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0071774

NOV 27 2006

07-AMCP-0043

Ms. Jane A. Hedges, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton
Richland, Washington 99354

Dear Ms. Hedges:

TRANSMITTAL OF STATEMENT OF DISPUTE (SOD) FOR HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) CHANGE CONTROL FORM M-91-06-01 MILESTONES M-91-00 AND M-91-42

The purpose of this letter is to transmit the subject SOD to the State of Washington Department of Ecology (Ecology). The U.S. Department of Energy has attempted to resolve this dispute at the Project Manager level; however, the Ecology Waste Management Project Manager has indicated there is no need to discuss the issue further at the project manager level. Therefore, in accordance with Article VIII, paragraph 30 of the Tri-Party Agreement, this SOD elevates the dispute to the Interagency Management Integration Team (IAMIT) level for resolution. This SOD concerns the portions of change package M-91-06-01 that have not been extended at the Project Managers level, specifically those issues related to the certification of transuranic wastes (M-91-42) and clarifying text in M-91-00. The U.S. Department of Energy looks forward to meeting at the IAMIT level to resolve this issue.

If you have any questions, please contact me, or your staff may contact Matt McCormick, Assistant Manager for the Central Plateau, on (509) 373-9971.

Sincerely,

Keith A. Klein
Manager

AMCP:GLS

Attachment

cc: See Page 2

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M^s. Jane A. Hedges
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cc w/attach:

G. Bohnee, NPT

N. Ceto, EPA

L. J. Cusack, Ecology

S. Harris, CTUIR

R. Jim, YN

T. M. Martin, HAB

K. Niles, ODOE

R. E. Piippo, FHI

K. M. Quigley, DFSH

D. Singleton, Ecology

R. R. Skinnarland, Ecology

J. G. Vance, FFS

Administrative Record (M-91)

Environmental Portal

**STATEMENT OF DISPUTE
MILESTONE M-91-42
TRU CERTIFICATION REQUIREMENTS**

I. NATURE OF DISPUTE

This dispute is raised pursuant to Article VIII, paragraph 30, of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement or TPA), concerning disapproval by the Washington State Department of Ecology (Ecology) of Tri-Party Agreement Change Control Form #M-91-06-01 (Change Request)¹. The Change Request was submitted on September 29, 2006 by the U.S. Department of Energy (DOE). No written response was received from Ecology within fourteen days of the submittal. Thus, pursuant to Section 12.3.3 of the Tri-Party Agreement Action Plan, the change request was deemed disapproved.

DOE objects to the disapproval by Ecology and seeks to adjust the M-91 milestones to reflect realistic and achievable commitments. These changes are warranted by, and should be based upon, experience gained through DOE's execution of the milestones to date – as well as major changes in the assumptions and conditions that were the basis for the original 2003 milestones agreed to by the Tri-Parties.

In a November 9, 2006 letter, Ecology agreed to extend the dispute at the project manager level for all issues except those related to milestones due on or before December 31, 2006. Accordingly, this Statement of Dispute concerns only the transuranic waste certification (“contingent”) milestones and related definitions.

¹ The M-91-06-01 TPA change request encompassed changes to the entire M91 series of milestones including the M-91-42 milestone (subject of this current dispute).

II. DOE'S POSITION ON THE DISPUTE

DOE believes milestones covering the rate for certification of contact handled transuranic mixed waste (TRUM), and addressing the backlog of TRUM waste in storage, should be changed to reflect the significant experience gained by doing this work over the past three years, as well as changes to the key assumptions that formed the basis for the original 2003 milestones, in an environment of constrained fiscal resources.

The milestones were established prior to the start of transuranic waste retrieval operations in 2003. With no experience to base them on, the milestones were set to reflect reasonable assumptions about 1) the condition of the containers to be retrieved; 2) the percentage of drums that would require repackaging for disposal at the Waste Isolation Pilot Plant (WIPP); and 3) how much newly-generated transuranic waste would be available for certification. Over the past three years, there have been significant changes in conditions or circumstances, including:

1) The original assumption from 2002 was that only 10% of the retrieved drums would require overpacks to safely retrieve and process the drums. Actual retrieval experience to date has shown that 35% of the drums require overpacking and it is forecasted that 95% of the remaining drums to be retrieved will require overpacking.

2) The number of retrieved drums that require remediation to meet WIPP disposal requirements (e.g. remove prohibited items) is higher than originally anticipated. Additionally, even the overpacked containers that meet WIPP accept criteria require repackaging into standard drums in order to maximize the efficient use of the WIPP repository space and transportation resources. This has resulted in committing more resources to repackaging the containers and resulted in the repackaging effort becoming the critical path to certifying the waste for disposal.

3) The amount of newly-generated transuranic waste available for certification through 2006 was approximately 700 cubic meters less than the amount forecasted for that time period.

A large portion of this change is due to a slow down in decommissioning and disposal (D & D) activities at the Plutonium Finishing Plant necessitated by the continued storage of plutonium at the facility.²

This is not a problem of there not being enough TRUM in storage to certify. There is in fact enough waste in storage to meet the 2006 milestone for certification of TRUM, but it requires significantly more effort and resources to sort through and repackage wastes to meet WIPP acceptance criteria than it does to certify newly generated wastes. DOE has been working to certify this waste, but it will not be completed in sufficient time to meet the milestone. Had the assumptions about drum condition and TRUM generation proved accurate, this stored waste would not have been “needed” for milestone completion.

With regard to so-called “backlog” waste, about 80% of the backlog in storage has been certified since 2003; what’s left is an array of small waste streams (about 29 in all) that will only provide about 200 cubic meters of certifiable waste (25 of these waste streams will only provide about 100 cubic meters of certifiable waste). Most of these waste streams are not yet approved for shipment to WIPP and it can take six months or longer to prepare the documentation and obtain approval for each waste stream. DOE has sought WIPP shipping approval for the backlog waste streams based on their size in order to maximize the amount of waste that could be certified for shipment.

When the M-91 milestones were signed in 2004, DOE negotiated new performance incentives for the Project Hanford Management Contract to reflect the milestone requirements for certification of transuranic waste. In 2005, based on the changing conditions (the same as noted above, e.g. drums in worse condition than anticipated, less waste being generated by PFP

² Modification of the mission of the Plutonium Finishing Plant (PFP) for national security purposes has reduced the decontamination and decommissioning activities at that facility, thereby reducing the near term volume of transuranic waste that was forecast to be generated.

cleanup) and the fact that these changes were outside the control of the contractor, DOE changed the performance incentives. Ecology has questioned whether this change was an indication DOE didn't intend to meet the milestone. In reality, the change reflects the required and reasonable business practices when a contractor's ability to achieve performance measures is rendered impossible due to the conditions at hand. It's important to note that it would have been DOE's preference to have both the Tri-Party Agreement milestones and the contractor's incentives updated at the same time to ensure alignment; that approach was not possible, however, because the milestones were "contingent" upon finalization of a legal process (the HWMA proceedings now under appeal) to determine the state's jurisdiction over TRUM and thus not technically in effect and subject to a change process.

Ecology should approve the attached change request that modifies the M-91-00 major milestone definitions and adjusts the M-91-42 TRUM certification requirements. Rejection of the change request was unreasonable given the circumstances and is, in fact, an affront to the very spirit of the TPA, which anticipates adjusting milestones as a result of changed conditions. (See, HFFACO Article XL, Good Cause for Extensions.)

