



Department of Energy
 Richland Operations Office
 P.O. Box 550
 Richland, Washington 99352

0071838

07-AMCP-0060

DEC 13 2006

Ms. Jane Hedges, Program Manager
 Nuclear Waste Program
 State of Washington
 Department of Ecology
 3100 Port of Benton Boulevard
 Richland, Washington 99352

RECEIVED
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EDMC

Dear Ms. Hedges:

**RESPONSE TO DEPARTMENT OF ECOLOGY COMMENTS ON M-91-05-T01,
 ENGINEERING STUDY AND FUNCTIONAL DESIGN CRITERIA**

References: (1) Ecology ltr. to M. Collins, RL, and G. Sinton, RL, from M. Mandis,
 "Untitled" dtd. November 13, 2006.

(2) RL ltr. to J. Hedges, Ecology, from. M. S. McCormick, "Completion of
 the Hanford Federal Facility Agreement and Consent Order
 (Tri-Party Agreement) Target Date M-91-05-T01, Submittal of
 Engineering Study and Functional Design Criteria Due
 September 30, 2006," (06-AMCP-0311) dtd. September 29, 2006.

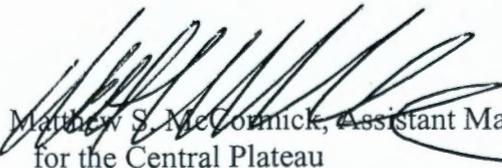
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The purpose of this letter is to respond to the State of Washington Department of Ecology's comments (Reference 1) on the subject engineering study and functional design criteria that were submitted to you on September 29, 2006, (Reference 2). Responses to the comments are attached. Please note that because the comments address a secondary document under the Tri-Party Agreement, the U.S. Department of Energy, Richland Operations Office does not plan to revise and reissue the document. However, the comments will be considered as project planning moves forward.

If you have any questions, please contact me, or your staff may contact Mark French, of my staff, on (509) 373-9863.

Sincerely,


 Matthew S. McCormick, Assistant Manager
 for the Central Plateau

AMCP:MSC

Attachment

cc: See Page 2

Ms. Jane Hedges
07-AMCP-0060

-2-

DEC 13 2006

cc w/attach:

G. Bohnee, NPT

N. Ceto, EPA

S. Harris, CTUIR

R. Jim, YN

T. Martin, HAB

M. Mandis, Ecology

K. Niles, ODOE

D. Singleton, Ecology

Administrative Record (M-91, T Plant)

Environmental Portal

cc w/o attach:

S. M. Joyce, FHI

R. E. Piippo, FHI

C. R. Stroup, FHI

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Document Number(s)/Title(s)	Program/Project/Building Number	Reviewer	Organization/Group	Location/Phone
<u>Processing Hanford Remote-Handled and Large Package Mixed Low-Level Waste and Transuranic Waste Engineering Study (ES)</u> <u>T-Plant Solid Waste Processing center, Functional Design Criteria (FDC)</u>	TPA Milestone M-91-05-T01	J. Roberts O. Wang N. Uziemblo M. Mandis S. Szendre	Ecology/Chemistry Ecology/Engineering Ecology/S&T Ecology/Engineering Ecology/Permit Lead	NWP/372-7906 NWP/372-7932 NWP/372-7928 NWP/372-7970 NWP/372-7911

Comment Submittal Approval:

Agreement with indicated comment disposition(s)

Status:

Organization Manager (Optional)

Date

Reviewer/Point of Contact

Date

Reviewer/Point of Contact

Author/Originator

Author/Originator

Item	Page #, Line #, or Section and Paragraph	Comment (s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	Hold Point	Disposition (Provide justification if NOT accepted.)	Status
				DOE has no plans to revise the ES and FDC. Ecology comments will be considered in subsequent	

