

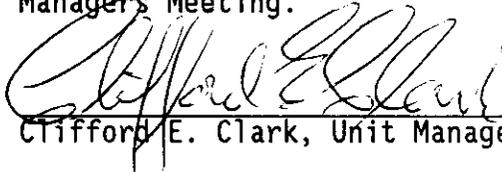
START

Meeting Minutes Transmittal - Approved

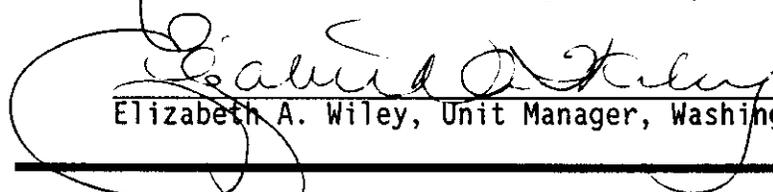
Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
740 Stevens Center, Room 1200
Richland, Washington

Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.

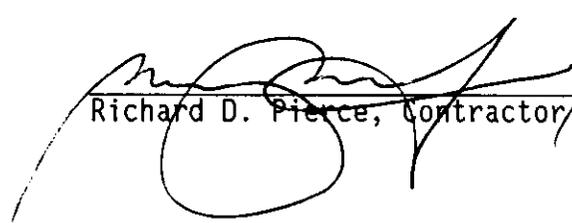
The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Unit Managers Meeting.

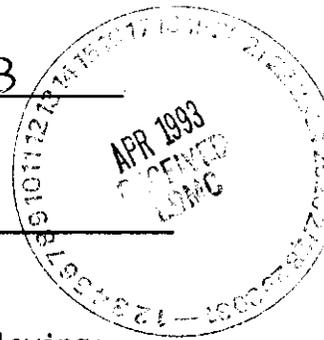

Clifford E. Clark, Unit Manager, RL Date: 4/8/93

Date: _____
Daniel L. Duncan, RCRA Program Manager, EPA Region 10


Elizabeth A. Wiley, Unit Manager, Washington State Department of Ecology Date: 4/8/93

Hanford Central Waste Complex-Radioactive Mixed Waste Storage Facility,
WHC Concurrence


Richard D. Pierce, Contractor Representative, WHC Date: 4/8/93



Purpose: Discuss Permitting Process

Meeting Minutes are attached. The minutes are comprised of the following:

- Attachment 1 - Agenda
- Attachment 2 - Summary of Discussion and Commitments/Agreements
- Attachment 3 - Attendance List
- Attachment 4 - Action Items
- Attachment 5 - Hanford Central Waste Complex Notices of Deficiency
- Attachment 6 - Presentation, HCWC-Waste Storage Modules
- Attachment 7 - Vendors brochure on waste storage modules
- Attachment 8 - List of design drawings, acceptance test reports, engineering change notices, and construction specifications

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Attachment 1
AGENDA - UNIT MANAGERS MEETING - WEDNESDAY, FEBRUARY 10, 1993
740 STEVENS CENTER, CONFERENCE ROOM 1200
RICHLAND, WASHINGTON, 1:00 p.m. - 3:00 p.m.

HANFORD CENTRAL WASTE COMPLEX-RADIOACTIVE MIXED WASTE STORAGE FACILITY

- 1:00 p.m.
- Approval of past UMM minutes (Ecology/RL/WHC)
 - Status of HCWC-RMW Storage Facility schedule/design/construction (RL/WHC)
 - Status of HCWC-RMW Storage Facility Permit Application (Ecology/RL/WHC)
 - Submit to Ecology acceptance test reports, engineering change notices, design drawings, and construction (RL/WHC) specifications for Project W-016H and Project W-241
 - Feedback on NODs (Ecology/RL/WHC)
 - Presentation: HCWC-Waste Storage Modules (RL/WHC)
 - General discussion (Ecology/RL/WHC)
 - Action items (Ecology/RL/WHC)
 - Previous Action Items
 - * None
 - New action items
 - Set next meeting date (Ecology/RL/WHC)
 - Tentative dates
 - Proposed topics

HANFORD CENTRAL WASTE COMPLEX-WASTE RECEIVING AND PROCESSING FACILITY

- 1:30 p.m.
- **HCWC-WRAP Facility Module 1**
 - Approval of past UMM minutes (Ecology/RL/WHC)
 - Status of HCWC-WRAP Facility Module 1 schedule/design/construction (RL/WHC)
 - Status of HCWC-WRAP Facility Permit Application (Ecology/RL/WHC)
 - Feedback on NODs (Ecology/RL/WHC)
 - Presentation: HCWC-WRAP Facility Module 1 Waste Characterization Strategy (RL/WHC)
 - **HCWC-WRAP Facility Module 2**
 - Approval of past UMM (Ecology/RL/WHC)
 - Status of HCWC-WRAP Facility Module 2 schedule/design/construction (RL/WHC)
 - Status of HCWC-WRAP Facility Module 2 Change Request (Ecology)
 - **HCWC-WRAP Facility Modules 1, 2A, and 2B**
 - General discussion (Ecology/RL/WHC)
 - Action items (Ecology/RL/WHC)
 - Previous action items
 - * 01/13/93-01 - Provide to Ecology the type of blast furnace slag material
 - New action items
 - Set next meeting date (Ecology/RL/WHC)
 - Tentative dates
 - Proposed topics

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Attachment 2

Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
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Richland, Washington

Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.

Summary of Discussion and Commitments/Agreements

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1. Mr. T. M. Greager of WHC informed Ms. E. A. Wiley and Mr. M. N. Jaraysi of Ecology on the current status of Project W-112, Enhanced Radioactive and Mixed Waste Storage Facility - Phase V. According to Mr. Greager, the Conceptual Design Report was approved by DOE-RL in June of 1992. The advanced conceptual design report currently is being developed in the following areas:

- Integrated Control Systems
- Automated Container Inspection
- Automated Guided Vehicle Attributes
- Site Plan/Grade.

Mr. Greager also informed Ecology that a supplemental design requirements document (a supplement to the design requirements) is being developed which focuses on automated systems, office, maintenance, and infrastructure requirements.

Mr. Greager then gave an overview of the schedule for Project W-112:

- Title I design to start January 1994
- Construction to Start January 1995
- Initiate operations in November 1997.