III. SUPPORTING INFORMATION

A. Milestone History

The M-91 milestone series was established on June 14, 1996. TPA milestone M-91-03 required a TRU/TRUM Project Management Plan for transuranic and transuranic mixed waste; DOE submitted the plan June 28, 2000. Disagreement over its adequacy, as well as a lack of defined schedules and milestones, led to an extended M-91 dispute. By 2003, disagreement about state authority over transuranic waste destined for disposal at WIPP, and the

need to align milestones with site budgets and priorities, caused the Tri Parties to initiate negotiations at the Director of Ecology level. These negotiations included DOE Headquarters senior management (Assistant Secretary for Environmental Management), the Director of Ecology, and the EPA Hanford Project Manager. From January through March 2003, the Tri-Parties engaged in detailed negotiations in an effort to resolve the concerns related to the M-91 milestones. Of significant issue was whether transuranic mixed waste was subject to Resource Conservation Recovery Act/Hazardous Waste Management Act (RCRA/HWMA) Land Disposal Restrictions (LDR). On March 4, 2003, DOE submitted a final M-91 change package to the State of Washington; the state subsequently filed suit under the National Environmental Policy Act (NEPA), complaining that DOE did not have sufficient NEPA documentation to accept waste at Hanford -- particularly transuranic waste for storage from offsite. On March 10, 2003, the State rejected DOE's final M-91 TPA Change Package and issued a Final Determination under the dispute process. The Final Determination sought to establish a compliance schedule for dispositioning Hanford's backlog of transuranic, mixed low level wastes, and retrieval and processing of "retrievably stored" suspect transuranic waste.

On April 9, 2003, DOE appealed the Final Determination to state (Cause No. 03-2-00722-3) and federal (Cause No. CT-03-5038-EFS) courts. On April 30, 2003, Ecology issued an administrative order (No. 03NWPKW-5494) addressing the retrieval of retrievably-stored waste (RSW); processing of retrieved, stored, and newly generated transuranic waste; and management of mixed-low-level waste (MLLW). On May 29, 2003 DOE appealed the administrative order to the Washington State Pollution Control Board (PCHB No. 03-079). In all four litigation matters, DOE raised issues concerning the scope of state authority over transuranic waste. During this same timeframe, DOE was responding to the State's NEPA lawsuit (Cause No. CT-03-5018-AAM).

On October 23, 2003, Ecology and DOE agreed to pursue a final resolution to the question of the state's authority to impose RCRA/HWMA LDR treatment requirements and LDR storage prohibitions on transuranic mixed wastes in the NEPA lawsuit (Cause No. CT-03-5018-AAM). Among other things, included in the terms of this October 23, 2003 Settlement Agreement were: (1) tentative milestones to govern the retrieval, characterization, treatment, certification and storage of retrievably stored waste, (2) "contingent" milestones for the treatment of TRUM or certification of the untreated TRUM for shipment to the Waste Isolation Pilot Plant (WIPP) in New Mexico, (3) provisions for disputing the M-91 milestones subject to the settlement, and (4) provisions for amending the M-91 milestones subject to the settlement. Even though the milestones were tentative DOE immediately began work to meet them.

On January 10, 2006, the federal district court held that the hazardous portion of transuranic mixed waste stored in Washington State is subject to RCRA/HWMA LDR. On February 8, 2006, DOE submitted TPA Change Request No. M-91-05-01 to reflect the district court's opinion in accordance with the October 23, 2003 Settlement Agreement to make the contingent milestones effective. Even then, as elaborated upon later in this document, discussions with Ecology were well underway regarding the need to revise quantities and dates to reflect actual experience and conditions. On March 9, 2006 the United States filed a notice with the appellate court that it intended to appeal the lower court's judgment. Nonetheless, DOE has been working in good faith since October 23, 2003 to meet the M-91 TPA contingent milestones in the belief that Ecology and DOE would agree on new quantities to reflect the changed conditions from those assumed or amounts estimated since negotiating the 2003 M-91 milestones.

In the summer of 2006, it became apparent that Ecology was not inclined to revise the M-91-42 portion of the M-91 Milestone. On September 29, 2006 DOE submitted TPA Change

Request No. M-91-06-01 that could then be formally disputed if Ecology continued to disagree with the DOE's proposal. This current TPA dispute springs from Ecology rejecting that proposal to modify the milestones to reflect realistic commitments based upon experience gained through execution of the milestones to date and changes in assumptions and conditions that formed the basis for the original 2003 milestones. In addition, updated forecasts for newly generated wastes indicate there will be less waste generated than that estimated in 2002. The incorrect assumptions for the condition of retrieved containers and the over-estimation of future waste volumes impacted DOE's ability to meet the M-91-42 TRUM certification schedule despite DOE's actions to mitigate the impacts of these changes.³ Actual experience managing the waste since 2003, when the major milestone definitions and M-91-42 certification rates were established, has found that: (1) The volume of newly generated transuranic waste has been less than the planning basis established in 2002 (2002-2006 generation was approximately 700 cubic meters less than forecast). (2) The near term forecast (2007-2011) for transuranic waste generation is also significantly lower than the 2002 planning basis (approximately 6700 cubic meters less). (3) The drums that are being retrieved have been found to be in worse condition than assumed in 2002. (4) Waste requires more resources to treat and repackage than assumed in 2002.

A detailed chronology reflecting the history and discussions related to TPA milestone M-91-42 is included in Appendix A, Table 1.

³ DOE's actions included increasing staffing at WRAP, increasing repackaging stations at T-Plant, and exploring alternatives for remediation/certification of overpacked containers. See, letter 06-AMCP-0027, dated July 28, 2006 from K. Klein to J. Hedges, "Completion of Certification of 1800 Cubic Meters of Transuranic Waste Toward Tri-Party Agreement Milestone M-91-42 Requirements."

B. M-91 Milestones Current Status Summary

Since the M-91 milestones were agreed to in October 2003, DOE has completed an enormous amount of work and made good-faith progress toward project completions. Examples include:

- Meeting 31 M-91 requirements on or ahead of the due dates. Several significant requirements such as annual treatment volumes for MLLW treatment and annual retrieval volumes for RSW have been met up to 11 months early. Notably, DOE has retrieved over 4,633 cubic meters of RSW ahead of schedule and treated over 5,000 cubic meters of contact handled MLLW well ahead of the M-91 TPA milestone schedule. Only the December 31, 2005 M-91-42 milestone to certify 1800 cubic meters of TRUM waste was completed after its due date (completed April 27, 2005)⁴.
- Certifying more than 2,200 cubic meters of transuranic waste through November 2006 and having just completed the 300th shipment of transuranic waste to WIPP in New Mexico (including 181 shipments from October 2005 through November 2006)
- Completing retrieval of Trench 4 – a high risk trench and a priority for Ecology – about six weeks ahead of schedule

A detailed list of completed milestone commitments is provided in Appendix A, Table 2.

⁴ The milestone was not effective on the December 31, 2005 due date because the final appealable judgment had not been rendered. The M-91-42 contingent milestones were effective 30 days after the January 9, 2006 final appealable judgment or when Ecology approved TPA Change Request No. M-91-05-01 on February 10, 2006.

IV. DOE PATH FORWARD TO RESOLVE DISPUTE

DOE proposes to: 1) update the M-91-42 interim milestone TRUM certification requirements based on December 2005 contact handled TRUM waste storage, generation and treatment or certification data, and 2) clarify the milestone text for M-91-42 and M-91-00 definitions. DOE has included a proposed change request in appendix B (M-91-06-04) and recommends that the Tri-Parties approve the change request in order to resolve this dispute.

IV. HISTORY OF ATTEMPTED RESOLUTION

As described in the chronology in Appendix A, detailed discussions to attempt to address the TRUM certification issues that are the subject of this dispute started in October 2005. From November 2005 through April 2006 numerous meetings were held to discuss the initial basis of the milestone volumes, changed conditions, and new information gained since implementing the milestones in 2003.

