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Tri-Party Agreement

JUN 07 2004

Mr. Ken Niles, Assistant Director
Oregon Department of Energy
625 Marion St. N.E.
Salem, Oregon 97301

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EDMC

Dear Mr. Niles:

COMMENTS ON THE DRAFT TRI-PARTY AGREEMENT MILESTONE CHANGE PACKAGES ON THE ESTABLISHMENT OF SCHEDULES FOR THE CLEANUP OF SEVERAL TYPES OF HANFORD WASTE (M-91-03-01 AND M-16-03-03)

Thank you for submitting comments on the draft Change Packages for the Cleanup Schedules of Several Types of Hanford Waste. Responses to your comments, along with responses to the other comments received, are included in the Response to Public Comments document (Enclosure 1). The final signed M-91-03-01 and M-96-03-03 change packages are also provided (Enclosure 2). These documents are also available at http://www2.hanford.gov and can be accessed electronically at the U.S. Department of Energy's Information Repositories.

The State of Washington Department of Ecology, the U.S. Environmental Protection Agency, and the U.S. Department of Energy appreciate the time and effort you took to provide input on the proposed changes to the Tri-Party Agreement for the M-091 and M-016 milestone series.

If you have questions, please contact Joel Hebdon, Director, Office of Environmental Services, on (509) 376-6657.

Joel Hebdon, Director
Office of Environmental Services
U.S. Department of Energy
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Michael A. Wilson, Program Manager
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U.S. Environmental Protection Agency

Enclosures

04-AMCP-0309

cc: See Page 2

cc w/encls:
Administrative Record
Environmental Portal

cc w/o encls:
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ENCLOSURE 1

Response to Public Comments on Establishment of Schedules for the Cleanup of Several Types of Waste at Hanford
(M-91-03-01 and M-16-03-03 Change Packages)

April 2004

1. Comments submitted by Ken Niles, Oregon Department of Energy

Comment 1: We believe the proposed milestones fall short in some areas and additional work is needed. M-91 and M-16 are restricted in scope and fail to address the large amount of pre-1970 buried waste, both TRU and non-TRU. If these burial grounds must be exhumed for any reason, it is highly likely that they will result in the generation of a large quantity of TRU waste needing characterization and treatment.

Response to Comment 1: In June 2002, the Tri-Parties, following public comment, established Tri-Party Agreement (TPA) milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Washington State Department of Ecology (Ecology) and U.S. Department of Energy (USDOE) currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

In addition, enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit Record of Decision. The ROD identifies a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds.

M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and mixed transuranic (TRUM) waste generated through Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) actions. This work plan will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA decision to retrieve pre- 1970 buried waste.

Comment 2: Additional Tri-Party Agreement (TPA) milestones are needed to provide for characterization, retrieval, treatment and storage/disposition of all buried waste. By limiting the focus as M-91 and M-16 do, the agencies are left with many outstanding issues to resolve later. This makes it difficult to ensure that facilities are available when needed, and are of sufficient capacity and capability to handle all the wastes that may be sent to them. We encourage the Tri-Parties to immediately begin negotiation on these larger issues to ensure that the funding is available and the plants are built when needed.

Response to Comment 2: The TPA agencies developed the M-91 milestone series using the most current waste forecast information available at the time. We recognize there is a high degree of uncertainty associated with potential processing needs required by wastes generated through future CERCLA remedial actions and other clean up activities. Several TPA milestones (M-91-03 and M-16-93) were established to assess processing capacity and capabilities required for wastes generated through CERCLA and other clean up activities. These milestones have requirements for revisions in 2009, 2012, and 2013 to coincide with completion of investigations of the 200 Area waste sites and completion of retrieval of post-1970 contact-handled suspect TRU from the low-level burial grounds. M-91-01 requires the acquisition of capabilities to treat remote-handled (RH) TRU by 2012 that is

planned to provide processing capability for CERCLA waste, also. DOE will identify and seek needed funding.

Comment 3: The Tri-Parties should: Include milestones for quantification, retrieval and disposition of pre-1970 TRU waste and require the work to be fully funded;

Response to Comment 3: In June 2002, the Tri-Parties, following public comment, established TPA milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Ecology and DOE currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

In addition, enforceable milestones for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established. These milestones identify a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds. This cleanup work is part of 300-FF-2 Operable Unit Record of Decision.

M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and TRUM waste generated through CERCLA Actions. This work plan will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA to retrieve pre-1970 buried waste.