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				documentation as the development of the T Plant "M-91" upgrades and related activities proceed.	
1.	ES p. 5.16	<p>Comment: Non-conforming waste, chemical in nature: Make sure spill control kits and procedures are in place to handle any free liquids found. Ecology agrees most waste will be handled at CWC, but non-conforming waste will be found.</p> <p>Justification: Non-conforming waste has already been found during Retrieval operations.</p> <p>Modification: Address data gap in document. (JR)</p>		<p>The ES is a high level document that would not address specific spill kits and procedural requirements related to handling free liquids. Spill kits are currently available and procedures are currently in place to handle free liquids. Changes to procedures will be made as circumstances warrant.</p>	
2.	ES p. 5.16	<p>Comment: There is also no description of how non-conforming waste materials will be packaged and segregated prior to shipment to CWC; and how liquid wastes will be identified or categorized so operators know if it's an acid, base, or organic.</p> <p>Justification: Non-conforming waste has already been found during Retrieval operations.</p> <p>Modification: Address data gap in document. (JR)</p>		<p>The ES is a high level document that would not address specific procedural requirements related to managing non-conforming waste and incompatible waste. Procedures are</p>	

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			currently in place to manage non-conforming waste and incompatible waste. Changes to procedures will be made as circumstances warrant.	
3.	ES and FDC General	<p>Comment: These documents are adequate for conceptual and functional designs, obviously there is a long way to the final design (i.e., from “what they want” to “how they are going to operate”). What future actions and associated documentation will DOE perform to cross this gap between initial concept to final design to operating facility?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (OW)</p>	<p>The T Plant “M-91” upgrades will be managed consistent with the requirements of DOE Order 413.3A, <i>Program and Project Management for the Acquisition of Capital Assets</i>. The project still needs to go through several stages prior to operations: conceptual design, preliminary design, detailed design, construction, and startup. Associated with those project phases is the required development of safety and hazard</p>	

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			analyses, permits attendant, procedures and other documentation required to support the safe construction and operation related to the upgrades.	
4.	ES and FDC General	<p>Comment: The documents have some discussions on risk assessment, ALARA and safety analyses, but there are no evidence of design integration is in place. Maximum “maintenance-free periods” are required, but not specifically defined at this stage. Maybe the integration and additional warranty conditions will take place from now to the final design phase. I suggest several parallel “linear” reviews for future design work, including areas in ALARA, safety analyses, risk assessment, maintainability, etc.</p> <p>Justification: One can review the entire final design from ALARA (or safety) point of view. Sometimes, a system makes sense in ALARA, but may not in safety; then optimum compromise may be needed.</p> <p>Modification: The final design should address integration and optimization of all the design issues mentioned above (ALARA, safety, risk, maintainability, compliance, etc.). (OW)</p>	<p>The risk assessments, ALARA and safety analyses, and other subjects of the comments are all developed as part of the process mentioned in the previous response.</p> <p>The reviews mentioned should be part of any good project management process and are required by DOE Order 413.3A and other DOE requirements.</p>	
5.	ES General	<p>Comment: The re-design of T-Plant to process the LLW and transuranic waste is based on estimates of the volume of waste that will be ‘retrieved’ from Hanford. These volume numbers are presented with no uncertainty. What</p>	<p>The volume estimates used in the ES were based</p>	

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		<p>happens if these volumes are underestimated?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (NU)</p>	<p>on 1) existing waste inventories in above ground storage, 2) existing waste forecasts for newly generated wastes, and 3) information on retrievably stored waste from the Solid Waste Information and Tracking System and from actual retrieval. These were used for the purposes of the ES.</p> <p>At this early stage of the project, there is time to address any changes in the project as a result of changes to waste volume estimates. In addition, there is cost contingency within the estimate provided in the ES.</p>	
6.	ES p. 2.3, table 2.2	<p>Comment: Is there a path for the item “9519114” that is too large for treatment and there is no existing capabilities available?</p> <p>Justification: See comment above.</p>	<p>The intention is to process this package through the upgraded T Plant.</p>	

