



STATE OF WASHINGTON
 DEPARTMENT OF ECOLOGY
 3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950

October 16, 2007

Mr. David A. Brockman
 Richland Operations Office
 United States Department of Energy
 P. O. Box 550, MSIN: A7-50
 Richland, Washington 99352

RECEIVED
 OCT 23 2007

EDMC

Re: Change Control Form M-91-07-02 Modification of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement M-91 Series Milestones) Submitted to Ecology October 2, 2007, by Letter 07-AMCP-0304

0074033

Dear Mr. Brockman:

The Department of Ecology received the M-91-07-02 Class II Change Control Form extending the M-91-42 Mixed Low-Level Waste (MLLW) Milestone from December 31, 2007, to March 31, 2008. Ecology is disapproving this change request.

We appreciate the United States Department of Energy's (USDOE) advance notice that the M-91-42 MLLW treatment milestone may be missed. We also appreciate the efforts that USDOE is making to meet this milestone, including:

- Shipping additional MLLW to both Perma Fix Northwest and Perma Fix East.
- Accelerating MLLW treatment at Perma Fix Northwest (additional shifts, shipments, increased storage facility inventory limits, etc.).
- Working to gain off-site disposal approval for MLLW to be treated by Energy Solutions-Clive of Utah.
- Resuming on-site MLLW processing of Albany soils.

Ecology notes that the project timeline as documented in the Project Manager's Meeting Minutes (January – September 2007) shows that USDOE met the M-91-42 MLLW treatment Milestone for December 31, 2006, three months early. We reviewed the informal Waste Activity Reports and found that only small quantities (less than 60 cubic meters) were shipped in March, April, May, and June of 2007. We also note that in January, February, March, May, and June of 2007 USDOE's onsite disposal of MLLW was less than 65 cubic meters per month.

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Based on these treatment and disposal rates, Ecology does not intend to change the M-91-42 MLLW treatment milestone. We are concerned that USDOE and its contractors need to focus on meeting the overall milestone of treating the entire backlog of stored MLLW by December 2009.

We will continue to monitor USDOE and contractor efforts to meet this milestone and all other waste retrieval and treatment milestones. We will base our future enforcement decisions on our evaluation of those efforts. Please contact Deborah Singleton at 509-372-7923 if you have any questions.

Sincerely,

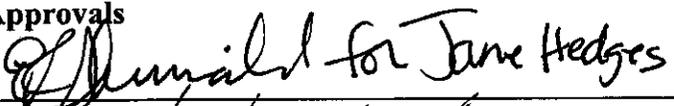
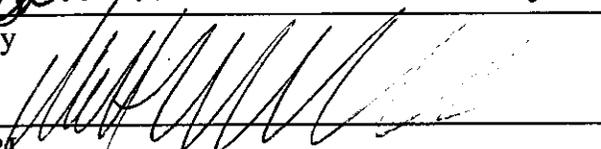


Jane A. Hedges
Program Manager
Nuclear Waste Program

mm/lkd
Enclosure

cc: Nick Ceto, EPA
Mark French, USDOE
Robert Piippo, USDOE
Greg Sinton, USDOE
Stuart Harris, CTUIR
Gabriel Bohnee, NPT
Russell Jim, YN
Susan Leckband, HAB
Ken Niles, ODOE
Administrative Record: M-91-42/MLLW
Environmental Portal

H-0-12

Change Number M-91-07-02	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date September 20, 2007
Originator M. French		Phone (509) 373-9863
Class of Change <input type="checkbox"/> I – Signatories <input checked="" type="checkbox"/> II – Executive Manager <input type="checkbox"/> III – Project Manager		
Change Title Modification of Hanford Federal Facility Agreement and Consent Order (Agreement) M-91-42 Interim Milestone		
Description/Justification of Change This change package extends the due date of Tri-Party Agreement Interim Milestone M-91-42, item 2, D. “6,520 cubic meters (cumulative) shall be treated by 12/31/2007”, to 3/31/2008. The due date is being extended due to good cause per the Agreement Article XL’s Good Cause for Extensions provisions. Operational difficulties at the treatment and disposal facilities (Pacific EcoSolutions Inc. (PEcoS), PermaFix and the Environmental Restoration Disposal Facility) have resulted in project schedule delays that have impacted the ability of RL to get the required treatment accomplished by the December 31, 2007, completion date. <p style="text-align: center;"><i>(Continued on page 2.)</i></p>		
Impact of Change Approval of this change package extends the completion date for the treatment of 6,520 cubic meters of CH-Mixed Low-Level Waste (MLLW) from December 31, 2007, to March 31, 2008.		
Affected Documents The Hanford Federal Facility Agreement and Consent Order, as amended and Hanford Site internal planning, management and budget documents (e.g., baseline control documents, related work authorization and directives).		
Approvals		
Ecology 	10/16/07	Approved <input type="checkbox"/> Disapproved <input checked="" type="checkbox"/>
DOE-RL 	10/11/07	Approved <input checked="" type="checkbox"/> Disapproved <input type="checkbox"/>
N/A	_____	Approved <input type="checkbox"/> Disapproved <input type="checkbox"/>
EPA	_____	Date