In the initial meetings the parties agreed to attempt to reach resolution by the end of December 2005. However, subsequent to that meeting Ecology indicated that the M-91-42 TRUM certification issues should not be addressed separately from other M-91 issues. This led to more detailed discussions on all the M-91 milestones including development of the information that would be used as the basis for modifying the existing milestones. This data took into account actual conditions, the amount and type of waste retrieved, and processing experience to date. The data also provided an updated forecast of waste to be generated. In February 2006 general agreement was reached on the December 2005 basis numbers (forecast, storage, retrieval breakout) and several versions of proposed change packages were discussed.

Though some changes were agreed upon and implemented through separate change packages, the majority of the M-91 issues, and TRUM certification issues in particular, were not resolved.

In an April 27 meeting the Ecology TPA Section Manager indicated the parties were far apart on the proposed changes and requested that DOE prepare and submit a change package to formally enter the TPA dispute process. Ecology also indicated that resolution of this issue would be considered by its senior management alongside other issues related to the overall schedule for cleanup of the Hanford Site. From April through November 2006, status briefings on DOE's progress toward meeting the M-91-42 milestone were provided to Ecology in monthly Project Manger Meetings and periodic Interagency Management Integration Team (IAMIT) meetings.

On September 29, 2006 DOE submitted the M-91-06-01 change package. Since then, as detailed in the chronology (Appendix A, Table 1), the Ecology Waste Management Project Manager has indicated there is no need to discuss the issue further at the project manger level. The Ecology letter rejecting the proposal to extend the dispute at the project manager level states, "Ecology does not believe that additional time is needed to understand the issues associated with USDOE's ability to meet those requirements." See Appendix A, Table 1, Chronology for more detail.

Appendix A

Table 1: Chronology

Appendix A

Table 1: Chronology

DATE	EVENT DESCRIPTION
Jan-Mar 2003	Extensive negotiations fail to resolve issues.
Mar 4, 2003	DOE's final M-91 TPAChange Package submitted to Ecology
Mar 4, 2003	State files NEPA Complaint
Mar 10, 2003	Ecology issues M-91 Final Determination
Apr 9, 2003	DOE appeals Final Determination
Apr 30, 2003	Ecology issues an Administrative Order addressing retrieval of RSW, and processing of retrieved, stored, and newly generated Transuranic and MLLW.
May 29, 2003	DOE appealed the administrative order to the PCHB
May 2003- May 2004	Implementation starts based on Admin Order and continues based on October 23, 2003 Tentative Agreement Change Package.
Oct 23, 2003	M-91 Settlement Agreement signed. Includes tentative agreement M-91 Change Package with contingent milestones. Implementation of waste management activities is consistent with the M-91 tentative agreement milestones.
Dec 1, 2003 - Feb 13, 2004	Public Comment on M-91 Change Package
Approx. March 2004 to present	Monthly waste tracking reports given to the Ecology Project Manager providing volumes of waste dispositioned (retrieved/treated etc) including volumes of transuranic waste shipped to WIPP
May 10, 2004	Final M-91 Change Package signed by Ecology
Jan 24, 2005	Order granting final partial summary judgment issued in favor of Ecology concerning TRUM LDR count
Feb 2005	Guidance/direction received to delay consolidation of Pu. Impacts PFP D&D schedule and the volume of transuranic waste available to certify
Oct 23, 2005	Project Mangers Meeting (PMM): Various proposed changes to M-91 milestones discussed. Planned meeting with Ecology for October 31. Agreed to put M-91 Planning Documents approach table in PMM minutes to further document agreement on approach.
Nov 2005 – April 2006	Held detailed meetings with Ecology approximately every two weeks to discuss changes that have occurred since 2003. ⁵
Nov 16, 2005	M-91 meeting with Ecology: Presentation to Ecology, including the Project Manager (PM) on contingent milestones. Presentation included: 1) Background including that the original milestone language

⁵ Initially the primary focus of discussion was the TRUM certification issue, but later the meetings were expanded to address all M-91 issues. Detailed discussions included information on the initial basis of volumes and the original assumptions. Discussions included information regarding anticipated conditions and actual conditions encountered, revised forecasts, knowledge and experience gained from on-going retrieval and processing activities, and updated retrieval forecast information. Planning changes such as the PFP delay and other issues impacting the milestones also were discussed.

	<p>recognized the considerable uncertainty associated with the TRUM volume estimates and possibility that adjustments may be necessary. 2) Progress made on M-91 milestones to date. 3) Implementation experience (actual conditions observed) and assumption updates. 4) Proposal for contingent milestone TPA change request. 5) Agreed to try to reach agreement by Christmas 2005.</p>
Nov 17, 2005	<p>As follow-up to Nov 16 meeting, Ecology Project Manager was provided with a table of what was believed to be the original basis for the 2003 TRUM certification contingent milestones.</p>
Nov 30, 2005	<p>M-91 meeting with Ecology. Presented tables of current transuranic waste streams expected from retrieval, storage, and new generation.</p>
Dec 5, 2005	<p>M-91 Meeting with Ecology. Primarily a review of what was discussed in previous meetings because additional Ecology staff (TPA Section Manager) started to participate in meetings. TPA manager indicates issues should not be addressed separately (initially addressing just the TRUM certification issues had been suggested by DOE since those issues had the most immediate potential impact). See presentation material in Appendix C.</p>
Dec 9, 2005	<p>M-91 Meeting with Ecology discussed rates on M-91-42 TRUM certification.</p>
Dec 20, 2005	<p>M-91 Meeting with Ecology.</p>
Dec 31, 2005	<p>M-91-42 contingent requirement to certify 1800 cubic meters of transuranic waste passes. Milestone still not in effect because no final appealable judgment on Count 3 or the change package required by the Settlement Agreement to conform the milestones to the outcome of the judgment. As of 12/31/05 approximately 1546 cubic meters of transuranic waste had been certified showing progress was being made.</p>
Jan 4 2006	<p>M-91 Meeting with Ecology to review forecast data actuals versus the proposed change request rates</p>
Jan 6, 2006	<p>SWEIS Settlement Agreement reached and includes stipulation that court enter final judgment on TRUM LDR claim that will give rise to DOE's contingent obligations under the TPA M-91 Milestone series (i.e. the TRUM milestones)</p>
Jan10, 2006	<p>Decision handed down on cross summary judgment motions on Count 3 (TRUM LDR count) of litigation in favor of Ecology.⁶</p>
Jan 20, 2006	<p>M-91 Meeting with Ecology to review waste volume changes since 2003</p>
Jan 24, 2006	<p>TPA Quarterly M-91 presentation: Some discussion of M-91 TRU certification milestones. Disagreement as to whether the 12/31/05 milestone had been missed, DOE indicated that the requirement was not in effect. Agreed that 1800 cubic meters of transuranic waste had not been certified as of 12/31/05, but not on the enforcement potential significance. The current status of certification was provided as "behind schedule" (referring to the 12/31/06 contingent milestone). In</p>

⁶ The court's ruling has been appealed by DOE.