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		Modification: Address data gap in document. (NU)			
7.	ES p. 2.5, section 2.2.2	<p>Comment: The waste generation from the WTP for normal operations and planned maintenance is give to start FY 2010. This date is likely too early with the new projected start of WTP.</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (NU)</p>			<p>This information became available after the ES was started. A decision was made to continue using data that was available when the ES started rather than reacting to often changing information (of which the commenter notes an example). New waste forecasts resulting from the new projected start of the Waste Treatment Plant will be taken into account as the design develops.</p>
8.	ES p. 2.11-12, section 2.5	<p>Comment: It appears Table 2.9 and Table 2.10 have about the same numbers and they should be different tables [one is gross weight and the other is waste weight]. The total by gross weight is ~ 6,300,000 kg and should be in Table 2.9, but this number is not.</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (NU)</p>			<p>The commenter is correct. Table 2.9 should have the following information (in thousands of kilograms):</p> <p><u>Above Ground Storage –</u> CH-MLLW – 17</p>

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				<p>RH-MLLW – 63 CH TRU(M) – 921 RH TRU(M) – 728</p> <p><u>Post-1970 LLBGs</u> CH-MLLW – 0 RH-MLLW – 0 CH TRU(M) – 2006 RH TRU(M) – 159</p> <p><u>Forecast</u> CH-MLLW – 0 RH-MLLW – 226 CH TRU(M) – 405 RH TRU(M) – 1769</p>
9.	ES p. 3.2 section 3.1	<p>Comment: Should there be D, F, U, and P codes attached to the waste? The coeds are listed in this text as Dxxx, Fxxx, Uxxx, and Pxxx.</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (NU)</p>	<p>Waste codes are and will continue to be attached to the waste. For the purposes of the ES, recognition that there many codes is adequate. The text does provide a pointer to the complete list of waste codes, specifically Table 3-1 of the Hanford Site Solid Waste Acceptance Criteria.</p>	

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10.	FDC p. 1, section 1.2	<p>Comment: “Approximately 10,800 m³ of the estimated volume of MLLW and TRU waste will require treatment.... through SWPC prior to disposal.” Page 3, section 2.0 “The SWPC will be able to process a minimum of 600 m³ of TRU waste and 300 m³ of MLLW waste per year. With this information, is the SWPC designed for ~+10 years to handle the 10,800 m³ of MLLW and TRU?”</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (NU)</p>	<p>The intention is to design the facility to process waste the 10,000 m³ at a rate of 600 m³/yr for TRU waste and 300 m³/yr for MLLW. Note that the 10,000 m³ is the 10,800 m³ total minus about 800 m³ of MLLW in packages less than 35 m³. Plans are to treat this 800 m³ of MLLW at commercial treatment facilities</p> <p>The FDC, Section 5.1, requires a basic design life of 30 years.</p>	
11.	FDC p. 10, section 2.1.5.2	<p>Comment: Why is it assumed that twice as many men will work at the M-91 Facility as women?</p> <p>Justification: Comparing the design the change rooms, the men’s change room is twice the size as the women’s change room.</p> <p>Modification: Address data gap in document. (NU)</p>	<p>This assumption is based on recent historical data.</p>	
12.	FDC p. 12 and elsewhere	<p>Comment: The term “R-door” is used through-out the document.</p> <p>Justification: See comment above.</p>	<p>The R doors are a series of doors on the east side of T Plant whose main</p>	

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		Modification: Define this term. (NU)		purpose is to provide emergency egress from the canyon. See the site plan on Page 41 of the FDC.	
13.	ES p. iii and FDC General	<p>Comment: How will waste out-side of the new M-91 Facility specifications/tolerances be treated?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		All waste currently identified for processing through the upgraded T Plant is within the criteria discussed in the ES and FDC.	.
14.	ES p. iii and FDC through-out	<p>Comment: Is there any variance in the schedule planned? (Opportunities for acceleration or difficult tasks that may require additional time)</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		<p>Opportunities to accelerate the schedule, reduce costs, and perform work more efficiently will be identified through value engineering studies and other means consistent with DOE Order 413.3A and best business practices.</p> <p>One of the purposes of the remote testing and integration and mock-up testing is to, upfront, to prevent the need</p>	.