Description/Justification continued:

Operational difficulties at the treatment facilities have included 1) A nearly three month delay in shipments to PEcoS due to problems at that facility relating to processing of some americium waste, radionuclide inventory issues, and secondary waste processing; 2) Delays in shipments to PEcoS/PermaFix Northwest (PFNW) due to delays in shipment approval from the Washington State Department of Health; and 3) Treatment subcontractors not being able to complete treatment within contractually required timeframes. These issues have caused the treatment facilities to be unable to accept additional waste for treatment at the rates required to ensure meeting the December 31, 2007, milestone.

The State of Washington Department of Ecology (Ecology) has been kept apprised of the status of the M-91-42 Mixed Low-Level Waste (MLLW) milestones through the monthly M-91 project manager meetings and the quarterly Tri-Party Agreement review meetings. Beginning in the summer of 2007, Ecology was informed that there was no float left in the schedule for completion of this requirement. In August 2007, Fluor Hanford Inc. (FHI) notified RL that their risk analysis indicated a low confidence in meeting the requirement to treat 6,520 cubic meters of CH-MLLW by December 31, 2007. RL and FHI have continued to work on recovery actions. Ecology was formally notified that the requirement was at risk in the August 23, 2007, M-91 Project Managers meeting.

Following is a description of actions that are being aggressively implemented between RL and its contractors to recover the requirement or complete the treatment as soon as possible:

1. FHI has met with PEcoS (prior to the PFNW acquisition) to discuss the challenge associated with meeting the milestone requirements. Although not contractually obligated to do so, PEcoS had verbally committed to FHI to maintain an accelerated schedule that included treatment and shipment back to Hanford as early as two to three months after receipt at their facility for the majority of the waste needing treatment. After the acquisition of PEcoS by PFNW, FHI met with the new management at PFNW to share the previous discussions that occurred with PEcoS and to get assurance that PFNW would also support an accelerated schedule for the M-91-42 CH-MLLW volumes. PFNW expressed their commitment to FHI and RL's success and followed up with a schedule that showed them treating all of the PFNW volume required to meet the M-91-42 CH-MLLW December 31, 2007, due date.
2. PFNW has explored opportunities to accelerate their schedule for treating the MLLW and has implemented the following actions:
 - 2a. Completed the corrective actions, including removing more legacy waste from the facility, which EPA identified in a Notice of Violation in June 2007. These actions have eliminated the requirements for a 30-day notification to the Washington State Department of Health prior to receipt of MLLW. This requirement has previously delayed shipments to PFNW.
 - 2b. Increased facility inventory limits for two primary isotopes (Sr-90 and Am-241) that previously placed constraints on PFNW's ability to receive RL's waste.

- 2c. Implemented a second shift for all MLLW processing lines.
- 2d. Provided FHI up to three additional shipments into PFNW during September, moving these shipments up from the original October schedule.
3. PermaFix East (PF East) has notified FHI that they will not be able to complete treatment (by December 31, 2007) of the 26 cubic meters of reactive waste FHI sent to them in the February and March 2007 timeframe. This development occurred after the schedule showing completion of treatment by December 31, 2007, was provided. RL had counted on this waste volume being treated in accordance with subcontract requirements to support meeting the volume requirement. As a result, FHI is now working with PF East to identify other wastes that could be shipped and treated within this calendar year to offset the reactive waste stream. FHI is currently looking at additional state only waste as the greatest confidence for success this late in the year.
4. FHI is scheduled to resume onsite processing in September of the Albany soils, Tank Farm soils, and grouted Uranium drums. Completion of this activity will provide approximately 70 cubic meters of MLLW that contributes to the M-91-42 requirement. As of mid-September, 18 cubic meters has been processed.
5. FHI has substituted 45 cubic meters of debris waste requiring treatment at PFNW for a volume of MLLW oils and state only waste conducive to short treatment durations that could be shipped and treated at PF East, again to reduce volume and reliance on PFNW facility for treatment of all the required volume.
6. FHI has a contract in place with EnergySolutions-Clive of Utah and profiles approved to send up to 50 cubic meters for treatment and disposal. RL is working to gain offsite disposal approval to implement this option but it has a low confidence of happening in time to support the December due date.