2. Ms. Wiley provided a draft copy (Attachment 5) of Ecology's comments on the HCWC-RMW Storage Facility Notice of Deficiency Response Table (the HCWC-RMW Storage Facility NOD Response Table was submitted to Ecology and the EPA on October 9, 1992). Ms. Wiley also indicated that the compatibility chart in Chapter 3.0 (Waste Characterization) is out of date and needs to be replaced with an approved Coast Guard compatibility Chart.
3. Ms. B. J. Broomfield of WHC gave a presentation to Ecology on the Hanford Central Waste Complex-Waste Storage Modules (Attachment 6). This presentation provided Ecology with an overview on the possibility of increasing the operating flexibility by placing RCRA/WAC 173-303 compliant waste storage modules at various locations on the Hanford Facility. Attachment 7 contains a vendors brochure on the waste storage modules.

Attachment 3

Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
740 Stevens Center, Room 1200
Richland, Washington

Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.

Attendance List

Name	Organization	Phone #
J. M. Augustenborg	RL	509-372-1407
B. M. Barnes	WHC	509-376-3640
B. J. Broomfield	WHC	509-376-4966
R. C. Bowman	WHC	509-376-4876
C. E. Clark	RL	509-376-9333
E. P. Clements	WHC	509-372-3563
T. M. Greager	WHC	509-376-0312
M. N. Jaraysi	Ecology	509-546-2995
E. M. Megahed	WHC	509-373-9206
R. D. Pierce	WHC	509-376-5681
H. Spanheimer	WHC	509-372-2700
D. J. Swanberg	GSSC	509-376-1760
E. A. Wiley	Ecology	206-493-9426

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Attachment 4

Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
740 Stevens Center, Room 1200
Richland, Washington

Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.

Action Items

<u>Action Item #</u>	<u>Description</u>
01-13-93:1	Mr. B. M. Barnes of WHC will pursue the possibility of holding video UMM conferences in the future.
01-13-93:1 - Closed	According to Mr. D. L. Duncan of EPA the video capability was terminated in January of 1993. However, UMM's can be conducted via telephone.
02-10-93:2	Ms. E. A. Wiley of Ecology will check with Mr. D. B. Jansen of Ecology to determine what type of budgetary information Ecology is requesting DOE-RL to provide.

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Attachment 5

**Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
740 Stevens Center, Room 1200
Richland, Washington**

**Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.**

**Hanford Central Waste Complex
Notices of Deficiency**

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Hanford Central Waste Complex Notices of Deficiency

Response

3. Ecology Comment: This issue is still undergoing resolution.

4. Ecology Comment: This issue is still undergoing resolution.

8. DOE-RL/WHC Response: Text will be revised to read: "Hanford Facility--A single RCRA Facility identified by the EPA /State identification number WA7890008967 that consists of over 60 TSD units conducting dangerous waste management activities. These TSD units are included in the Hanford Facility Dangerous Waste Part A Permit Application (DOE-RL 1988). The Hanford Facility consists of all contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste. The Hanford facility excludes portions...."

Ecology Comment: From the way this definition is written (page 1-6, line 31), it can be implied that waste from an off-site DOE facility can be considered onsite if it is run by RL. Waste which is going to WIPP many fall under this category. Please be more specific in the definition of on-site. The above definition does not designate the difference between off-site and on-site in regards to waste transport.

9. DOE-RL/WHC Response: Text could be modified in the future if and when Ecology provides direction.

Ecology Comment: Ecology will provide direction regarding class I modifications as soon as more information becomes available.

10. Ecology Comment: Refer to comment 3.

20. DOE-RL/WHC Response: A legal description will be provided when available.

Ecology Comment: Is there a reason why a legal description is not available at this time? Please explain.

23. DOE-RL/WHC Response: Refer to disposition number 3 regarding radioactive contamination. This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application, which has been accepted by Ecology.

Ecology Comment: The 616 permit does require sampling of water prior to release to the environment. Since this is a storage area for dangerous and mixed waste, some type of field screening must be provided prior to release to the French drain.

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24. **DOE-RL/WHC Response:** Water is pooled intentionally on the Mixed Waste Storage Pad and the Waste Receiving and Storage Area to permit cleanliness verification before release to the environment.

Ecology Comment: Does "cleanliness verification" mean that the pooled water is sampled to detect contamination?

26. **DOE-RL/WHC Response:** This text is nearly verbatim from the 616 NRDSWF Dangerous Waste Permit Application, which has been accepted by Ecology. This information is located in Chapter 4.0, Section 4.1.1.8.

Ecology Comment: Information on spills and discharges will comply with the requirements of WAC 173-303-145. This must be indicated in the section on spills and discharges. Ecology may require additional information more stringent than that in the 616 Permit.

29. **DOE-RL/WHC Response:** The Building Emergency Plan for the Central Waste Complex is updated at least annually. To reference sections could require unnecessary modification(s) to the permit. Refer to Table of Contents in the Building Emergency Plan for the Central Waste Complex for location of the information.

Ecology Comment: Ecology requires that the specific section for the mitigation and control of spills be noted. Editorial changes are not permit modifications.

31. **DOE-RL/WHC Response:** There is no regulatory requirement for this condition. This condition has been inappropriately written to impose requirements for onsite waste movement. There are no shipping requirements for onsite waste movement. Waste handling at the Hanford site is consistent with that which is protective of human health and the environment.

Ecology Comment: Ecology will concur if the already established tracking mechanisms at the site are similar to those which are stated in Hanford Site Wide Draft Permit condition II.Q.

33. **DOE-RL/WHC Response:** This paragraph is addressing the shipment of onsite transfers, which are accompanied by waste tracking forms, not an EPA manifest. Refer to disposition number 31.

Ecology Comment: It is not clear from the paragraph written regarding waivers, that this exemption is provided only for onsite transfers of waste. Please be more specific so that the paragraph on waivers will not be misconstrued.

35. **DOE-RL/WHC Response:** Refer to disposition number 3

Ecology Comment: Refer to comment number 3.

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44. DOE-RL/WHC Response: Refer to disposition number 31.

Ecology Comment: Please indicate if the WHC waste acceptance criteria meets WAC 173-303-300 and 40 CFR criteria for waste analyses. These are the regulations which apply to this section of the permit application.

47. DOE-RL/WHC Response: Refer to disposition number 32.

Ecology Comment: Please denote if the waste acceptance criteria specified by WHC meets the WAC and 40 CFR requirements. Provide the document or copies of the section which demonstrate that this document is in compliance with State and Federal regulations.