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				for additional time on the difficult tasks. See the response to Comment 28.	
15.	ES and FDC General	<p>Comment: Will the M-91 Facility be able to process High-Level wastes (HLW) or spent fuels that are either RSW or due to CERCLA actions?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		Material, regardless of what it is technically called, that is within the limits established in the FDC could presumably be processed in an upgraded T Plant. It is possible that spent nuclear fuel will be found during the processing of retrievably stored waste. There are provisions in the FDC for packaging it.	
16.	ES p. 1.1	<p>Comment: Add "RH-" to the "MLLW" bullet?</p> <p>Justification: See comment above.</p> <p>Modification: Change text. (MM)</p>		The commenter is correct. In this context "MLLW" should be read as "RH MLLW."	
17.	ES p. 1.2	<p>Comment: Add TRU component to M-91-42 discussion and update the dates after the TPA Negotiations are finalized.</p> <p>Justification: See comment above.</p>		The commenter is correct in noting that TRU waste is also a subject of the M-91-42 milestone.	

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		Modification: Add/change text. (MM)		These were intended to be summaries. The ES (Page 3) contains a pointer to the full text of the existing milestones (Appendix A).	
18.	ES p. 2.5 FDC General	<p>Comment: Have the delayed schedules of WTP, SST, DST projects and their impacts been considered and addressed in this document?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		No. This information became available after the ES was started. A decision was made to continue using data that was available when the ES started rather than reacting to often changing information (of which the commenter notes an example). New waste forecasts resulting from changes in generator schedules will be taken into account as the design develops.	
19.	ES p. 4.1 and FDC General	<p>Comment: What is the status of commercial facilities to treat MLLW in containers up to 35 cubic meters? What facility? When?</p>		A contract to treat CH MLLW in packages up to 35	

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		<p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		<p>m³ at PECoS is being prepared. Opportunities to treat other waste at other commercial facilities is being investigated.</p>	
20.	ES p. 5.8 and FDC General	<p>Comment: What is the treatment/disposal path for Non-(LDR)-compliant MLLW that can not be treated commercially, thermally, or at the new M-91 Facility?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		<p>The purpose of the T Plant "M-91" upgrades is to "fill the gap" by processing waste that cannot be treated using existing/planned commercial or existing onsite processing. It is expected that in some instances, such as any retrieval actions associated with CERCLA remediation activities, waste will be processed at the retrieval site.</p>	
21.	ES p. 5.9 and FDC General	<p>Comment: When will US DOE reach a decision/determination on where and how to process RH-waste and Large containers of CH-MLLW?</p> <p>Justification: As the document notes that many opinions/decision makers have not reached consensus about building and supporting the new M-91 Facility.</p>		<p>Decisions regarding specific "hows" of processing (e.g., detailed processing steps, equipment</p>	

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		Modification: Address data gap in document. (MM)		and material selection) will be determined as part of the normal design process.	
22.	ES p. 5.28 and FDC General	<p>Comment: Add “Regulatory documents” such as “Permit” and “Permit Modifications Modules” to the bullets listed in Section 5.10.</p> <p>Justification: Regulatory documents will be required for T-Plant operations and final disposition of the waste remaining in the facility’s cells.</p> <p>Modification: Address data gap in document. (MM)</p>		Section 5.5 of the FDC addresses regulatory requirements that need to be met. Permitting is part of those requirements.	
23.	ES p. 5.28 and FDC General	<p>Comment: Duplicate “The cost estimate includes 30% for contingency.....” sentence.</p> <p>Justification: See comment above.</p> <p>Modification: Delete duplicate sentence. (MM)</p>		Noted.	
24.	ES p. 5.28 and FDC General	<p>Comment: Are efforts to conduct and document Cell Assessments and Remedial Action Work Plans for the remaining wastes in the T-Plant cells part of the schedule and cost in modifying the T-Plant to the new M-91 Facility?</p> <p>Justification: Regulatory documents will be required for T-Plant operations and final disposition of the waste remaining in the facility’s cells.</p> <p>Modification: Address data gap in document. (MM)</p>		As determined during the design process, if 1) cell(s) are needed to facilitate construction and/or operations and 2) material needs to be removed from the cell(s) to support that facilitation, the material will be removed consistent with regulatory	