	subsequent quarterlies that status of the contingent milestones is provided including volume certified.
Jan 24, 2006	At the M-91 Project Manager's Meeting (PMM) Ecology was told that transuranic waste certification was "behind schedule." Status of "contingent milestones" updated monthly in PMMs from this meeting on since they became effective in February 2006.
Feb 3, 2006	M-91 meeting with Ecology discussed the contingent milestones change request and PFP delay on the reduction of volumes
Feb 8, 2006	M-91 "30-day" change package submitted to Ecology to conform the M-91 milestones to the final appealable judgment (i.e. make the contingent milestones effective). The Settlement Agreement required this to be submitted with in 30 days of the Final Appealable judgment.
Feb 10, 2006	Ecology signs the "30-day" change package, making the contingent milestones effective.
Feb 16, 2006	M-91 Meeting with Ecology. General agreement reached on the December 2005 basis numbers (forecast, storage, retrieval breakout). No agreement on treatment rates. Ecology proposes rates even higher than existing milestone rates for large size and RH TRU(M) and MLLW.
Mar 17, 2006	M-91 Meeting with Ecology Reviewed draft RL change request with proposed M 91-42 rates and why they should be changed.
Mar 31, 2006	M-91 Meeting with Ecology to discuss M91-41, 43 and 44 rates and agencies disagreed on the proposed rates.
Apr 17- Aug 2006	Ecology TRU Certification "Inspection". Initial few meetings are primarily a review of the same information that had been discussed since October, but with different members of Ecology staff.
Apr 20, 2006	M-91 TPA quarterly Presentation. TRUM certification status as "Behind Schedule". 1773 cubic meters certified as of 4/17/06. Ecology requests monthly status also be provided in IAMIT
Apr 27, 2006	M-91 Meeting with Ecology: Ecology indicates that DOE and Ecology are far apart on issues such as treatment rates. Requests submittal of a formal change package to more formally initiate the TPA dispute process and put the M-91 issues in the hopper with the rest of the site issues (in particular alluding to the vitrification plant issues).
April 27, 2006	Certification of 1800 cubic meters completed.
Summer 2006 - Present	At request of Ecology, in addition to monthly PMMs and quarterly TPA reviews, the status of TRUM certification is provided at monthly IAMIT meetings
Jul 20, 2006	M-91 TPA Quarterly Presentation. Status of TRUM certification given as behind schedule. 1929 cubic meters certified as of 7/10/06.
July 28, 2006	RL submits letter to Ecology notifying it of completion of certification of 1800 cubic meters of Transuranic waste (on April 27) and actions taken to improve TRU(M) certification through-put.
August 17, 2006	IAMIT briefing to Ecology on TRUM Certification. 1979 cubic meters certified as of 8/14/06

Sept 21, 2006	IAMIT briefing to Ecology on TRU certification. 2139 cubic meters certified as of 9/15/06
Sept 29, 2006	DOE submitted signed M-91 "all changes" change request number M-91-06-01 to EPA and Ecology
Oct 13, 2006	M-91-06-01 Change package was disapproved. No written response was received from Ecology within 14 days of the submittal. This constitutes disapproval under the TPA Action Plan Section 12.3.3.
Oct 19, 2006	IAMIT briefing on TRUM Certification. 2214 cubic meters certified as of 10/10/06
Oct 20, 2006	RL submits letter to Ecology objecting to Change Package disapproval and initiating dispute in accordance with the TPA Article VIII, paragraph 30. Requested extension at Project Manager level until January 31, 2007. Requested response by October 30 to allow adequate time for preparation of statement of dispute in 30 days if needed.
Oct 25, 2006	M-91 PMP meeting. In addition to the PMP, the dispute is discussed and the Ecology Project Manager appeared to be supportive of extending the dispute at the PM level, particularly as many issues may be worked out through collaborative development of the PMP.
Oct 25, 2006	RL M-91 Project Manager signs extension agreement form and provides it to the Ecology Project Manager to facilitate agreement to extend the dispute. Ecology Project Manager indicates she needs to discuss internally.
Oct 26, 2006	M-91 PMM: Provided M-91 status to Ecology. Ecology PM indicated internal meeting was scheduled for October 30 to discuss dispute and no action on the extension could be taken until after that meeting. Also discussed PM level meetings on the dispute, but the Ecology PM indicated that would also be addressed in the October 30 internal meeting.
Oct 31, 2006	RL email and voicemail to Ecology PM re:dispute status and plans for PM level discussions.
Nov. 1, 2006	Ecology PM informally notifies RL that the dispute will not be extended at the PM level. One Ecology concern is day for day slip while in dispute. The Ecology PM thought a letter stating the Ecology position would be out by November 3.
Nov. 8, 2006	M-91 PMP "workgroup" meeting with Ecology. Concerning the dispute the Ecology PM indicated the following: 1) Portions of the dispute related to items due 12/31/06 would not be extended at the PM level. 2) The dispute on all other items in the change package would be extended at the PM level 3) A letter from Ecology explaining that decision was expected to be delivered by November 10. 4) There is no point or need to have PM meetings on the 12/31/06 TRUM dispute issues. 5) Other M-91 issues could be worked through the on-going M-91 PMP workgroup in the near term.

Nov. 14, 2006	DOE receives Nov. 9 letter from Ecology that is generally consistent with the November 8 information obtained from the Project Manager. The letter indicates the SOD for the portion of the dispute that is not extended at the PM level is due December 21, 2006. No date is given for the extension of the dispute at the PM level.
Nov. 15 2006	The M-91 PMP workgroup meeting is held. As a side discussion with the Ecology PM it is decided that due to the ambiguity of the November 9 letter it will be discussed at the Project Manger Meeting on the 16 th and clarification can be agreed upon and documented in the Project Manager meeting (PMM) minutes. This is done in the PMM on the morning of the 16 th .
Nov 16, 2006	As part of the TRUM certification status at the monthly IAMIT meeting on the afternoon of the 16 th DOE provides the status of the dispute and notifies Ecology of the intent to submit the SOD by December 21 as indicated by the November 9th letter. The Ecology TPA Section Manger indicates that the December date was a mistake and the SOD should have been due November 21. Ecology issues a new letter to reflect the revised SOD due date, but extends the due date by two working days (Due November 27) .

Appendix A

Table 2: Completed M-91 Milestones (2003-2006)

Appendix A

Table 2: Completed M-91 Milestones (2003-2006)

Milestone	Due Date	Completed	Finished On Time	Finished Early	Finished Late	Title
M-091-03A	12/31/03	12/31/03	X			Submit 12/31/03 Revision Of TRUM And MLLW PMP To Ecology
M-091-05-T01	12/31/07	09/29/06		X		Submit TRU/TRUM Facility ES/FDC To Ecology
M-091-12A	09/30/05	08/16/05		X		Complete Thermal Treatment Of 240 CM Of CH-MLLW
M-091-40A	11/15/03	10/17/03		X		Initiate Retrieval At Burial Ground 218-W-4C
M-091-40B	12/31/04	09/01/04		X		Retrieve CH-RSW 1200 Cubic Meters (Cumulative)
M-091-40C	12/31/05	07/12/05		X		Retrieve CH-RSW 2700 Cubic Meters (Cumulative)
M-091-40H	*	09/12/03	X			Update 218-W-4C SAP
M-091-40I	*	12/29/05		X		Update 218-W-4B SAP
M-091-40J	*	08/29/05		X		Update 218-W-3A SAP
M-091-40K	*	08/24/04		X		Update 218-E-12B SAP
M-091-40L-001	03/17/04	03/17/04	X			Submit Oct-Dec 1st Qtr FY04 Burial Ground Sample Results
M-091-40L-002	06/04/04	06/04/04	X			Submit Jan-Mar 2nd Qtr FY04 Burial Ground Sample Results
M-091-40L-003	09/29/04	09/29/04	X			Submit Apr-Jun 3rd Qtr FY04 Burial Ground Sample Results
M-091-40L-004	12/16/04	12/16/04	X			Submit Jul-Sep 4th Qtr FY04 Burial Ground Sample Results
M-091-40L-005	02/17/05	02/17/05	X			Submit Oct-Dec 1st Qtr FY05 Burial Ground Sample Results
M-091-40L-006	05/12/05	05/12/05	X			Submit Jan-Mar 2nd Qtr FY05 Burial Ground Sample Results
M-091-40L-007	09/30/05	09/20/05		X		Submit Apr-Jun 3rd Qtr FY05 Burial Ground Sample Results
M-091-40L-008	12/15/05	12/14/05		X		Submit Jul-Sep 4th Qtr FY05 Burial Ground Sample Results
M-091-40L-009	03/15/06	03/09/06		X		Submit Oct-Dec 1st Qtr FY06 Burial Ground Sample Results
M-091-40L-010	06/15/06	05/31/06		X		Submit Jan-Mar 2nd Qtr FY06 Burial Ground Sample Results
M-091-40L-011	09/15/06	07/21/06		X		Submit Apr-Jun 3rd Qtr FY06 Burial Ground Sample Results
M-091-40P	11/15/03	11/11/03		X		Start Vapor Extractions
M-091-40Q	01/15/04	01/12/04		X		Start Retrieval In Trench 4
M-091-40R	12/31/06	11/21/06		X		Complete retrieval of Trench 4