54. DOE-RL/WHC Response: Waste packages are segregated according to storage categories to prevent accidental commingling of incompatible waste. Each waste package is assigned to only one storage category (e.g., flammable storage, oxidizer storage, acid storage, caustic storage.....

Ecology Comment: The above stated is fine, except that on page 3-12, line 31, there is a reference to figure 3-1 as being a compatibility chart. The chart listed is a 1985 Coast Guard document. This list is outdated, and USCG compatibility references are found in 46 CFR, 49 CFR and the Federal Register(HM-181). New compatibility charts and regulations were promulgated in 1991. These rules are in effect at this time, and must be complied with by 1995. Since RMW is a Federal facility, these regulations should be implemented before the deadline.

57. DOE-RL/WHC Response: Text will be revised to read: "ASTM D2234-89".

Ecology Comment: The DOE response has a typo. The correct revision is ASTM D2234-86. Please correct.

63. DOE-RL/WHC Response: Text will be revised to provide additional information on the handling of containers which are poorly handled (e.g. weathered or deteriorated) or have limited verification (e.g., head gas analysis, document review).

Ecology Comment: Please ensure that all State and Federal requirements regarding labeling and waste testing of drums are followed.

64. DOE-RL/WHC Response: Mixed waste containers are not stored on the Waste Receiving and Staging Area. Mixed waste will remain on the truck(s) if a problem is detected on the waste tracking forms or if an inspection reveals a problem with the containers.

Ecology Comment: WAC 173-303-395 (4) clearly states that loading and unloading areas must be designed, constructed, operated and maintained to contain spills and leaks that might occur during loading and unloading. Some type of containment is necessary in the staging area in case of accidental leaks during operations.

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65. DOE-RL/WEC Response: Pallets contaminated from a spill or release of waste will be treated as waste accordingly. Pallets will be removed and segregated for storage and/or disposal based on the nature of the contaminant(s).

Ecology Comment: How will the structural integrity of the pallets be determined if a spill occurs. If contaminants from a spill are at such low levels that disposal of the pallet is unnecessary, what precautions are taken to ensure that the pallets will be sturdy enough to continue to bear the weight of the drums.

66. DOE-RL/WEC Response: Refer to chapter 4.0, section 4.1.1.7.

Ecology Comment: This section is not detailed enough in explaining how spilled wastes will be sampled and/or treated. Please cite in section 4.1.1.7 or 4.1.1.8 a reference to the Building Emergency Plan, section 4.2-Identification of Hazardous Materials.

67. DOE-RL/WEC Response: As per the revised WAC 173-303 requirements, leaks or spills to an engineered secondary containment system no longer need to be reported.

Ecology Comment: Ecology is following the draft Hanford Site-Wide Permit regarding spills. All spills in excess of 10 gallons shall be reported to Ecology.

69. DOE-RL/WEC Response: Refer to disposition number 23.

Ecology Comment: Visual inspection of water is an inefficient form of examination for contaminants, unless one is looking for particulate contamination. Not all contaminants exhibit visual signs. Contamination by unknown analytes can only be detected by analytical processes.

74. DOE-RL/WEC Response: The NFPA-10 requires one 20-pound (9.1-kilogram) ABC portable fire extinguisher to be available to personnel located within 75 feet (22.9 meters) maximum travel distance and to be protected against the weather. The two portable fire extinguishers satisfy this requirement.

Ecology Comment: The fact that the portable extinguishers are near the buildings, and not inside the buildings may be a problem. The extinguishers must be within a 75 foot travel distance, is that clear space or with barriers in between that distance such as doors? Please examine this further, so that the Central Waste Complex is in compliance with NFPA requirements.

77. DOE-RL/WHC Response: Text will be revised. Chapter 6.0, Section 6.4.4 incorrectly states that the loss of power would result in deactivation of the fire alarms. The fire alarm systems are equipped with battery backup capabilities that automatically will operate should there be a loss of normal electrical power.

Ecology Comment: If a loss of power does not affect the fire alarm system, why then is this stated? Does the battery backup system automatically engage when a loss of power results, or does it need to be manually engaged?

79. Ecology Comment: This comment was referred to EPA.

80. DOE-RL/WHC Response: Refer to disposition number 54.

Ecology Comment: Refer to comment number 54.

81. DOE-RL/WHC Response: Refer to disposition number 72.

Ecology Comment: The inspection checklist for the Central Waste Complex must be consistent with the 616 NRDWSF permit application.

87. DOE-RL/WHC Response: The referenced drawing has been revised with an updated version. Refer to attached Building Emergency Plan for the Central Waste Complex.

Ecology Comment: The revised version of the Building Emergency Plan displays a totally different drawing than that indicated in the original version. Was the original drawing deleted?

91. DOE-RL/WHC Response: The types of waste might be specified to a point, but the types of waste change constantly with shipments. While individual structures are designed and labeled as to what waste types (refer to disposition 54) the structures contain (refer to figures in attached Building Emergency Plan for the Central Waste Complex), the building emergency director's best source for delineating actual substances and amounts is the shipping manifests for offsite shipments or waste tracking forms for waste moved onsite.

Ecology Comment: The manifests will contain the type of waste which is received at the site, but where will the information be kept on the specific area where these wastes are stored? Is there a log book or computer system which will furnish this information? This information will need to be easily accessed in case of an emergency situation.

92. DOE-RL/WHC Response: Sampling methods will be listed in the next revision of the Building Emergency Plan for the Central Waste Complex. Currently, sampling is conducted in accordance with WAC 173-303-110, "Sampling and Testing Methods", and SW-846, "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods". Refer to chapter 3.0 of the HCWC-RMW Storage Facility Dangerous Waste Permit Application.

Ecology Comment: Will the revision deal with methods for aqueous samples?

94. Ecology Comment: The QA/QC plan in the Permit is consistent with EPA documents which are currently in existence. If RL is in compliance with all EPA QA/QC requirements as specified for methods used, there should be no problem with RL to comply with the QA/QC plan as stated. The QA/QC plan refers only to sampling and analyses operations. The QA/QC specified in the permit are basic analytical procedures. These procedures are normally performed, and the permit requires that these procedures be documented. The reason for documentation is so that Ecology can perform a data validation on data packages coming from laboratories to ensure compliance to EPA protocols.