Despite the challenges experienced in trying to meet the requirement, RL continues to make good progress towards treating the 6,520 cubic meters required by the Tri-Party Agreement milestone and has treated/disposed 5,731 cubic meters to date. RL will continue to aggressively monitor and challenge the contractors to meet the December due date. As of September 20, 2007, FHI had shipped all but 138 cubic meters of CH-MLLW needed to meet the 6,520 cubic meters total. All waste shipments required to meet the 6,520 cubic meters treatment requirement are currently planned to be shipped by October 19, 2007. Although the actions taken to date provide an increased level of confidence, accomplishing the milestone by the December 31, 2007, due date is still at risk and is expected to be impacted by approximately three months.

Modifications to existing Tri-Part Agreement milestones are denoted with ~~strikeout~~; new milestone/text are denoted with **bolding**.

M-91-42	<p>REGARDING: (1) NEWLY GENERATED CH WASTE; AND (2) CH WASTE CURRENTLY IN ABOVE-GROUND STORAGE (NOT INCLUDING CH WASTE CURRENTLY IN ABOVE-GROUND STORAGE IN BOXES AND LARGE CONTAINERS).</p> <ol style="list-style-type: none"> 1. DOE SHALL DESIGNATE ALL NEWLY GENERATED CH WASTE AT THE POINT OF GENERATION. SUCH DESIGNATION SHALL COMPLY WITH THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100. 2. THERE ARE 5,066 CUBIC METERS OF CH-MLLW IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE COMPLEX (CWC) AND ELSEWHERE AT HANFORD AS OF 12/31/02 (AS IDENTIFIED IN DOE HFFACO MILESTONE M-26-01 LDR REPORT MLLW TREATABILITY GROUPS MLLW-02 THROUGH MLLW-10, EXCLUDING MLLW-07) THAT HAS NOT BEEN TREATED TO MEET LDR REQUIREMENTS. (THIS VOLUME DOES NOT INCLUDE 600 CUBIC METERS OF WASTE REQUIRING THERMAL TREATMENT, AS THAT WASTE IS REQUIRED TO BE TREATED BY 2006 UNDER HFFACO MILESTONES M-91-12 AND M-91-12A). DOE'S 2002 LDR REPORT ESTIMATES THAT IT WILL GENERATE AN ADDITIONAL ANNUAL VOLUME OF APPROXIMATELY 330 CUBIC METERS OF CH-MLLW (AS WASTE TYPES IDENTIFIED IN DOE HFFACO MILESTONE M-26-01 LDR REPORT MLLW TREATABILITY GROUPS MLLW-02 THROUGH MLLW-10, EXCLUDING MLLW-07). DOE WILL RETRIEVE APPROXIMATELY 800 CUBIC METERS OF CH-MLLW BY 2010. IN ADDITION TO MEETING THE REQUIREMENTS OF M-91-12 AND M-91-12A, DOE SHALL TREAT THE WASTE DESCRIBED ABOVE TO MEET LDR REQUIREMENTS ON A SCHEDULE MEETING, AT MINIMUM, THE FOLLOWING: <ol style="list-style-type: none"> A. 1630 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/04, B. 3260 CUBIC METERS BY (CUMULATIVE) SHALL BE TREATED BY 12/31/05, C. 4890 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/06, D. 6520 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/07, 2010 E. 8150 CUBIC METERS (CUMULATIVE) SHALL BE 	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE
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TREATED BY 12/31/08, AND
F. COMPLETE TREATMENT OF ALL CH-MLLW (5066 CUBIC METERS IN STORAGE AS OF 12/31/02 AS DESCRIBED ABOVE, AND RETRIEVED CH-MLLW AND NEWLY GENERATED CH-MLLW IN THE TREATABILITY GROUPS DESCRIBED ABOVE, AS OF 6/30/09, BY 12/31/09

IF CH-MLLW IN THE TREATABILITY GROUPS SUBJECT TO THIS MILESTONE GENERATED DURING THE PERIOD FROM 12/31/02 THROUGH 6/30/09 IS TREATED TO LDR STANDARDS PRIOR TO DELIVERY TO STORAGE OR DISPOSAL, THE ORIGINAL PRE-TREATMENT VOLUME OF THAT WASTE SHALL BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE. EXCEPT FOR WASTE ALREADY IN PERMITTED STORAGE, TREATMENT OF CERCLA WASTE WILL NOT BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE. IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-MLLW COVERED BY THIS MILESTONE IS LOWER THAN THE ESTIMATED VOLUMES ANTICIPATED BY THESE MILESTONES DOE WILL ONLY BE REQUIRED TO TREAT THE VOLUME OF WASTE GENERATED, RETRIEVED AND/OR IN STORAGE. IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-MLLW COVERED BY THIS MILESTONE IS SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES THE PARTIES' MAY AGREE TO REVISE THESE REQUIREMENTS.