Milestone	Due Date	Completed	Finished On Time	Finished Early	Finished Late	Title
M-091-42A	12/31/04	01/15/04		X		Treat 1630 Cubic Meters CH-MLLW (Cumulative)
M-091-42B	12/31/05	03/09/05		X		Treat 3260 Cubic Meters CH-MLLW (Cumulative)
M-091-42C	12/31/06	10/27/06		X		Treat 4890 Cubic Meters CH-MLLW (Cumulative)
M-091-42G	12/31/04	12/19/04		X		Treat 700 Cubic Meters CH TRUM
M-091-42H	12/31/05	04/27/06			X	Treat 1800 Cubic Meters CH TRUM (Cumulative)
M-091-45A	09/30/04	09/30/04	X			Submit Report For RH Waste & Boxes Of RH/CH Waste
M-091-45B	09/30/05	09/29/05		X		Submit Report For RH Waste & Boxes Of RH/CH Waste
M-091-45C	09/30/06	09/29/06		X		Submit Report For RH Waste & Boxes Of RH/CH Waste

Total of enforceable milestones including targets = 32

Total Completed On Time = 9

Total Completed Early = 22

Total Completed Late = 1

* SAPs are due at least 45 days prior to starting retrieval in the specific burial ground.

Appendix B

Change Request M-91-06-04

Change Number M-91-06-04	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date 11/22/2006												
Originator Mark French		Phone (509) 373-9863												
Class of Change <input checked="" type="checkbox"/> I – Signatories <input type="checkbox"/> II – Executive Manager <input type="checkbox"/> III – Project Manager														
Change Title Modification of <u>Hanford Federal Facility Agreement and Consent Order</u> (Agreement) M-91-00 & 42 Milestones														
Description/Justification of Change This change package modifies the M91-00 major milestone definitions and the M-91-42 certification of transuranic waste rates and clarifying text. (Continued on page 2)														
Impact of Change The changes made by approval of this change request do not impact the health and safety of the workforce and do not impact the environment.														
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended and Hanford Site internal planning management, and budget documents (e.g., USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, LDR Report).														
Approvals <table border="0" style="width: 100%;"> <tr> <td style="width: 40%; border-top: 1px solid black;">Ecology</td> <td style="width: 15%; border-top: 1px solid black;">Date</td> <td style="width: 15%; border-top: 1px solid black;">_____ Approved</td> <td style="width: 30%; border-top: 1px solid black;">_____ Disapproved</td> </tr> <tr> <td style="border-top: 1px solid black;">DOE-RL</td> <td style="border-top: 1px solid black;">Date</td> <td style="border-top: 1px solid black;">_____ Approved</td> <td style="border-top: 1px solid black;">_____ Disapproved</td> </tr> <tr> <td style="border-top: 1px solid black;">EPA</td> <td style="border-top: 1px solid black;">Date</td> <td style="border-top: 1px solid black;">_____ Approved</td> <td style="border-top: 1px solid black;">_____ Disapproved</td> </tr> </table>			Ecology	Date	_____ Approved	_____ Disapproved	DOE-RL	Date	_____ Approved	_____ Disapproved	EPA	Date	_____ Approved	_____ Disapproved
Ecology	Date	_____ Approved	_____ Disapproved											
DOE-RL	Date	_____ Approved	_____ Disapproved											
EPA	Date	_____ Approved	_____ Disapproved											

Description/Justification of Change (cont)

The Tri-Parties have held discussions to re-assess the M-91 commitments established in 2003 that were based on inventory volumes, future generation projections, and assumed condition of retrieval waste packages from the December 2002 timeframe. Actual experience managing the waste since the Summer and Fall of 2003 when the major milestone definitions and M-91-42 certification rates were established has found that: (1) The volume of newly generated transuranic waste has been less than the planning basis established in 2002 (2002-2006 generation was approximately 700 cubic meters less than forecast). (2) The near term forecast (2007-2011) for transuranic waste generation is also significantly lower than the 2002 planning basis (approximately 6700 cubic meters less). (3) The drums that are being retrieved have been found to be in worse condition than assumed in 2002. (4) Waste requires more resources to treat and repackage than assumed in 2002.

The original assumption from 2002 was that only 10% of the retrieved drums would require overpacks. Actual retrieval experience to date has shown that 35% of the drums require overpacking and it is forecasted that 95% of the remaining drums to be retrieved will require overpacking. The number of drums that require remediation to meet WIPP disposal requirements (e.g. remove prohibited items) is higher than originally anticipated. Additionally, even the overpacked containers that meet WIPP accept criteria require repackaging into standard drums in order to maximize the efficient use of the WIPP repository space and transportation resources. This has resulted in committing more resources to repackaging the containers and resulted in the repackaging effort becoming the critical path to certifying the waste for disposal.

The four changes identified above have impacted DOE's ability to meet the transuranic waste certification rates that were established in 2003 based on 2002 assumptions and forecast data.

The major milestone definitions related to certification, the rate for certification of contact handled transuranic mixed waste (TRUM), and addressing the backlog of TRUM waste in storage are being modified by this change package to reflect experience gained through execution of the milestone to date as well as changes to the assumptions that formed the basis for the original 2003 milestones agreed to by the Tri-Parties. The M-91-42 milestone was established prior to the start of transuranic retrieval operations in 2003 and was based on reasonable assumptions as to the condition of the containers and the percentage of drums that would require repackaging to remove prohibited items in order to meet requirements for disposal at the. Additionally, the amount of newly generated transuranic waste available for certification between 2002 and 2006 was approximately 700 cubic meters less than the amount forecasted for that time period.

The Tri-Parties recognize that the rates need to be updated and by approving this change package authorize the modification of the definitions and rates based on experience managing the waste since 2003.

