per WAC 173-303-110(4) and (5).</p> <p>DOE-RL/WHC Response: Text will be added to the end of the paragraph indicating approval will be received from Ecology and the EPA.</p>	
94.	<p><u>Page 11-7, line 37.</u> <u>Comment:</u> Quality control documentation shall include chromatographs in the data package.</p> <p><u>Requirement.</u> Add "chromatographs" to the quality control procedures section.</p> <p>DOE-RL/WHC Response: The quality control documentation provided will continue to be SW-846 summary reports. No change is required.</p>	
95.	<p><u>Page 11-7, line 44.</u> <u>Comment:</u> If decon containers containing other than radioactive & mixed waste will not be removed, where will they be placed after facility closure?</p> <p><u>Requirement.</u> State where these containers will be placed and if they will remain at the facility.</p> <p>DOE-RL/WHC Response: The last sentence in the section states: "Containers of radioactive, mixed, and/or dangerous waste will not be left in the WRAP Facility after closure." The reason for the comment is unclear, nowhere in the section does it indicate any waste will remain after closure. No change is required.</p>	
96.	<p><u>Page 11-9, line 32.</u> <u>Comment:</u> Since it is assumed that the WRAP facility will be clean closed, replace the first sentence.</p> <p><u>Requirement.</u> Change the first sentence to read, "It is assumed that the WRAP facility will be clean closed".</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 31 of 38

No.	Comment/Response	Ecology Concurrence
	DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.	
97.	<u>Page 11-9, line 40.</u> <u>Comment:</u> Same as 96. <u>Requirement.</u> Change the first sentence to read, "It is assumed that the WRAP facility will be clean closed". DOE-RL/WHC Response: Refer response to comment 96.	
98.	<u>Page 11-9, line 47.</u> <u>Comment:</u> See comment 96. <u>Requirement.</u> Change the first sentence to read, "It is assumed that the WRAP facility will be clean closed". DOE-RL/WHC Response: Refer response to comment 96.	
99.	<u>Page 11-10, line 5.</u> <u>Comment:</u> Third line, replace the word "for" with "of". DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.	
100.	<u>Page 11-10, line 18.</u> <u>Comment:</u> See comment 99. DOE-RL/WHC Response: Refer response to comment 99.	
101.	<u>Page 11-10, line 26.</u> <u>Comment:</u> See comment 99. DOE-RL/WHC Response: Refer response to comment 99.	
102.	<u>Page 11-10, line 39.</u> <u>Comment:</u> See comment 99. DOE-RL/WHC Response: Refer response to comment 99.	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 32 of 38

No.	Comment/Response	Ecology Concurrence
103.	<u>Page 11-10, line 47.</u> <u>Comment:</u> See comment 99. DOE-RL/WHC Response: Refer response to comment 99.	
104.	<u>Page 12-1, line 12.</u> <u>Comment:</u> When referring to WAC citations please be more precise. <u>Requirement.</u> To the WAC citation regarding regulatory agency access, add "173-303-380". DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.	
105.	<u>Page 12-3, line 12.</u> <u>Comment:</u> The WAC citation for reporting requirements relating to dangerous waste is WAC 173-303-390. <u>Requirement.</u> Please fill in the proper citation. First line, add to the citation, 173-303-390". DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.	
106.	<u>Page 12-4, line 43.</u> <u>Comment:</u> All requirements falling under WAC 173-303-145 regarding unplanned releases must be followed. <u>Requirement.</u> Please note this in this section of the document. DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.	
107.	<u>Page APP 3A-1, line 49.</u> <u>Comment:</u> Type on line 49. <u>Requirement.</u> "RSWMIS" should be changed to "RSWIMS". DOE-RL/WHC Response: Text will be revised.	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 33 of 38