Comment 4: Require DOE to aggressively obtain capacity to handle, characterize, treat and package wastes;

Response to Comment 4: Capabilities to treat contact-handled (CH) mixed low-level waste (MLLW) and certify CH TRU waste have been effectively demonstrated at Hanford; however, there is limited commercial or USDOE capability for the processing of RH or CH large container wastes. Due to this gap in processing capabilities, M-91 milestones were established requiring capabilities/facilities for processing of RH and large container TRU waste and MLLW and to support the processing requirements for waste generated during CERCLA clean up actions.

Comment 5: Focus on the highest risk wastes first; and

Response to Comment 5: The Parties believe the M-91 change package does place priority on addressing the highest risk wastes first through enforceable retrieval milestones. Records for waste retrievably stored in low-level burial ground 218-W-4C, the first burial ground required to be retrieved under milestone M-91-40, indicate that the plutonium inventory represents nearly three quarters of the plutonium inventory within all of the post-1970 retrievably stored suspect TRU waste burial grounds.

In addition, many of the containers within burial ground 218-W-4C contain soils exhumed from the 216-Z-9 Crib. These drummed soils contain approximately 40,000 grams of plutonium and volatile organic compounds, including carbon tetrachloride and its degradation products. Activities are currently underway to capture the releases of these compounds from vent risers within sections of 218-W-4C. Removal of these suspect TRU drums lessens the potential for releases to the soil column and potentially the groundwater.

Comment 6: Ensure regulatory compliant storage of all wastes.

Response to Comment 6: The M-91 change package includes a compliance schedule to retrieve retrievably stored suspect mixed waste and to place mixed waste into compliant storage.

2. Comments submitted by Todd Martin, Chair, Hanford Advisory Board

Comment 1: The proposed M-91 and M-16 TPA milestones should require aggressive schedules for characterization, retrieval, treatment and storage/disposition of all buried waste in compliance with regulations. The Board's input on the M-91/M-16 change package is rooted in this fundamental principle.

Response to Comment 1: In June 2002, the Tri-Parties, following public comment, established Tri-Party Agreement (TPA) milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Washington State Department of Ecology (Ecology) and U.S. Department of Energy (USDOE) currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

In addition, enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit Record of Decision. The ROD identifies a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds.

M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and mixed transuranic (TRUM) waste generated through Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) actions. This work plan will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA decision to retrieve pre-1970 buried waste.

Pre-1970 buried waste will be addressed as necessary through CERCLA processes. The change package does include capacity planning and reporting milestones for TRU and TRUM waste subject to CERCLA processes.

Comment 2: DOE, the Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) should ensure that the TPA:

Includes milestones for quantification, retrieval and disposition of pre-1970 TRU waste and requires the work to be fully funded;

Response to Comment 2: As noted in our previous response, the Parties believe the milestones in the TPA provide a strong framework to address pre-1970 transuranic contaminated waste. In addition, the issue of funding work required by the TPA is already addressed in the TPA.
Comment 3: Contains enforceable schedules for the shipment of TRU waste to WIPP;

Response to Comment 3: Although this draft Change Package does not include enforceable schedules for shipping TRU waste to Waste Isolation Pilot Project (WIPP), DOE is working to identify ways to accelerate shipping TRU off of the Hanford Site.

Comment 4: Focuses on highest risk wastes first;

Response to Comment 4: The Parties believe the M-91 change package does place priority on addressing the highest risk wastes first through enforceable retrieval milestones. Records for waste retrievably stored in low-level burial ground 218-W-4C, the first burial ground required to be retrieved under milestone M-91-40, indicate that the plutonium inventory represents nearly three quarters of the plutonium inventory within all of the post-1970 retrievably stored suspect TRU waste burial grounds.

In addition, many of the containers within burial ground 218-W-4C contain soils exhumed from the 216-Z-9 Crib. These drummed soils contain approximately 40,000 grams of plutonium and volatile organic compounds, including carbon tetrachloride and its degradation products. Activities are currently underway to capture the releases of these compounds from vent risers within sections of 218-W-4C. Removal of these suspect TRU drums lessens the potential for releases to the soil column and potentially the groundwater.

Comment 5: Is responsive to the Board's principles on shipment of wastes to Hanford (Advice #143, Principles 1, 2, 3, 4 and 6); and,

Response to Comment 5: The draft change package covers Hanford waste and forecasted waste to be generated at Hanford. Currently, shipments of TRU waste to Hanford are enjoined, i.e., banned. Should waste be identified to come to Hanford, the Parties will consider the issues identified in your previous advice.