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

<p>M-91-00</p>	<p>COMPLETE THE ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND MODIFICATION OF PLANNED FACILITIES NECESSARY FOR RETRIEVAL, STORAGE, AND TREATMENT/PROCESSING OF ALL HANFORD SITE RCRA MIXED AND SUSPECT MIXED LOW-LEVEL WASTE AND RCRA MIXED AND SUSPECT MIXED TRANSURANIC WASTE.</p> <p>DEFINITIONS</p> <p>THE FOLLOWING DEFINITIONS APPLY TO THIS SERIES OF MILESTONES</p> <p>"BOXES AND LARGE CONTAINERS" AS USED HEREIN IS DEFINED AS WASTE CONTAINERS THAT ARE NOT 55-GALLON DRUMS AND THAT CANNOT BE PLACED IN SUCH DRUMS.</p> <p>"LARGE CONTAINERS" AS USED HEREIN HAS DIFFERENT MEANINGS DEPENDING ON WHETHER IT IS USED IN REFERENCE TO MLLW/LLW OR TRANSURANIC WASTE.</p> <p>WHEN REFERRING TO MLLW/LLW, LARGE CONTAINERS ARE CONTAINERS GREATER THAN OR EQUAL TO 10 CUBIC METERS.</p> <p>WHEN REFERRING TO TRANSURANIC WASTE, LARGE CONTAINERS ARE CONTAINERS THAT ARE NOT 55 GALLON DRUMS OR 55 GALLON DRUMS OVERPACKED IN 85 GALLON DRUMS AND CONTAINERS THAT CAN NOT BE PLACED IN 55 GALLON DRUMS. AN EXCEPTION TO THIS SIZE DEFINITION IS NEWLY GENERATED WIPP STANDARD WASTE BOXES. NEWLY GENERATED WIPP STANDARD WASTE BOXES ARE NOT CONSIDERED "LARGE CONTAINERS".</p> <p>"CERTIFICATION" AS USED HEREIN IS DEFINED AS COMPLETION OF ALL CERTIFICATION ACTIVITIES REQUIRED BY THE WIPP HAZARDOUS WASTE PERMIT AND ENTRY INTO THE WIPP WASTE INFORMATION SYSTEM.</p> <p>"NEWLY GENERATED" AS USED HEREIN IS DEFINED AS WASTE GENERATED AFTER 12/31/02 UNLESS OTHERWISE</p>	<p>TO BE DETERMINED*</p>
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SPECIFIED.

“DESIGNATION” AS USED HEREIN IS DEFINED AS THE PROCESS FOR DETERMINING: (1) WHICH CONTAINERS OF LOW-LEVEL WASTE ARE MLLW; AND, (2) WHICH CONTAINERS OF TRANSURANIC WASTE ARE MIXED TRANSURANIC WASTE (CH-TRUM OR RH-TRUM). DESIGNATION OF WASTE WILL BE PERFORMED PURSUANT TO WAC 173-303-070 THROUGH 100. THESE REGULATIONS ALLOW THE USE OF “ACCEPTABLE KNOWLEDGE,” SURROGATE SAMPLING AND OTHER MEASURES FOR DESIGNATION TO MINIMIZE WORKERS’ RADIATION EXPOSURE AND TO REDUCE COSTS. WHERE APPLICABLE, DOE INTENDS TO USE INFORMATION GATHERED THROUGH THE CERTIFICATION OF TRANSURANIC WASTE IN SUPPORT OF ITS DESIGNATION OF RELATED LOW-LEVEL WASTE STREAMS. WHERE APPROPRIATE, DOE WILL USE MEASURES ALLOWED UNDER STATE AND FEDERAL REGULATIONS TO PERFORM ACCURATE AND COST EFFECTIVE DESIGNATIONS OF LOW-LEVEL WASTE.

“LOW-LEVEL WASTE” AS USED HEREIN IS DEFINED AS RADIOACTIVE WASTE THAT IS NOT SPENT FUEL, HIGH-LEVEL WASTE, TRANSURANIC WASTE, BYPRODUCT MATERIAL, OR NATURALLY OCCURRING RADIOACTIVE MATERIAL. LOW-LEVEL WASTE INCLUDES BOTH “MIXED LOW-LEVEL WASTE” AND “NON-MIXED LOW-LEVEL WASTE.” “MIXED LOW-LEVEL WASTE” (MLLW) IS LOW-LEVEL WASTE THAT IS SUBJECT TO RCRA OR 70.105 RCW. “NON-MIXED LOW-LEVEL WASTE” (LLW) IS LOW-LEVEL WASTE THAT IS NOT SUBJECT TO RCRA OR 70.105 RCW. LLW AND MLLW CAN BE CONTACT-HANDLED (CH), I.E., CH-LLW OR CH-MLLW, OR REMOTE-HANDLED (RH), I.E., RH-LLW OR RH-MLLW.

“CONTACT HANDLED” (CH) WASTE IS A WASTE PACKAGE WITH A SURFACE DOSE RATE LESS THAN ~~OR EQUAL TO~~ 200 MILLIREM PER HOUR.

“REMOTE HANDLED” (RH) WASTE IS A WASTE PACKAGE WITH A SURFACE DOSE RATE ~~EQUAL TO OR~~ GREATER THAN 200 MILLIREM PER HOUR.

“RETRIEVABLY STORED WASTE” (RSW) AS USED HEREIN

IS DEFINED AS WASTE THAT IS OR WAS BELIEVED TO BE CONTAMINATED WITH SIGNIFICANT CONCENTRATIONS OF TRANSURANIC ISOTOPES WHEN IT WAS PLACED IN THE 218-W-4B, 218-W-4C, 218-W-3A AND 218-E-12B BURIAL GROUND TRENCHES AFTER MAY 6, 1970. DURING THE RETRIEVAL PROCESS, CONTAINERS OF RSW WILL BE SEGREGATED INTO TWO CATEGORIES: (1) CH RSW AND (2) RH RSW. SUBSEQUENT ANALYSIS AND CATEGORIZATION OF RSW PURSUANT TO RCRA, CH. 70.105 RCW, THE ATOMIC ENERGY ACT, AND THE WIPP LAND WITHDRAWAL ACT WILL RESULT IN MOST OR ALL OF THIS WASTE BEING CLASSIFIED AS ONE OF THE FOLLOWING TYPES OF WASTE: CH-LLW, RH-LLW, CH-MLLW, RH-MLLW, CH-TRU, CH-TRUM, RH-TRU OR RH-TRUM. RSW DOES NOT INCLUDE WASTE IN CONTAINERS THAT HAVE DETERIORATED TO THE POINT THAT THEY CANNOT BE RETRIEVED AND STABILIZED (E.G. PLACED IN OVERPACKS) IN A MANNER THAT WOULD ALLOW THEM TO BE TRANSPORTED AND DESIGNATED WITHOUT POSING SIGNIFICANT RISKS TO WORKERS, THE PUBLIC OR THE ENVIRONMENT. WITH RESPECT TO ANY SUCH CONTAINERS, AND WITH RESPECT TO ANY RELEASE OF RSW, THE DECISION AS TO HOW TO MOVE FORWARD WILL BE DETERMINED THROUGH THE CLEANUP PROCESS SET FORTH IN RCRA, CH. 70.105 RCW, AND/OR CERCLA AS APPROPRIATE. THOSE PROCESSES MAY RESULT IN ADDITIONAL REQUIREMENTS FOR THE REMEDIATION OF SUCH WASTES.

“CAISSON WASTE” AS USED HEREIN IS DEFINED AS RSW IN THE 218-W-4B BURIAL GROUND CAISSONS ALPHA-1 THROUGH ALPHA-4.

“TRANSURANIC WASTE” AS USED HEREIN IS DEFINED AS WASTE THAT MEETS THE DEFINITION IN SUBSECTION (18) OF SECTION 2 OF THE WASTE ISOLATION PILOT PLANT LAND WITHDRAWAL ACT, PUB. L. 102-579. TRANSURANIC WASTE INCLUDES BOTH ~~MIXED TRANSURANIC (TRUM) WASTE AND NON MIXED TRANSURANIC (TRU) WASTE~~ “~~MIXED TRANSURANIC WASTE~~” (TRUM) WASTE” AND “~~NON MIXED TRANSURANIC WASTE~~” (TRU), AND COMPRISES THE FOLLOWING CATEGORIES: CH-TRU, CH-TRUM, RH-TRU, AND RH-TRUM.