No.	Comment/Response	Ecology Concurrence
108.	<p><u>Page APP 3A-2, line 8.</u> <u>Comment:</u> Typo on line 8.</p> <p><u>Requirement.</u> "RSWMIS" should be changed to "RSWIMS".</p> <p>DOE-RL/WHC Response: Text will be revised.</p>	
109.	<p><u>Page APP 8A-2, line 17.</u> <u>Comment:</u> Is "fork truck" the proper term or is this a "fork lift truck"?</p> <p><u>Requirement.</u> If "fork lift" is the proper term, please indicate this in all sections where "fork truck" is used.</p> <p>DOE-RL/WHC Response: "Fork truck" is the proper terminology.</p>	
110.	<p><u>Page APP 8A-4, line 18.</u> <u>Comment:</u> In the "descriptions" section, the word "indepth" should be changed to "in depth".</p> <p>DOE-RL/WHC Response: Text will be revised to read "in depth."</p>	
111.	<p><u>Page APP 8A-5, line 2.</u> <u>Comment:</u> In the "descriptions" section, the word "indepth" should be changed to "in depth".</p> <p>DOE-RL/WHC Response: Text will be revised to read "in depth."</p>	
112.	<p><u>Page APP 4B-36, Liquid Waste Collection System, 3rd paragraph, line 11.</u> <u>Comment:</u> Where will the waste collected in the 9000 gallon holding tank be disposed? Will this be a dilution rather than a treatment?</p> <p><u>Requirement.</u> Please indicate above in the report and give detailed information.</p> <p>DOE-RL/WHC Response: Refer to disposition number 51.</p>	
113.	<p><u>Page APP 4B-63, Aerosol Can Disposal.</u> <u>Comment:</u> CFC's are a hazardous waste. How will they be Disposed?</p>	

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
 NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
 Page 34 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

Requirement. Please indicate what will be done to contain and dispose of CFC's.

DOE-RL/WHC Response: Text will be revised. It is anticipated that some of the aerosol cans received in the WRAP Facility Module 1 might contain dichlorodifluoro methane (Freon 12) or chlorodifluoro methane (Freon 22) (both were commonly used as aerosol propellants up until this usage was banned in 1978), or trichlorotrifluoro ethane (Freon 113), which is used as a flux remover/cleaner. All aerosol cans will be vented and drained of liquid contents in the WRAP Facility Module 1. All collected transuranic liquids will solidified, repackaged, and transported to the WIPP repository or another approved location for disposal. All collected low-level liquid waste will repackaged and transported to the Hanford Central Waste Complex pending treatment and disposal.

All materials present as vapor or gas will be treated using toxic-best available control technology (T-BACT). After treatment, these vapors or gases will be discharged from the stack in accordance with the WRAP Facility Module 1 air permit requirements for toxic air pollutants as delineated in WAC 173-460.

114. APP 4B. Comment: The plans should show the details of how construction pollution will be handled. Where will machinery be serviced? Where will hazardous chemicals be stored? Will fuel be stored on the site?

Requirement. All these details and more should be shown on the plans and listed as a separate bid item in the contractor's proposal in order to be effectively done.

DOE-RL/WHC Response: These details will be provided in a future revision of the permit application. However, since information regarding the control of construction activities is not required to be included in a final facility operating permit, these details will be provided for information only.

115. Page 12-5, line 17. Comment: If the Wrap facility has a fire, an explosion, or a release that could threaten human health or the environment, regardless of where this occurred inside or outside of the facility, the proper authorities are to be notified.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 35 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

Requirement. Delete the part of the sentence that states, "outside the Hanford facility".

DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.

116. Page 12-6, line 28 & 29. Comment: Regarding reportable quantities of unpermitted spills or discharges, the thresholds and exceedences will be in accordance with the Site Wide Permit specifications.

Requirement. Please make the notation that the reportable quantities, exceedences and reporting requirements will be in accordance with the Site Wide Permit specifications.

DOE-RL/WHC Response: In the Draft Hanford Facility Permit (Condition I.E.15), Ecology has arbitrarily and unjustifiably added reporting requirements not required under RCRA Subtitle C or WAC 173-303. First, the Draft Permit condition is based on the previous version of WAC 173-303-145, which deals with spill reporting. The replacement language proposed by RL and WHC is based on the "immediate reporting" requirement applicable to TSD permits contained in WAC 173-303-810(14)(f), and this language should be used instead. The text conforms to the language in other EPA and Ecology permits (Fort Wainwright, No. AK 6210022426; Chempro, No. WAD 00812909; Texaco, No. WAD 009276197; Chem Security Systems, No. ORD 089 452 353,). The WAC 173-303-145, in contrast, purports to apply to everyone in the state including any ordinary citizen. This condition is not appropriate as a permit condition.