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			requirements including preparation and approval of appropriate regulatory documentation.	
25.	ES p. 5.28 and FDC General	<p>Comment: As of late over 85% of the RSW in the 218-W-4C Burial Ground has required over-packing before it could be retrieved and transported to a TSD. Is there an assumption about the quantity of RSW in other burial grounds will also require over-packing before transport to the M-91 facility? If so, has this been added to the planning assumptions of the new facility?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>	No, 85-gal overpacks are not included in the planning assumptions for the T Plant "M-91" upgrades. These overpacks are currently and will continue to be processed through the Permacons at T Plant.	
26.	ES p. 5.28 and FDC General	<p>Comment: As of late over 85% of the RSW in the 218-W-4C Burial Ground has required over-packing before it could be retrieved and transported to a TSD. Will there be enough containers for over-packing, on-site transport, and off-site transport? Will there be enough vendors or suppliers of containers for all of the waste stream feeds that are anticipated for the duration of the M-91 Facility?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>	<p>See the previous response regarding the processing of 85-gal containers.</p> <p>The overpacks are readily available from commercial vendors.</p>	
27.	FDC p. 2 and ES General	<p>Comment: Will the efforts required to modify the HVAC system, T-Plant roof, Cover block replacement, and verification of structural integrity be completed by the appropriate Licensed, Professional Engineers? Is this accounted for in the cost and schedule of the upgrades?</p>	Licensed, professional engineers will perform work as required.	

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		<p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		<p>There is no specific delineation between licensed engineers and non-licensed engineers in this estimate and schedule. Generally differences in labor rates between the sets of engineers are minor and would be covered through contingency (if needed) rather than building the differences into the direct estimate. By the time a schedule is prepared for the preliminary design, any "extra" time for activities that need to be done by licensed engineers should be apparent.</p>	
28.	FDC p. 3 and ES General	<p>Comment: Will a mock-up of the new M-91 Facility be built on-site before the design is complete and the construction is initiated of the actual M-91 Facility? If so, when will the facility be built and where will it be located?</p> <p>Justification: See comment above.</p>		<p>Part of the remote system integration and testing will involve some mock-up work to support selection of</p>	

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		<p>Modification: Address data gap in document. (MM)</p>	<p>equipment and other system components during the design process.</p> <p>During procurement and construction modules, equipment, and other systems will be put together in a clean environment (not necessarily onsite). This will allow verification of operability, training of work crews, development of procedures, and modifications to be made before installation in the canyon. This is similar to what was done for the NLOP sludge treatment equipment.</p>	
29.	FDC and ES General	<p>Comment: Based on lessons learned at the Idaho National Environmental Laboratory's treatment facility, dusts, liquids and pockets of contamination will collect in pockets during operations. How will the new M-91 Facility design/operation/maintenance address this issue?</p> <p>Justification: See comment above.</p>	<p>Some lessons learned from other facilities including INEL were factored into the development of the</p>	