“RETRIEVAL OF CH RSW” IS DEFINED AS UNCOVERING CH WASTES WITHIN DOE’S RSW TRENCHES, AND REMOVING

SUCH CH WASTES FROM THE TRENCHES, STAGING WITHIN THE BURIAL GROUNDS, AND TRANSFER TO A PERMITTED AND COMPLIANT TREATMENT, STORAGE OR DISPOSAL FACILITY, THE ENVIRONMENTAL RESTORATION AND DISPOSAL FACILITY (ERDF) OR FOR WASTE DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100 AS NON-MIXED TO A STORAGE OR DISPOSAL FACILITY THAT DOE DETERMINES IS APPROPRIATE. THE 218-W-4C PROCESSING AREA WILL BE USED TO STAGE, SAMPLE, ASSAY, DESIGNATE, ETC., THE CONTAINERS MOVED FROM THE 218-W-4B BURIAL GROUND. THE 90-DAY DESIGNATION CLOCK FOR WASTE COMING FROM 218-W-4B TO 218-W-4C PROCESSING AREA WOULD NOT START UNTIL WASTE WAS TRANSFERRED FROM THE 218-W-4C STAGING AREA TO A PERMITTED COMPLIANT TREATMENT, STORAGE OR DISPOSAL FACILITY. STAGING OF CH RSW IN THE BURIAL GROUNDS SHALL BE PROTECTIVE OF THE ENVIRONMENT TO PREVENT SPILLS. STORAGE OF ANY RETRIEVED CH RSW THAT HAS NOT BEEN DESIGNATED AS NON-MIXED PURSUANT TO WAC 173-303-070 THROUGH -100 SHALL INCLUDE SECONDARY CONTAINMENT PURSUANT TO WAC 173-303-630(7).

“RETRIEVAL OF RH RSW” IS DEFINED AS UNCOVERING RH WASTES WITHIN DOE’S RSW TRENCHES AND CAISSONS, AND REMOVING SUCH RH WASTES FROM THE TRENCHES AND CAISSONS, STAGING WITHIN THE BURIAL GROUNDS, AND TRANSFER TO A PERMITTED AND COMPLIANT TREATMENT, STORAGE OR DISPOSAL FACILITY, THE ENVIRONMENTAL RESTORATION AND DISPOSAL FACILITY (ERDF) OR FOR WASTE DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100 AS NON-MIXED TO A STORAGE OR DISPOSAL FACILITY THAT DOE DETERMINES IS APPROPRIATE. THE 218-W-4C PROCESSING AREA WILL BE USED TO STAGE, SAMPLE, ASSAY, DESIGNATE, ETC., THE CONTAINERS MOVED FROM THE 218-W-4B BURIAL GROUND. THE 90-DAY DESIGNATION CLOCK FOR WASTE COMING FROM 218-W-4B TO 218-W-4C PROCESSING AREA WOULD NOT START UNTIL WASTE WAS TRANSFERRED FROM THE 218-W-4C STAGING AREA TO A PERMITTED COMPLIANT TREATMENT, STORAGE OR DISPOSAL FACILITY. STAGING OF RH RSW IN THE BURIAL GROUNDS SHALL BE PROTECTIVE OF THE ENVIRONMENT TO PREVENT SPILLS. STORAGE OF ANY RETRIEVED RH RSW THAT HAS NOT BEEN DESIGNATED AS NON-MIXED PURSUANT TO WAC 173-303-070 THROUGH -100 SHALL INCLUDE SECONDARY CONTAINMENT PURSUANT TO

	<p>WAC 173-303-630(7).</p> <p>NOTE: THE REQUIREMENTS OF THIS MILESTONE WITH REGARD TO THE ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND MODIFICATION OF PLANNED FACILITIES NECESSARY FOR TREATMENT/PROCESSING OF RCRA MIXED AND SUSPECT MIXED TRANSURANIC WASTE DO NOT APPLY AS TO FACILITIES FOR LDR TREATMENT (OR FOR CERTIFICATION IN LIEU OF SUCH TREATMENT) OF MIXED TRANSURANIC WASTE PRIOR TO A FINAL APPEALABLE JUDGMENT ON THE MERITS OF THE LDR STORAGE AND TREATMENT CLAIM IN <i>WASHINGTON V. ABRAHAM</i>, NO. CT 03 5018 AAM, AND AFTER SUCH A JUDGMENT, ONLY AS SET FORTH IN THE ACCOMPANYING SETTLEMENT AGREEMENT.</p> <p>* NOTE: THE M-91 SERIES MILESTONES (INCLUDING THIS NOTE) DO NOT INCLUDE ANY REQUIREMENTS TO ESTABLISH SCHEDULES FOR THE MANAGEMENT OF PRE-1971 TRU/TRUM. SCHEDULES FOR THE MANAGEMENT OF PRE-1971 TRU/TRUM WILL BE ESTABLISHED, PURSUANT TO APPLICABLE PROVISIONS OF THE HFFACO OTHER THAN THE M-91 SERIES MILESTONES, FOLLOWING THE ISSUANCE OF OPERABLE UNIT RECORDS OF DECISION (RODS).</p>	
M-91-42	<p>REGARDING: (1) NEWLY GENERATED CH WASTE (EXCLUDING LARGE CONTAINERS); (2) CH RETRIEVAL WASTE (EXCLUDING LARGE CONTAINERS); AND (3) (2) CH WASTE CURRENTLY IN ABOVE-GROUND STORAGE (NOT INCLUDING CH WASTE CURRENTLY IN ABOVE-GROUND STORAGE IN BOXES AND EXCLUDING LARGE CONTAINERS).</p> <ol style="list-style-type: none"> 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. THERE WERE 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 HAD HAS NOT BEEN TREATED TO MEET LDR REQUIREMENTS. (THIS VOLUME DOES NOT INCLUDE 600 CUBIC METERS OF WASTE REQUIRING THERMAL 	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

TREATMENT, AS THAT WASTE HAS SEPARATE TREATMENT REQUIREMENTS PER M-91-12. APPROXIMATELY 4422 CUBIC METERS OF MLLW SUBJECT TO THIS MILESTONE WAS TREATED BETWEEN 12/31/02 AND 12/31/05. ~~IS REQUIRED TO BE TREATED BY 2006 UNDER HFFACO MILESTONES M-91-12 AND M-91-12A).~~ DOE'S 2002 LDR REPORT ESTIMATED THAT IT WILL GENERATION OF 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). IT WAS ALSO ESTIMATED IN 2002 THAT DOE WOULD ~~DOE WILL~~ RETRIEVE APPROXIMATELY 800 CUBIC METERS OF CH-MLLW BY 2010. BASED ON THE CY2005 LDR SUMMARY REPORT AS OF 12/31/05 FOR MLLW SUBJECT TO M-91-42, THERE WERE APPROXIMATELY 2100 CUBIC METERS IN PERMITTED STORAGE, AND 280 CUBIC METERS FORECAST TO BE GENERATED BY THE END OF CY2009.

APPROXIMATELY 2750 CUBIC METERS OF M-91-42 MLLW WAS EXPECTED TO BE RETRIEVED BETWEEN 12/31/05 AND 12/31/09. 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 CUMULATIVE TOTALS BASED ON A START DATE OF 12/31/02:

- 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,
- E. 8150 CUBIC METERS (CUMULATIVE) SHALL BE 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. RSW DETERMINED TO BE MLLW IN THE TREATABILITY GROUPS COVERED BY THIS MILESTONE WILL 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 (EXCLUDING LARGE CONTAINERS) CONTAINING LDR CONSTITUENTS IN COMPLIANCE WITH WAC 173-303-140 AND BY REFERENCE 40 CFR 268.