3. AFTER JUNE 30, 2009, DOE SHALL TREAT TO MEET LDR TREATMENT REQUIREMENTS ALL NEWLY GENERATED CH-MLLW CONTAINING LDR CONSTITUENTS IN COMPLIANCE WITH WAC 173-303-140 AND BY REFERENCE 40 CFR 268.
4. THERE ARE APPROXIMATELY 440 CUBIC METERS OF CH-TRUM IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE COMPLEX (CWC) AND ELSEWHERE AT HANFORD AS OF 12/31/02. DOE'S 2002 LDR REPORT ESTIMATES THAT IT WILL GENERATE AN ADDITIONAL ANNUAL VOLUME OF APPROXIMATELY 220 CUBIC METERS OF CH-TRUM AND DOE ESTIMATES THEY WILL RETRIEVE APPROXIMATELY 1600 CUBIC METERS OF CH-TRUM BY 2010. CONSIDERING THESE ESTIMATES AND THE CONSIDERABLE UNCERTAINTY ASSOCIATED WITH THEM DOE SHALL TREAT THE WASTE CATEGORIES

DESCRIBED ABOVE TO MEET LDR REQUIREMENTS ON THE FOLLOWING SCHEDULE:

- 700 CUBIC METERS BY 12/31/04;
- 1,800 CUBIC METERS (CUMULATIVE) BY 12/31/05;
- 3,000 CUBIC METERS (CUMULATIVE) BY 12/31/06,
- 4,200 CUBIC METERS (CUMULATIVE BY 12/31/07
- 5,400 CUBIC METERS (CUMULATIVE BY 12/31/08
- 6,600 CUBIC METERS (CUMULATIVE BY 12/31/09
- 7,600 CUBIC METERS (CUMULATIVE) BY 12/31/10;
- 8,600 CUBIC METERS (CUMULATIVE) BY 12/31/11.

IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-TRUM COVERED BY THIS MILESTONE IS LOWER THAN THE ESTIMATED VOLUMES ANTICIPATED BY THESE MILESTONES DOE WILL ONLY BE REQUIRED TO TREAT THE VOLUME OF WASTE GENERATED, RETRIEVED AND/OR IN STORAGE. IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-TRUM COVERED BY THIS MILESTONE IS SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES THE PARTIES' MAY AGREE TO REVISE THESE REQUIREMENTS.

5. FOR CH TRANSURANIC WASTE NEWLY GENERATED ON OR AFTER 7/1/11 THAT IS DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100 AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTES TO MEET LDR REQUIREMENTS PURSUANT TO WAC 173-303-140 WITHIN ONE YEAR OF GENERATION.

DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF CH TRANSURANIC WASTE FOR DISPOSAL AT WIPP IN LIEU OF LDR TREATMENT, PROVIDED THAT ECOLOGY IS NOTIFIED IN WRITING OF SUCH COMPLETION OF CERTIFICATION, AND ONLY IF, AS OF THE TIME OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS WHEN DISPOSED AT WIPP. IF DOE CHOOSES TO CERTIFY IN LIEU OF TREATMENT, IT MAY MEET THE VOLUME REQUIREMENTS SPECIFIED IN THIS MILESTONE FOR ANY GIVEN YEAR BY CERTIFYING CH TRU OR CH TRUM. , PROVIDED THAT 1) ALL CH TRUM IN PERMITTED STORAGE AS OF 12/31/02 IS TREATED TO MEET LDR REQUIREMENTS OR CERTIFIED BY 12/31/2006 AND 2) ALL CH TRUM IN PERMITTED STORAGE AS OF 7/1/11 IS TREATED TO MEET LDR REQUIREMENTS OR IS CERTIFIED BY 12/31/2011.

	<p>NOTE:-IN THE EVENT THAT ITEMS 4 OR 5 BECOME APPLICABLE, AMOUNTS OF CH TRUM CERTIFIED BETWEEN 12/31/02 AND THE DATE ON WHICH ITEMS 4 OR 5 BECOME APPLICABLE SHALL COUNT TOWARDS SATISFACTION OF THE OBLIGATIONS IN ITEMS 4 AND 5.</p> <p>EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.</p>	
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