Comment 6: Requires DOE to aggressively obtain remote-handled TRU capacity.

Response to Comment 6: Hanford continues to work with representatives from the WIPP to track the permit modification schedule that DOE believes will enable the disposal of Hanford RH TRU. Once the Waste Acceptance Criteria (WAC) are established (assumed to be no earlier than 2006), Hanford will incorporate these requirements into the RH TRU facility design criteria. We will explore opportunities to accelerate the start up of RH TRU operations prior to 2012; however, the majority of waste requiring processing in this facility is not forecasted to be generated until post 2007.

Comment 7: Regarding the safe storage of TRU, The TPA should contain milestones for characterization of CH- and RH-TRU suspect mixed waste from the 200 Area burial grounds;

Response to Comment 7: Milestones M-91-40 and M-91-41 require all retrievably stored CH and RH post-1970 suspect TRU waste be designated within 90 days of retrieval in accordance with State requirements. In addition to this state-required designation, TRU waste will undergo additional characterization to meet WIPP certification requirements.

Comment 8: Mixed hazardous and transuranic waste (TRUM) should be stored as Resource, Conservation and Recovery Act (RCRA) waste until it is treated to meet Land Disposal Restrictions (LDR) or shipped to WIPP for disposal in a timely manner; and, the TPA should not allow non-compliant storage of TRU waste.

Response to Comment 8: The M-91 change package includes a compliance schedule for retrieval of retrievably stored suspect TRU mixed waste, and placement of mixed waste into RCRA compliant storage until the waste is treated to meet LDR standards (when required) or the TRUM is certified for shipment to WIPP. The DOE and the Department of Ecology have a disagreement on the scope of the State's authority to require LDR treatment of mixed TRU waste at Hanford, but have agreed to submit that question to a federal judge for resolution. All newly generated TRUM is currently stored in RCRA permitted facilities.

Comment 9: M-16 - The Board advises DOE to provide a work plan describing what Comprehensive Environmental Response and Liability Act (CERCLA) waste will be generated through cleanup and how those wastes will be treated (RH and CH). Additionally, steps to acquire treatment capability and plans for disposition (shipment offsite or Hanford disposal) should also be included.

Response to Comment 9: Several TPA milestones (M-91-03 and M-16-93) were established to assess processing capacity and capabilities required for wastes generated through CERCLA and other clean up activities. These milestones require revisions in 2009, 2012, and 2013 that coincide with completion of the 200 Area waste sites investigations and retrieval of post-1970 CH suspect TRU from the low-level burial grounds. Milestone M-91-01 requires acquiring capabilities to treat and/or process post-1970 RH TRU by 2012 that will also allow processing capability for CERCLA clean up waste.

Comment 10: Lastly, the Board requests it and the public be kept informed and involved in discussions regarding priority shifts in site cleanup activities that may occur as a result of M-91 funding choices.

Response to Comment 10: Cleanup at Hanford sometimes involves trade-offs in scheduling. Priority decisions are intended to be made by fully considering relative risks, desired end states, and regulatory requirements. Helping to establish priorities is an important function of the Hanford Advisory Board (HAB) and every effort is made to provide timely information so that the HAB can contribute to these on-going evaluations.

3. Comments submitted by Gerald Pollet, Heart of America Northwest

Comment 1: The lack of priority given to all buried wastes – not just TRU - and the spread of contamination from burial grounds has prompted us to call for the rapid investigation of the burial grounds, and retrieval and characterization of all buried wastes.

Response to Comment 1: Pre-1970 waste is addressed in other TPA milestones. USDOE plans to characterize pre-1970 waste under RCRA past-practice or the CERCLA processes to determine what, if any, remedial actions would be required before closing any facilities, waste site or burial grounds that contain this waste.

Comment 2: Of course, the notion of retrieving these wastes and then returning them to unlined burial grounds is legally unacceptable and defies common sense. To date, however, there has been no effort to include a requirement that retrieved wastes – regardless of classification or type after characterization - may only go into lined landfills with leachate collection and legally compliant monitoring systems. Indeed, USDOE's plans for new landfills and the Central Waste Complex contain no mention of receipt of post-characterization retrieved LLW quantities, and recent public statements by USDOE and contractor managers for Hanford disposal facilities indicate they plan to re-dump wastes back into unlined burial grounds.

Response to Comment 2: The M-91 change package contains enforceable schedules for US DOE to retrieve and designate retrievably stored wastes. Retrieved wastes designated as mixed are required to be stored in RCRA compliant facilities. Retrieved wastes designated as non-mixed can be stored in a facility meeting the regulatory requirements for LLW.