99. DOE-RL/WHC Response: Text will be modified to read , "radioactive and/or mixed waste" when the Building Emergency Plan for the Central Waste Complex is revised.

Ecology Comment: The original question stated that the definition of hazardous material was not clear. Please provide a more detailed explanation of hazardous waste.

106. DOE-RL/WHC Response: Text will remain unmodified.

Ecology Comment: Although the text will remain unmodified, will the names of the emergency coordinator and the alternates be submitted to the Occurrence Notification Center and Ecology?

110. DOE-RL/WHC Response: Refer to disposition number 6.

Ecology Comment: Refer to comment 106.

112. DOE-RL/WHC Response: This information is addressed in the HCWC-RMW Storage Facility Dangerous Waste Permit Application, Chapter 2.0, section 2.7.

Ecology Comment: Chapter 2.0, Section 2.7 references the Building Emergency Plan. The plan covers most of the requirements which are stated in WAC 173-303-360, but not all are met. Please add those requirements which have not been cited.

124. DOE-RL/WHC Response: Refer to disposition number 123 for response to first portion of the comment. Refer to disposition number 3 regarding the use of a continuous air monitor system. Continuous air monitor systems in the Low-Flash-Point Mixed Waste Storage Modules have been considered unnecessary and will be removed in the near future.

Ecology Comment: It is unreasonable to expect someone to hold their breath while running to an area which is one barrier away from the affected area of a release. If personnel are in an area where the potential exists for a release of hazardous material, protective gear such as face masks with respirators, should be carried at all times. This will ensure some type of protection in the event of a release, and if the nearest barrier is .25 mile or more away, personnel involved will have a better chance of escape.

127. DOE-RL/WHC Response: Refer to disposition number 106.

Ecology Comment: Refer to comment 106.

137. DOE-RL/WHC Response: The sentence will be revised to read: "Spills and other unusual occurrences are required to be handled promptly and to be well documented." Also, to be consistent with the wording of the 616 NRDWSF Dangerous Waste Permit Application, the following text will be added: "The RMW Storage Facility is not anticipated to become extensively contaminated (the use of the word contaminated refers to contamination by dangerous chemicals regulated by Ecology); therefore, the closure approach will be clean closure.

Ecology Comment: The sentence on line 10 needs to be deleted. It cannot at this time be determined if the RMW storage facility is a clean, well-maintained storage unit. Ecology agrees with the change to line 12, but delete line 10.

141. DOE-RL/WHC Response: Text will be revised. Section 11.1.4.4.1 will be deleted. Also, the following sentence on page 11-4, lines 36 through 37 "verification of the storage building will involve sampling of the walls and floors" will be deleted.

The following text will be added to Section 11.1.4.4: "The walls of the storage buildings are not expected to be contaminated with dangerous waste. Any material spilled in the RMW Storage Facility is removed and verification samples are taken to ensure that no residue remains."

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Ecology Comment: Will sampling the surface of suspected contaminated walls be conducted during the closure process? It cannot be assumed that the walls will not be contaminated. Dependant upon the extent of a possible spill and type of contaminants involved, some analytes may penetrate the walls of the complex. Some sort of sampling plan for these areas without washing walls must be employed to assure maximum protection of health and the environment and minimum accumulation of waste.

143. DOE-RL/WHC Response: Refer to disposition number 94.

Ecology Comment: Ecology is requiring that all clean closure data deliverables be comparable to those provided by laboratories conducting CLP analyses. These deliverables are required so that Ecology can ensure that the lab has followed all appropriate measures during analyses, and a data validation can be conducted if deemed appropriate.

149. DOE-RL/WHC Response: Text will remain unmodified. Refer to disposition number 3.

Ecology Comment: All components which are shown on Page F11-1 clearly indicate that a radiation survey is performed prior to decontamination. Why is the asphalt pad exempt from this requirement? The asphalt pad must also be surveyed to determine if there is any radioactivity present.

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

Ecology Comment: Although this text is verbatim from the 616 permit, as written, the sentence is out of context. This sentence states that cleanup operations are complete when they have been initiated. Rewrite the sentence to show that cleanup operations are underway.

152. DOE-RL/WHC Response: This text is verbatim from the 616 NRDWSF Dangerous Waste Permit Application.

Ecology Comment: Regardless of the fact that this is written verbatim from the 616 permit, "outside the Hanford Facility" is unacceptable. WAC 173-303-360 states that whenever there is a possible hazard to human health or the environment, the appropriate local, state and federal officials must be contacted. There is nothing that states outside of the facility. Delete "outside the facility".

163. Ecology Comment: It is stated in the operating record section of recordkeeping, that report records are included. Does this include the "required notices" which are a requirement of WAC 173-303-290. If not, where are the required notices kept that are specified by WAC 173-303-290.

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Attachment 6

Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
740 Stevens Center, Room 1200
Richland, Washington

Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.

Presentation,

Hanford Central Waste Complex-
Waste Storage Modules

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WASTE STORAGE MODULES

WESTINGHOUSE HANFORD COMPANY

February 10, 1993

INTRODUCTION

- **To provide greater operating flexibility we are considering the placement of waste storage modules at various areas around the Hanford Site.**
- **These modules will be constructed and operated in compliance with WAC 173-303 requirements for container storage**

DESCRIPTION OF WASTE STORAGE MODULES

Two types of modules are being considered:

1. Large modules
 - 76 55-gallon drum capacity
 - 3 storage compartments
 - 33' long x 11' wide x 10' height
 2. Small modules
 - 28 55-gallon drum capacity
 - 2 storage compartments
 - 15' long x 11' wide x 10' height
- Construction Specifications:
 - all steel
 - welded seams
 - secondary containment
 - insulated
 - 4" negative slope of roof
 - heat-reflective exterior finish
 - 2-hour fire resistant rating

DESCRIPTION (CONT.)