4. IN 2003 IT WAS ESTIMATED THAT THERE WERE ARE APPROXIMATELY 440 CUBIC METERS OF CH-TRUM (EXCLUDING LARGE CONTAINERS) IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE COMPLEX (CWC) AND ELSEWHERE AT HANFORD AS OF 12/31/02. DOE'S CY2002 LDR REPORT ESTIMATES THAT IT WILL GENERATE ESTIMATED GENERATION OF AN ADDITIONAL ANNUAL VOLUME OF APPROXIMATELY 220 CUBIC METERS OF CH-TRUM AND DOE ESTIMATES ESTIMATED THEY WILL RETRIEVAL OF WOULD RETRIEVE APPROXIMATELY 1600 CUBIC METERS OF CH-TRUM BY 2010. BASED ON THE CALENDAR YEAR

(CY) 2005 DATA AND THE CY2005 LDR REPORT AS OF 12/31/05 THERE WERE APPROXIMATELY 900 CUBIC METERS OF TREATABILITY GROUP "TRUM-CH STANDARD PROCESSING" WASTE (I.E. CH TRUM EXCLUDING LARGE CONTAINERS) IN PERMITTED STORAGE AS OF 12/31/05. AN ADDITIONAL QUANTITY OF APPROXIMATELY 2500 CUBIC METERS OF THIS WASTE WAS EXPECTED FROM RETRIEVAL BY 12/31/10. APPROXIMATELY 55 CUBIC METERS OF THIS WASTE WAS FORECAST TO BE GENERATED BY 12/31/10. 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 CUMULATIVE SCHEDULE **BASED ON A START DATE OF 12/31/02:**

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

5. 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. **IN THIS CASE THE CUMULATIVE VOLUMES SHALL BE CONSIDERED MET AS LONG AS THIS CH-TRUM IS TREATED/CERTIFIED WITHIN THE TIMEFRAME ESTABLISHED BY THE STORAGE PROHIBITION REQUIREMENTS OF 40 CFR 268.50.** 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.

~~IF CH TRUM SUBJECT TO THIS MILESTONE GENERATED AFTER 7/1/11 CAN NOT BE TREATED (OR CERTIFIED IN LIEU OF TREATMENT) WITHIN THE TIMEFRAME ESTABLISHED BY THE STORAGE PROHIBITION REQUIREMENTS OF WAC 173-303-140 AND BY REFERENCE 40CFR 268.50, OR A BACKLOG OF CH TRUM WASTE REMAINS IN STORAGE THAT CAN NOT BE PROCESSED WITHIN ONE YEAR, NEW ANNUAL RATES FOR TREATMENT/CERTIFICATION OF CH TRUM WILL BE ESTABLISHED AND ADDED TO THE SCHEDULE IN ITEM 4 ABOVE PRIOR TO 1/1/11. THESE RATES WILL BE BASED ON THE UPDATED GENERATION FORECASTS, STORAGE INVENTORY, AND CAPABILITIES AT THAT TIME. 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. NOTIFICATION OF CERTIFICATION IN LIEU OF TREATMENT WILL BE PROVIDED ANNUALLY AS PART OF THE CERTIFICATION VOLUME COMPLETION LETTER. 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 AT LEAST 80% OF M-91-42 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.

NOTE: THE REQUIREMENTS OF ITEMS 4 AND 5 OF

THIS MILESTONE DO NOT APPLY PRIOR TO A FINAL APPEALABLE JUDGMENT ON THE MERITS OF THE LDR STORAGE AND TREATMENT CLAIM IN *WASHINGTON V. ABRAHAM*, NO. CT 03 5018 AAM, AND AFTER SUCH A JUDGMENT, ONLY AS SET FORTH IN THE ACCOMPANYING SETTLEMENT AGREEMENT.

~~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.~~

6. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT

Appendix C

M-91 Contingent Milestone December 5, 2005 Presentation

M-91 Contingent Milestones

December 5, 2005

Purpose of Meeting

- Discuss adjustment of contingent milestones to reflect experience gained since implementation of the October 2003 M-91 agreement
 - The original milestones recognized the “considerable uncertainty associated with” the original volume estimates (M-91-42 (4)) and the possibility that adjustments may be necessary

Background

- “Contingent milestones” dealing with disposition of TRUM were included in the October 2003 M-91 agreement.
- Contingent milestones do not come into effect until after a “final appealable judgment”
- Contingent sections are included in 7 milestones (M-91-00, 01, 03, 40, 41, 42, and 44)
- Original contingent milestones were based on retrieval, processing, and new generation assumptions from the 12/31/02 timeframe. Actual conditions now need to be factored into the milestones

M-91 Implementation Success October 2003- October 2005

Excellent progress on meeting all M-91 milestones to date:

- Retrieval: Have met retrieval volumes ahead of schedule, completed vapor extraction in T-4, started retrieval in T-4, and started retrieval trench sampling and analysis plan sampling.
- Met mixed waste treatment annual requirements well ahead of schedule
- Ramped up certification capabilities: Went from shipping 17 m³ in FY2002 to 525 m³ in FY2005
- Overall have completed over 20 major M-91 requirements on or ahead of schedule since October 2003. No requirements missed.

Original Milestone Basis

- **Original Goal:** Establish a schedule to certify a volume of CH TRU/TRUM equivalent to the volume of CH TRUM/Suspect TRUM that was in permitted storage (excluding large containers), expected to be generated, and expected to be retrieved by 12/31/11
- After 7/1/11 CH TRUM subject to M-91-42 would be certified within 1 year of generation.
- Based on TRUM volumes, but could use TRU or TRUM to meet certification rate because it results in the same volume of waste being dispositioned.

Implementation Experience and Assumption Updates (1 of 2)

- Retrieval waste requires considerably more work than expected to meet WIPP WAC
 - Drums require repackaging to remove prohibited items and meet transportation requirements (40%)
 - Condition of drums much worse than planned:
 - Original assumption was 10% requiring overpacks.
 - Observed to date: 25% need overpacks.
 - Current forecast: 75% will need overpacks.
 - More containers require special handling and/or repackaging at T-Plant rather than WRAP

Implementation Experience and Assumption Updates (2 of 2)

- Quantity of newly generated transuranic waste has been significantly less than planning basis, and with change in PFP plans it is now expected to continue to be drastically less than the planning basis
- Original retrieval volume used for M-91-42 did not take into consideration that much of the retrieval waste is in large containers, which are covered by M-91-44. Retrieval volume of transuranic waste was all apparently assumed to be available for certification (or this was not considered a problem due to anticipated substitution of newly generated TRU).

Proposal for Contingent Milestone Update Change Request

- Revise basis statement (M-91-42 (4)) to reflect current stored volumes, forecast, retrieval rates, and clarify the specific type of waste and container sizes covered by the milestones.
- Discuss current volume assumptions for TRU and TRUM so the actual basis of how the commitments may be reached is clear, but specific volumes in milestone will be based on TRUM.
- Reduce the 12/31/05 milestone certification volume to a level that can reasonably be met based on actual conditions.
- Revise requirement for certification of all CH TRUM in storage as of 12/31/02 by 12/31/06 to be more flexible to maximize the amount of waste certified: It is more efficient to apply resources to larger streams

Proposal for Contingent Milestone Update Change Request

- Base revised work-off rate on current experience and considering the changes in assumptions that have occurred (base total volume to work off on the current basis volume of approximately 3600 cubic meters for CY2006-CY2011)
- Maintain language that after 7/1/11 newly generated TRUM waste of this type would be treated (certified) within one year.
- Proposed work-off schedule:
 - 450 m³ in CY2006
 - 450 m³ in CY2007 through 2011

Open Discussion and Questions