Some of the Hanford Solid Waste (HSW) EIS alternatives analyzed disposing of LLW generated during post-1970 suspect TRU retrieval in unlined trenches; however, the preferred alternative is to place this waste in lined trenches. In addition, USDOE and the regulators are evaluating the use of lined trench disposal through the Inter-Agency Management Integration Team Working Group process.

Comment 3: Following retrieval, neither the proposed new TPA changes nor any baseline of USDOE include proper remediation and closure of the active Low-Level Burial grounds. Indeed, USDOE-RL's baseline, adopted in 2003, shows that the unlined burial grounds would not be "closed" (i.e., properly capped to prevent migration after characterization of the releases to the soil and groundwater, and cleaning up the releases) until the year 2035!!

Response to Comment 3: Closure of the low-level burial grounds will be scheduled through the RCRA Part B permit. Some burial grounds may be in operation until 2035 (for example, trench 94 that is used for disposal of Navy reactor compartments). DOE's current plan is to integrate the closure of the currently operating low-level burial grounds with the CERCLA closure of 200-SW-2 Operable Unit (OU) (including inactive pre-1970 burial grounds). DOE must submit a work plan for the closure of this OU by December 2004. Whether the permitted burial grounds are closed individually through

the permit or integrated with the CERCLA OU, the public will have the opportunity to comment on the schedule and performance requirements.

Comment 4: These types of concerns led Heart of America Northwest and other public interest groups to propose to Washington Ecology a principle for these negotiations that the goal would be to ensure the retrieval and characterization of all buried wastes. It was agreed that this would be a goal for the negotiations, and stated in a memo/letter from Ecology director Tom Fitzsimmons to the Hanford Public Interest Network groups in January, 2003. However, this was never sought by Ecology as a goal in the negotiations with USDOE.

Response to Comment 4: The M-91 negotiations that Tom Fitzsimmons was referring to in your referenced letter, were those that took place, and ultimately failed in early 2003. As a result of those failed negotiations, Ecology issued the April 2003 Administrative Order pursuant to Ecology's RCRA/Hazardous Waste Management Act (HWMA) authority. Ecology's Order was narrower in scope than the issues originally involved in the earlier negotiations. These latter negotiations, on which you are now commenting, were focused on obtaining TPA milestones for the substance of the work required in Ecology's RCRA-based Administrative Order.

The disposition of other buried waste on site (i.e., pre-1970 waste) will be determined through other existing processes (permitting actions, RCRA corrective action or CERCLA), as currently contemplated in the Hanford Federal Facility Agreement Consent Order. Those existing processes are designed to evaluate multiple options for the investigation and disposition of those wastes.

Comment 5: The highest risk buried TRU wastes, of course, are the ones buried for the longest period of time. Those buried before 1971, however, are entirely ignored by the TPA and by this proposed new milestone. Thus, the TPA will continue to have two glaring holes: failing to address the highest risk TRU wastes buried; and, failing to have any timeline for investigation, retrieval, cleanup and closure of the massive "active" Low-Level Burial Grounds. Only TRU (all of which is "suspect" Mixed Waste) in those burial grounds (based on trusting USDOE to say where the TRU is buried and that there is no other TRU) are subject to be retrieved under the new proposed milestones.

Response to Comment 5: In June 2002, the Tri-Parties, following public comment, established TPA milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Ecology and DOE currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

In addition, enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit ROD. This ROD identifies a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds.

M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and TRUM waste generated through CERCLA Actions. This work plan will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA decision to retrieve pre 1970 buried waste.

The Parties believe the M-91 change package does place priority on addressing the highest risk wastes first through enforceable retrieval milestones. Records for waste retrievably stored in LLBG 218-W-4C, the first burial ground required to be retrieved under milestone M-91-40, indicate that the plutonium inventory represents nearly three quarters of the plutonium inventory within all of the post-1970 retrievably stored suspect TRU waste burial grounds.

In addition, many of the containers within burial ground 218-W-4C contain soils exhumed from the 216-Z-9 Crib. These drummed soils contain approximately 40,000 grams of plutonium and volatile organic compounds, including carbon tetrachloride and its degradation products. Activities are currently underway to capture the releases of these compounds from vent risers within sections of 218-W-4C. Removal of these suspect TRU drums lessens the potential for releases to the soil column and potentially the groundwater.