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		<p>Modification: Address data gap in document. (MM)</p>	<p>ES and FDC. For example, the extensive use of airlocks and modules is intended to address contamination control issues noted by others.</p> <p>Lessons learned, more detailed discussions, and site visits are planned as part of the development of the design to help address these issues.</p>	
30.	FDC and ES General	<p>Comment: To ready the T-Plant Facility for construction of the new M-91 Facility, waste in the T-Plant cells will require disposition, stabilization, etc. When will this effort and the regulatory documentation associated with this effort commence?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>	<p>Possibly. As determined during the design process, if 1) cell(s) are needed to facilitate construction and/or operations and 2) material needs to be removed from the cell(s) to support that facilitation, the material will be removed consistent with regulatory</p>	

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			requirements including preparation and approval of appropriate regulatory documentation.	
31.	FDC and ES General	<p>Comment: Will the new M-91 Facility have neutralization, liquid/oil separation and solidification equipment/chemicals?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>	This will be determined during the design process. These activities might be performed in the upgraded T Plant, through use of existing onsite capabilities, and/or through use of commercial treatment capabilities.	• •
32.	FDC and ES General	<p>Comment: Will the new M-91 Facility have neutralization, liquid/oil separation and solidification equipment/chemicals?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>	See previous response.	
33.	FDC General	<p>Comment: Based on lessons learned at the Idaho National Environmental Laboratory's treatment facility, housekeeping of the facility and durability of the tools and instruments chosen will be critical. How will the new M-91 Facility design/operation/maintenance address this issue?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>	Lessons learned, detailed discussions, and site visits are planned as part of the development of the design to help address these	

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				issues.	
34.	FDC General	<p>Comment: Were mobile robots considered for the new M-91 facility to assist with housekeeping and maintenance activities in the RH- environment?</p> <p>Justification: The M² Robots with manipulators are used by the Department of Defense at White Sands.</p> <p>Modification: Address data gap in document. (MM)</p>		<p>Remote control of equipment to assist in housekeeping and maintenance has been considered and are included in the ES and FDC. Remote control of equipment will be further developed during the design process.</p>	
35.	FDC General	<p>Comment: Choices of cameras/lenses (cleaning and drying) will be critical and dependant on the new M-91 facility environments within the SWHF, SWPM, POSSM, and TOSSM?</p> <p>Justification: Due to controls needed at PFP during operations, humid environments resulted.</p> <p>Modification: Address data gap in document. (MM)</p>		Agreed.	
36.	FDC General	<p>Comment: Choices of cameras/lenses (cleaning and drying) will be critical and dependant on the new M-91 facility environments within the SWHF, SWPM, POSSM, and TOSSM?</p> <p>Justification: Due to controls needed at PFP during operations, humid environments resulted.</p> <p>Modification: Address data gap in document. (MM)</p>		Agreed.	
37.	FDC General	<p>Comment: Beta testing for tools are planned in the document and schedules associated with the new M-91 Facility. Is the beta testing for associated software also planned?</p>		This is part of the mockup and testing described in the ES and FDC.	

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		<p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (MM)</p>		
38.	FDC and ES General	<p>Comment: What impacts would be placed on current and future Milestones, schedules and contracts at WRAP/CWC?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>		No changes to the current activities performed at WRAP or CWC are envisioned.
39.	FDC and ES General	<p>Comment: What impacts would be imposed on NDA, X-Ray, verification, and packaging activities at WRAP? Will there be enough storage capacity at T Plant, CWC, and WRAP?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>		<p>No changes to the current activities performed at WRAP are envisioned.</p> <p>The storage capacities at WRAP and CWC will not change. During the design process, the adequacy of RH waste storage at T Plant will be determined. This determination will be factored into the final design as appropriate.</p>
40.	FDC and ES General	<p>Comment: Have tanks and cells that are to be used been maintained / inspected / contents known?</p> <p>Justification: See comment above.</p>		The contents of the cells (including tanks and their contents) have been documented.