- **Construction Specification**
 - **Dual doors 60" wide by 80" tall (per compartment)**
 - **Compartment sumps will consist of a chemical resistant polyurethane liner**
 - **Chemical resistant non-skid fiberglass grating flooring**
 - **Floor loading capacity of 250 pounds per square foot**
 - **Explosion proof wiring**
 - **One explosion proof interior light per compartment**
 - **Two explosion proof exterior lights**
 - **One explosion proof heater/thermostat per compartment**
 - **Explosion proof forced air ventilation system**
 - **ANSUL Dry Chemical Fire Suppression System, one nozzle per compartment**

PROPOSED LOCATIONS FOR THE MODULES

- It is anticipated that waste storage modules will be placed at the following areas:
 - 100 N Area

 - 200 East Area
 - Plutonium Uranium Extraction Plant
 - B Plant
 - One Tank Farm in the 200 East Area

 - 200 West Area
 - Plutonium Finishing Plant
 - One Tank Farm in the 200 West Area

 - 300 Area

 - 400 Area

CONDITIONS

- **The modules will be managed as part of the Central Waste Complex (CWC) (e.g., waste loading/unloading, inspections, administrative, etc.,)**
- **Hanford onsite generating units will remain responsible for final waste characterization**

PERMITTING OF THE MODULES

- **The Hanford CWC - Radioactive Mixed Waste Storage Facility Dangerous Waste Permit Application Parts A and B will be revised in accordance with WAC 173-303 requirements.**

CONCLUSION

- **The waste storage modules will give Hanford greater operating flexibility to ensure compliant storage for mixed waste.**
- **If you have any questions regarding the modules, contact Mr. C. E. Clark, U.S. Department of Energy, Richland Field Office on (509) 376-9333 or Mr. G. A. Whitney, Westinghouse Hanford Company, on (509) 372-3201**

Attachment 7

**Unit Managers Meeting
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Richland, Washington**

**Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.**

Vendors Brochure on Waste Storage Modules

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Reduce the cost of storage per unit by 50% with ECP's space-saver modular designed buildings.

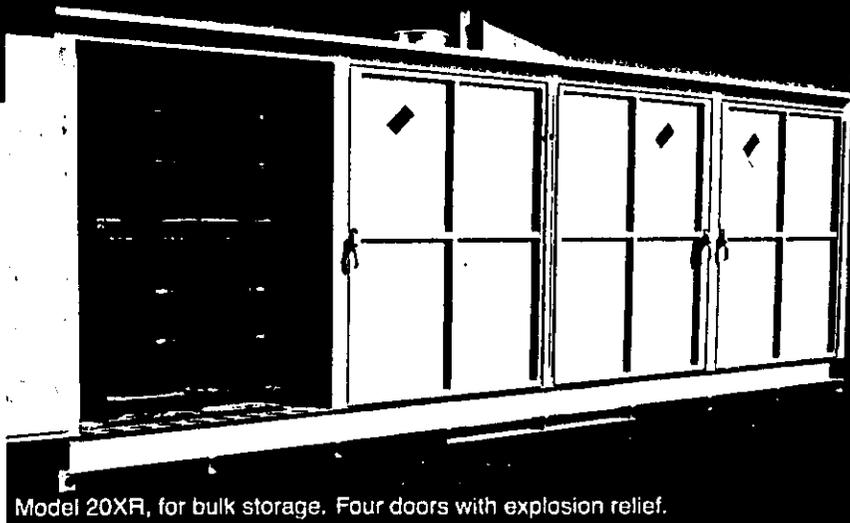


Model 5 Single-door unit.

- Household Hazardous Waste
- Solid Waste
- Satellite Stations
- Waste Accumulation areas
- East and West Coast Factories

For storage of flammables, combustibles, corrosives, chemicals, acids and pesticides.

The latest and best concept in Hazardous Materials Storage Buildings. Double Stacking of Drums Seismic Secondary Containment Shelving™ *



Model 20XR, for bulk storage. Four doors with explosion relief.

**Factory Mutual
System**
Approved


**Environmental
Compliance Products**

(800) 643-7065

Portable Hazardous Materials Storage Structures

*Pat. Pending

ECP buildings can store far more, less expensively and more efficiently than any others.

ECP buildings were designed to be a Palletized Modular System.



Model 20, for outside storage. Four doors.

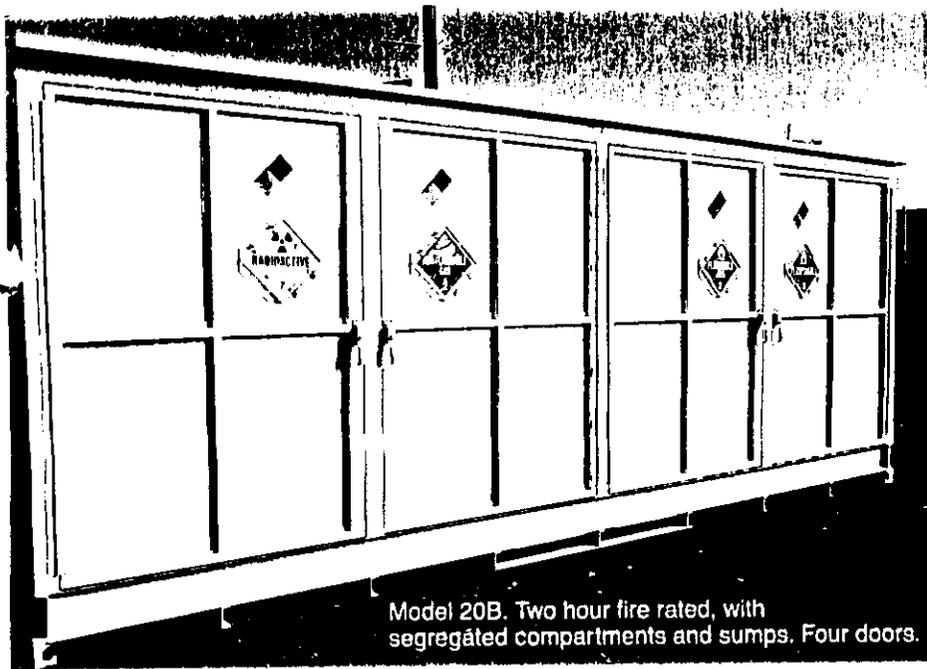
Space-saver Modular Designs

Provide twice the space of traditional free-standing buildings. They allow double stacking of larger containers (such as 55-gallon drums) or storing of smaller containers on seismic secondary containment shelving.

Generation Development of the Modular Design

First came the overseas containers (ISO, Cargo Sea Trains, etc.). Their designs required hand movement of drums.

Then came hazardous material storage buildings based on the same designs but with two or three doors added. However, they required the same hand movement of drums.