Second, even if WAC 173-303-145 is applicable as a permit condition, the current Draft Permit condition is much more stringent than necessary and would result in the unnecessary reporting of routine small spills, such as tipping over a gallon of paint. Therefore, even if Ecology is authorized to include reporting under WAC 173-303-145 in a permit, which the commenters do not concede, the revised version will provide ample protection without these undue burdens.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLE

September 12, 1992
Page 36 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

Third, the Draft Permit condition requires the reporting of a release of any radioactive substance. While commenters agree with the importance of reporting releases of radionuclides, and have committed to do so in accordance with CERCLA requirements, there is no authority to require it under a RCRA permit. Ecology asserts in the Fact Sheet that radionuclides are identified in the EPA spill table as a "hazardous substance," and that hazardous substances identified in the EPA spill table require reporting under WAC 173-303-145. However, the term "hazardous substances" is defined in WAC 173-303-040 not by reference to the EPA spill table, but as any material, product, etc. that exhibits any of the physical, chemical, or biological characteristics described in WAC 173-303-090, -101, -102 or -103. Thus, "hazardous substance" for purposes of Ecology's Dangerous Waste Regulations is not as broad as the CERCLA or MTCA definition of hazardous substances, but relates to the dangerous waste characteristics described in the regulation. Because solely radioactive materials are not described in those sections, and indeed are excluded from RCRA regulation [refer to 42 U.S.C. § 6905(a), 40 CFR 261.4(a)(4)], reporting of releases of radioactive substances is not required under the Ecology's Dangerous Waste Regulations. This reporting also is not required under the MTCA because it is not applicable to the Hanford Site, at least for the areas on the National Priorities List (NPL), which encompass all the major waste handling sites. Refer to 42 U.S.C. § 9620(a)(4).

117. Page 12-12, line 44-46. Comment: The issue surrounding training records and the privacy act is currently under resolution.

DOE-RL/WHC Response: It is understood that Ecology has a valid need for access to training records. Notwithstanding that, training records are listed within the DOE's "systems of records" required under the *Privacy Act of 1974*. As such, Ecology and the EPA are required to acknowledge and respect the DOE's responsibilities under that law as well. Access will not be withheld and such records may be copied, if necessary, to meet regulatory requirements once compliance with the *Privacy Act* is met.

118. Page 3-5, line 31. Comment: Will the waste which will be sent to a TSD be sent to the Central Waste Complex?

Requirement. State if the waste will go to the Central Waste Complex and also make a notation that waste will go to a TSD facility that is permitted to receive such waste.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLESeptember 12, 1992
Page 37 of 38

No.	Comment/Response	Ecology Concurrence
-----	------------------	------------------------

DOE-RL/WHC Response: Refer to disposition number 51.

119. Page 3-8, line 15. Comment: Why use LeChateilers formula for detecting the lower explosive limit, when a CGI or Hnu could be utilized for this purpose. It would be done more efficiently and quickly. The same for the flammability testing in the following paragraph.

DOE-RL/WHC Response: A Hnu or an equivalent device will be used to determine the lower explosive limit as suggested.

Text will be revised.

THE HANFORD CENTRAL WASTE COMPLEX--WASTE RECEIVING AND PROCESSING FACILITY
NOTICE OF DEFICIENCY RESPONSE TABLESeptember 12, 1992
Page 38 of 38

ENCLOSURE

CLP: SOPs prepared by the Contractor must be functional: i.e., clear, comprehensive, up-to-date, and sufficiently detailed to permit duplication of results by qualified analysts. All SOPs, as presented to the agency, must reflect activities as they are currently in the laboratory. In addition, all SOPs must:

- * Be consistent with current EPA/Ecology regulations, guidelines, and the CLP contract's requirements.
- * Be consistent with instrument manufacturers' specific instruction manuals.
- * Be available to Ecology during an On-Site Laboratory Evaluation. A complete set of SOPs shall be bound together and available for inspection at such evaluations. During on-site evaluations, laboratory personnel may be asked to demonstrate the application of the SOPs.
- * Provide for the development of documentation that is sufficiently complete to record the performance of all tasks required by the protocol.
- * Demonstrate the validity of data reported by the Contractor and explain the cause of missing or inconsistent results.
- * Describe the corrective measure and feedback mechanisms utilized when analytical results do not meet protocol requirements.
- * Be reviewed regularly and updated as necessary when contract, facility, or Contractor procedural modifications are made.
- * Be archived for future reference in useability or evidentiary situations.
- * Be available at specific work stations as appropriate.
- * Be subject to document control procedure which precludes the use of outdated or inappropriate SOPs. (User's Guide to the CLP, Page 36 & 37)

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Subject: RESPONSE TO THE JUNE 4, 1992, NOTICE OF DEFICIENCY FOR THE HANFORD CENTRAL WASTE COMPLEX-WASTE RECEIVING AND PROCESSING FACILITY DANGEROUS WASTE PERMIT APPLICATION		

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