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		<p>Modification: Address data gap in document. (SS)</p>	<p>Tanks and other equipment within the cells are no longer used and will not be used as part of the "M-91" process in T Plant.</p> <p>As determined during the design process, if 1) cell(s) are needed to facilitate construction and/or operations and 2) material needs to be removed from the cell(s) to support that facilitation, the material will be removed consistent with regulatory requirements including preparation and approval of appropriate regulatory documentation.</p>	
41.	FDC and ES General	<p>Comment: Provide more information about the specific management and process of placing and storing waste at the 2706 T. Will interim storage occur? How and where? Will waste be stored outside?</p>	<p>The ES and FDC include provisions for the installation of grouting</p>	

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		<p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>	<p>equipment within the 2706-T Facility for the macroencapsulation of waste. This would limit waste storage within the 2706-T Facility but would not otherwise affect waste storage practices. Consistent with current practices, waste can generally be stored anywhere within the T Plant fence line, indoors and outdoors. All of the stored waste is in interim storage as it is destined to be disposed of elsewhere onsite or at WIPP.</p>	
42.	FDC and ES General	<p>Comment: Have the tanks and systems within the T-Plant cells that are to be used/modified for the new M-91 Facility been maintained/inspected? Are the contents known? What is the integrity of the tanks and systems?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>	<p>The contents of the cells (including tanks and their contents) have been documented. Tanks and other equipment within the cells are no longer used and</p>	

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			<p>will not be used as part of the "M-91" process in T Plant.</p> <p>As determined during the design process, if 1) cell(s) are needed to facilitate construction and/or operations and 2) material needs to be removed from the cell(s) to support that facilitation, the material will be removed consistent with regulatory requirements including preparation and approval of appropriate regulatory documentation.</p>	
43.	FDC and ES General	<p>Comment: Is there a current "Path Forward" for all waste? When will the WAP be updated and verified?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>	<p>The T Plant "M-91" upgrades would provide a path forward for LLW, MLLW, and TRU waste that cannot be processed using</p>	

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				existing onsite or existing/planned commercial processing capabilities. Note that in some instances, such as any retrieval actions associated with CERCLA remediation activities, it is expected that waste will be processed at the retrieval site.	
44.	FDC and ES General	<p>Comment: Will repackaging processes occur in the Manned Processing Maintenance Module?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>		No, not in the Manned Processing Maintenance Module (MPMM). Personnel within the MPMM could, through glove ports, work on waste that is in adjacent modules.	
45.	FDC and ES General	<p>Comment: Permit modifications will be required for the new waste and associated processing/storage?</p> <p>Justification: Staging and processing Areas containing waste material will be subject to TSD requirements.</p> <p>Modification: Address data gap in document. (SS)</p>		Agreed. Section 5.5 of the FDC addresses regulatory requirements that need to be met. Permitting is part of those requirements.	

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46.	FDC and ES General	<p>Comment: Have issues to attain WIPP certification been worked out? Are there any contract issues or special needs? What is the status of these requirements?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>	<p>With regard to CH TRU waste, there are no issues. Existing certification processes will continue to be used.</p> <p>Planning for the eventual certification of RH TRU waste has started.</p>	•
47.	FDC and ES General	<p>Comment: TPA Milestone schedules are negatively affected and appear tied together with other ongoing activities at other units. Can the Milestones be rescheduled and not affect other units/facilities manpower and resources?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>	<p>The schedule presented with the ES is consistent with the recently submitted "M-91" change package.</p> <p>Apart from any TPA consideration, opportunities to accelerate the schedule, reduce costs, and perform work more efficiently will be identified through value engineering studies and other means consistent with DOE Order 413.3A and best</p>	•

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48.	FDC and ES General	<p>Comment: A 30 year lifespan for airlock doors, structure crane rails and beams seems inadequate, especially given the high radiation and potential for contamination spread that will be present. How will the design account for this?</p> <p>Justification: See comment above.</p> <p>Modification: Address data gap in document. (SS)</p>		<p>business practices.</p> <p>The design life is based on industrial experience. Periodic maintenance will be required. Further detail will be available as the design is developed.</p>