Model 20B. Two hour fire rated, with segregated compartments and sumps. Four doors.

4 ECP series of hazardous materials storage facilities were conceived to meet realistic requirements for hazardous materials storage and usage:

5 ECP buildings are designed on the concept of palletized grids, utilizing space more efficiently.

6 ECP buildings are designed for fork-lift pallet jack handling of drums. OSHA's policies discourage heavy lifting that frequently results in back injuries. The 55-gallon drums, when full, weigh from 400 to 700 pounds each.

9 **Better than Building Your Own**

Portable hazmat storage buildings have great advantages over permanent installations. They can be relocated if desired. In most cases, they do not require building permits to install.* Because they are prefabricated, they are less expensive than building from the ground up. General contractors may not be aware of the many code requirements for hazmat storage, creating delays in construction.

*Local jurisdiction has final authority

One to four hour non-combustible fire ratings

Others may promise, but ECP delivers one to four-hour non-combustible, fire-rated hazardous materials storage buildings.

ECP fire-rated buildings are prepared with a lightweight, asbestos free, cementitious-like fireproofing product with over 650 lbs. psi compressive strength. It is UL Classified, as well as Fire Insurers Institute tested and approved. In accordance with specific requirements, a one, two, three or four-hour fire rating can be achieved with this application technology.

Factory Mutual has approved the use of the materials to achieve the ECP Fire Ratings.

In short, ECP buildings are user friendly, more economical than any others on the market today and provide for more efficient handling of hazardous materials.

The system is far superior to any others available today

- The ECP system eliminates the need for double-skinned walls to achieve fire ratings.
- Although wall boards or foam systems are approved for use at the time of delivery from manufacturers, there is a possibility of either moisture or excessive heat penetrating the double walls. They are also susceptible to punctures. This results in the material losing its effectiveness. There is no way of determining what has happened inside the walls without breaking through for visual inspection.
- ECP's cementitious-like coating is visible to the naked eye, is repairable in the field, and is guaranteed to maintain its rating during normal use.

Retrofitting

It is not necessary to apply the fire-proofing material or install a fire suppression system when ordering the units. ECP's retrofitting capabilities allow for one to four hour fire proofing product or fire suppression systems to be installed in the field by a certified installer.

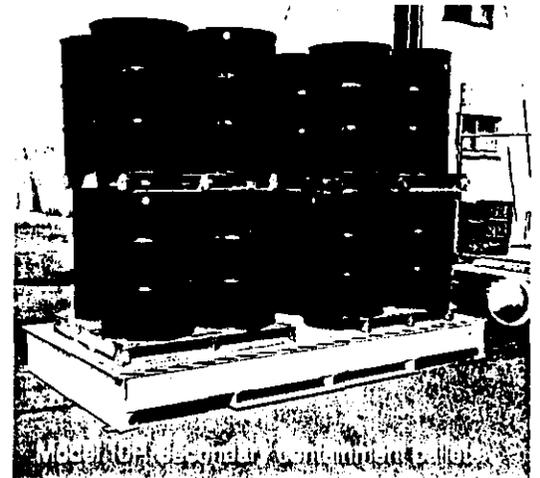
This means an up-front savings in capital outlay until a fire-rated facility or a fire suppression system is necessary.

"New Generation" Construction

Other MFG's use commercial grade A-569 steel while ECP building are constructed with 12 gauge non-commercial grade A-570 steel, which is of a higher quality.

The coatings include two-part anti-corrosive epoxies and polyurethanes which serve as insulators from climatic variations.

Buildings from some manufacturers use less effective protective coating systems. The interior of their buildings may heat or freeze according to outside temperatures.



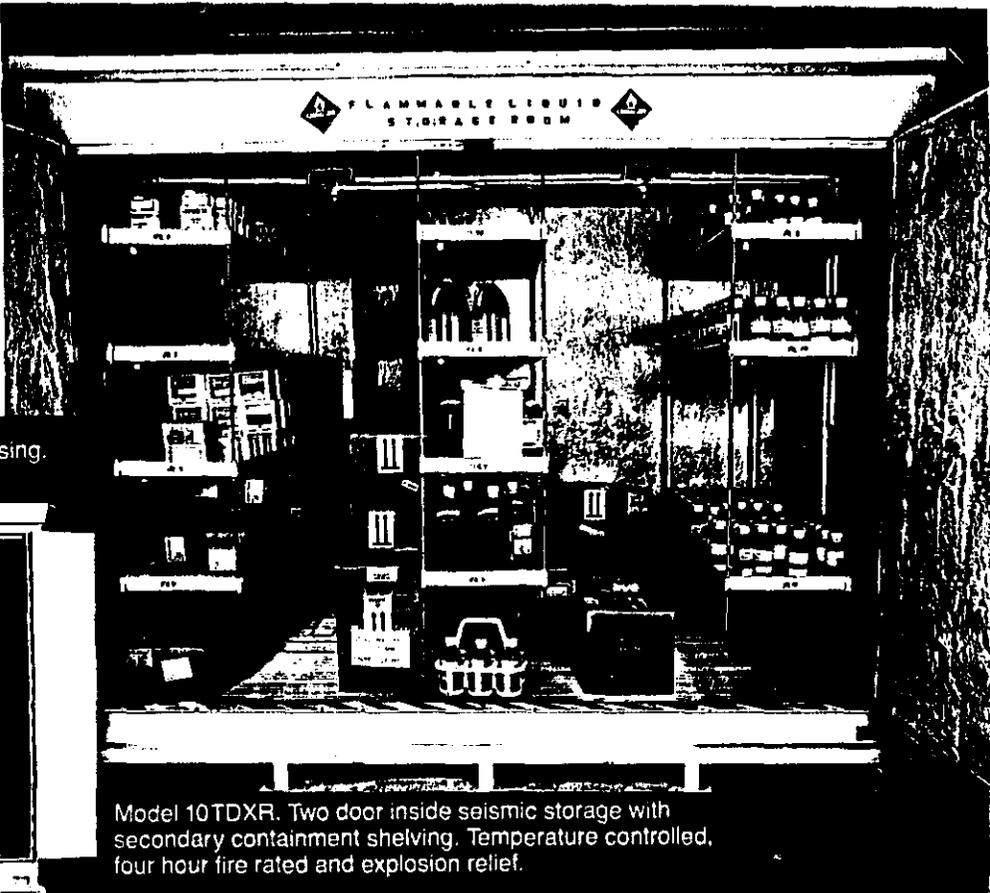
The ECP coatings are extremely effective in holding the interior of the building close to ambient temperatures when the 12 gauge non-commercial grade A-570 steel is used in conjunction with the protective coating.

9 5 1 3 9 3 8 0 7 5

Secondary Containment Spill Control

ECP buildings contain one-piece sumps with drain fittings to contain any leaks or spills that might create a groundwater hazard.

Model 10XR. Two door. For storage and dispensing.



Model 10TDXR. Two door inside seismic storage with secondary containment shelving. Temperature controlled, four hour fire rated and explosion relief.

3 2 7 6

Seismic Secondary Containment™ Shelving*

For laboratories, universities, hospitals, household hazardous waste programs and companies storing five gallon or smaller containers, ECP has developed seismic secondary containment shelving.

These include a sump to catch any leaks that might occur, a continuous solid lip to prevent articles from falling, and a drain with a cap to allow drainage from the shelves.

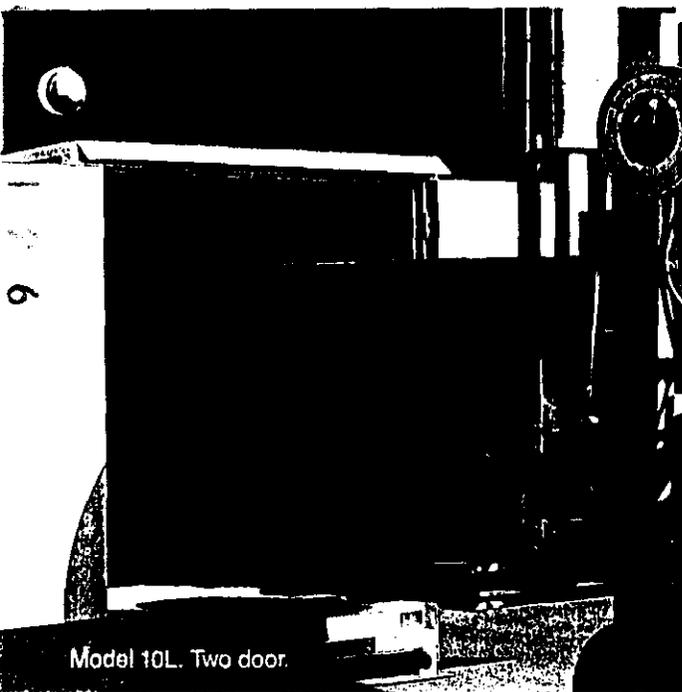
The shelves are suspended from a sub-roof frame assembly, with allthread rods to allow for total adjustability for any size containers.

The rods also provide seismic protection to items stored on the shelves. If the building is bumped during loading or unloading, the shelves free float, thus preventing items from falling off or spilling. Other manufacturers use rigidly mounted shelving with a 1" lip in the front or no lip at all, and no drain.

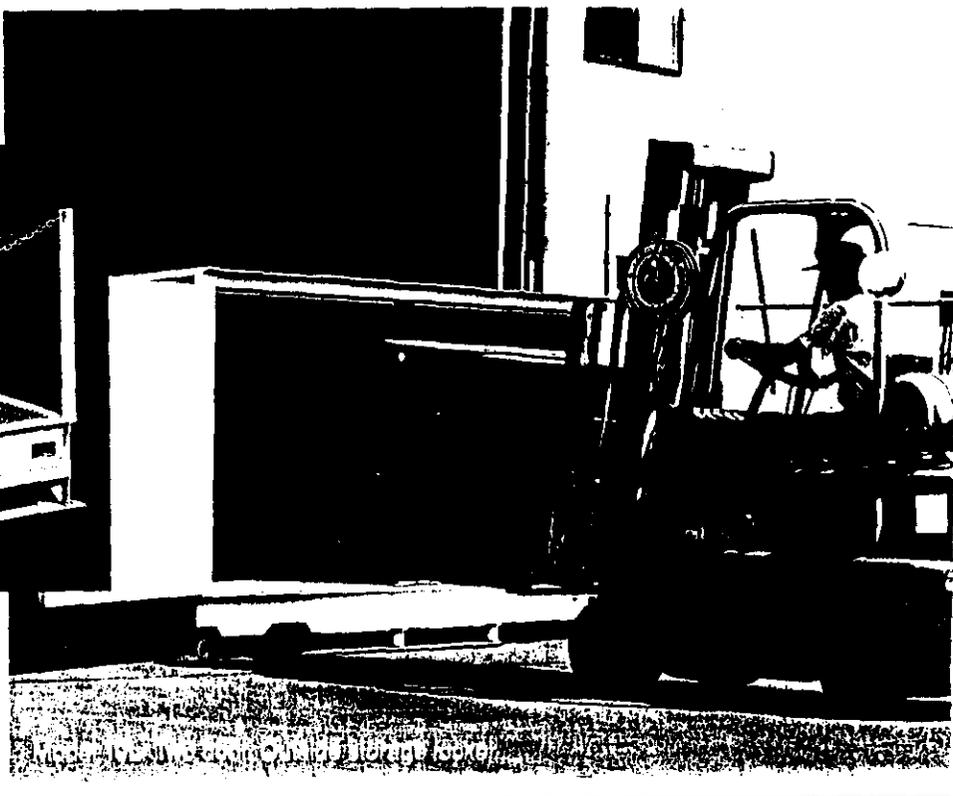
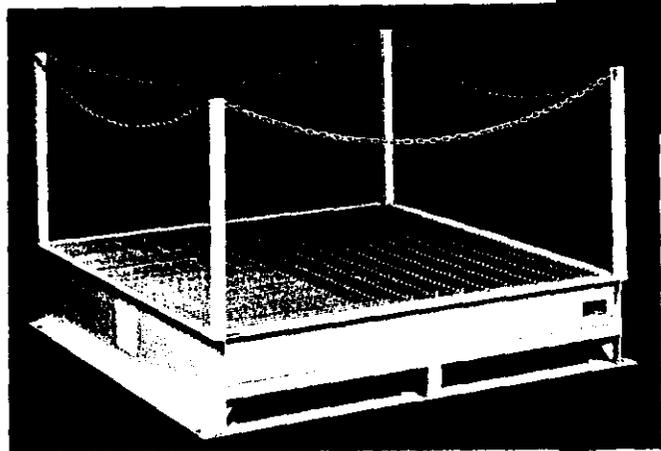
*Pat. Pending

9 4 1

Model 10L. Two door.



Model 5P. With guard rail and chain.



9 3 1 3 9 3 0 7 7 ECP portable hazardous materials buildings are constructed with a number of engineering innovations that make them the most user friendly on the market. Consider these:

Beneficial Features

- All doors open on the corner posts, not just pallet wide. The 56" to 280" widths available allow access to drums and shelving in the rear of the facility without the necessity of moving drums out of the way.
- Factory Mutual approved explosion relief panels are provided when required by code or local jurisdiction.
- Non-FM explosion-relief roofs are available to protect personnel in case of an accident in areas where snow loads are not a problem.*
- ECP provides heavy-duty load spreaders to prevent floors from sagging under the weight of heavy drums.
- Fork-lift guards are standard on ECP buildings, as are static ground connections.
- ECP buildings meet and or exceed code requirements.*

Also Available

ECP makes steel secondary containment pallets. They provide effective containment areas where roofs and security are not required. They provide easy access, and are built with the same type of grid floor, the same coating systems and one-piece sumps and fork-lift guards as are used in the full buildings.

ECP prefabricated, weatherproofed buildings offer the finest, low-cost solution to meeting the requirements for safe storage of chemical hazards in your facility.

They also assure safe secondary containment for ground water protection, meet fire safety needs, minimize liability and safeguard personnel while complying with federal, state and local regulations.*

*Local jurisdictions have final authority.
**Available on one and two-door buildings only.

Attachment 8

Unit Managers Meeting
Hanford Central Waste Complex-
Radioactive Mixed Waste Storage Facility
740 Stevens Center, Room 1200
Richland, Washington

Meeting Held February 10, 1993
From 1:00 p.m. to 1:30 p.m.

List of design drawings, acceptance test reports,
engineering change notices, and construction specifications

9 3 1 0 9 0 3 0 7 9

LIST OF DESIGN DRAWINGS, ACCEPTANCE TEST REPORTS,
ENGINEERING CHANGE NOTICES, AND CONSTRUCTION SPECIFICATIONS

DESIGN DRAWINGS

H-2-80894
Revision 3
DRAWING LIST

H-2-80895
Sheet 1 of 3
Revision 2
CIVIL SITE PLAN & DET

H-2-80895
Sheet 2 of 3
Revision 1
CIVIL SITE PLAN & DETAIL 12"SW PLAN AND PROFILE

H-2-80895
Sheet 3 of 3
Revision 1
CIVIL SITE PLAN & DETAIL 12" SW PLAN, PROFILE & DET

H-2-80896
Revision 3
CIVIL ENLARGED SITE PLAN & DET

H-2-80897
Revision 2
ARCHITECTURAL FLOOR PLAN & SCHED

H-2-80898
Revision 2
ARCHITECTURAL PLAN, SECT, EL & SCHED

H-2-80899
Revision 1
ARCHITECTURAL ELEVATIONS & SECT

H-2-80900
Revision 2
ARCHITECTURAL PLAN, SECT & DETAILS

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Sheet 1 of 2
Revision 1
STRL FOUNDATION PLAN & DETAILS

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Revision 1
STRL FOUNDATION PLAN & DETAILS

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H-2-80902
Sheet 1 of 3
Revision 2
FIRE PROTECTION ALARM SYSTEM PLAN, SECTION & DETAILS

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Revision 2
FIRE PROTECTION ALARM SYSTEM PLAN, SECTIONS & DETAILS

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Sheet 3 of 3
Revision 2
FIRE PROTECTION ALARM SYSTEM PLAN, SECTIONS & DETAILS

H-2-80903
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Revision 2
FIRE PROTECTION ALARM SYSTEM WIRING DIAGRAM

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Revision 2
FIRE PROTECTION ALARM SYSTEM WIRING DIAGRAM

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Sheet 3 of 3
Revision 2
FIRE PROTECTION ALARM SYSTEM WIRING DIAGRAM

H-2-80904
Sheet 1 of 3
Revision 2
HVAC PLAN, SECT & DETAILS

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Revision 2
HVAC PLAN, SECT & DETAILS

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Sheet 3 of 3
Revision 2
HVAC PLAN, SECT & DETAILS

H-2-80917
Revision 2
ELECTRICAL PLAN

H-2-80918
Revision 2
ELECTRICAL PLAN

9 3 1 1 9 0 3 1 0 0 1

H-2-80919
Revision 2
ELECTRICAL PLAN

H-2-80920
Revision 3
ELECTRICAL ELEVATIONS & DETAILS

H-2-80921
Revision 3
ELECTRICAL ELEVATIONS, & DETAILS

H-2-80922
Revision 3
ELECTRICAL ELEVATIONS, & DETAILS

H-2-80923
Revision 3
ELECTRICAL DIAG - PNLBD SCHED

H-2-80924
Revision 3
ELECTRICAL DIAG - PNLBD SCHED

H-2-80925
Revision 3
ELECTRICAL DIAG - PNLBD SCHED

H-2-815134
Revision 0
CIVIL STORAGE PAD PLAN SECTION DET & SPECS

ACCEPTANCE TEST REPORTS

Fire Alarm System Acceptance Test Report
WHC-SD-W016H-ATR-004, Revision 0
Acceptance Test Report for Building No. 2403-WD

Fire Alarm System Acceptance Test Report
WHC-SD-W016H-ATR-006, Revision 0
Acceptance Test Report for Building No. 2403-WC

Fire Alarm System Acceptance Test Report
WHC-SD-W016H-ATR-008, Revision 0
Acceptance Test Report for Building No. 2403-WB

ENGINEERING CHANGE NOTICES

W016-100

W-016H-102

W016H-104

9 3 1 3 9 0 3 1 0 9 2

W-016H-106

W-016H-108

CONSTRUCTION SPECIFICATIONS

CR9808-C1, Revision 0
CONSTRUCTION SPECIFICATION FOR
LOW LEVEL RADIOACTIVE METAL WASTE STORAGE PAD

W-016H-C3, AS-BUILT, REV 3
CONSTRUCTION SPECIFICATION FOR
RADIOACTIVE MIXED WASTE STORAGE FACILLITIES

9 8 1 0 9 0 3 3 0 9 3

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