Comment 6: <u>USDOE's Own Documents Show the Significant Risk From TRU in Burial Grounds, and That the Older TRU Poses Significant Risks To Health and Environment:</u>
"There is a medium to high risk of Public Health and Safety impact due to groundwater contamination and causing radioactive and hazardous constituents to reach the Columbia River upstream of significant population centers....

Response to Comment 6: The purpose of these milestones is to remove waste from the burial grounds thus reducing any potential impacts to the public health, safety or groundwater contamination.

Comment 7: "Site workers are at risk of radioactive and hazardous contamination due to containers being stored underground past their design life and need to correct contamination spreads." (HANFS-R960013 at Page 2, Sec. 22 and 23)

Response to Comment 7: DOE's health and safety professionals analyze the hazards associated with the post-1970 retrieval operation as part of the job hazard analysis process. This process includes a review of burial ground records to identify any contaminants of concern and based on this review, determines the level of personnel protective equipment required to be worn during retrieval operations. In addition to real-time industrial hygiene monitoring that is conducted during retrieval for carbon tetrachloride and tetrachloroethylene, a vapor extraction system that extracts volatile organics from the burial grounds has been operational since retrieval was initiated and will continue until Safety and Health professionals determine there is no additional need for this treatment system.

Comment 8: "The site is out of compliance with Hanford Defense Environmental Impact Statement Record of Decision that requires removal..." (HANFS-R960013 at Page 2, Sec. 25)
Design life of containers is 20 years (HANFS-R960013 at Page 4).

Response to Comment 8: Post-1970 suspect TRU waste retrieval was initiated on October 17, 2003. This activity met the M-91-40 milestone and was in accordance with the preferred alternative for management of retrievably stored suspect TRU waste as described in the Hanford Defense Waste Environmental Impact Statement (EIS) Record of Decision.

Comment 9: Other RDSes discuss the annual rate of deterioration as exceeding 13% per year for barrels buried in the mid 1980's. Of course, the older barrels of TRU have deteriorated much faster – and, there is scant assurance that TRU was even disposed of in barrels prior to 1971.

Response to Comment 9: Burial ground records from 1970 and 1971 indicate that TRU waste was retrievably stored in containers. The design life of the containers was estimated to be 20 years; however, the actual life of the containers, based upon observed corrosion rates for drums in direct contact with soils, appears to be in excess of 40 years.

Comment 10: NEPA analysis required: RDS R960015 notes that the "activities" for Remote Handled TRU (RH-TRU), which is what USDOE is attempting to ship to Hanford without an EIS, "could require NEPA analysis prior to processing." (at page 1):
"Some of the containers are reaching or have already exceeded their expected design life. Therefore, a threat exists to the environment and site workers...
"Prior to operations of M-33 (complete disposition of all Transuranic Waste) facilities, both the soil and possible the groundwater could be contaminated." (HANFS-R960015 at page 2, Sec 21 through 24).

Response to Comment 10: The State of Washington and other interested parties are in litigation with DOE concerning whether the DOE has complied with NEPA in regard to its decision to ship off-site TRU waste to Hanford for interim storage and processing prior to disposal at WIPP.

Comment 11: It has been established that Carbon Tetrachloride contamination is already spreading from Trench W-4, where TRU is "retrievably stored", in the 218-W-4C Burial Ground. This spreading contamination poses significant health risks (vapor levels measured at 176 times the OSHA PEL and 176% above the lowest reported fatal concentration for humans) and is likely the source of increased contamination identified for two years in a nearby groundwater monitoring well. Trench 4 ceased operation in 1984 (Draft Hanford Solid Waste EIS, USDOE, April, 2002 at Figure D.6, page D.8). Thus, in significantly less than 30 years, the retrievably stored TRU containers have breached or spread contamination. USDOE now proposes to store RH-TRU, without lab analysis of hazardous waste constituents, and some waste streams of which, USDOE contractor records indicate, contain volatile organic hazardous wastes and other solvents and hazardous wastes (in addition to highly radioactive wastes and Plutonium). USDOE's records indicate a likelihood that the TRU imported from ETEC and BCL will be stored for 20 years.

Response to Comment 11: Mixed waste imported from offsite would be managed in RCRA/HWMA compliant facilities. All waste, including RH TRU that is accepted for storage at Hanford is required to meet the Hanford Site Solid Waste Acceptance Criteria (WAC), which requires the generator to determine if there are hazardous components and if so, to designate the waste in accordance with state and federal regulations. Both state and federal requirements allow appropriate use of process knowledge to designate wastes. DOE will store any RH TRUM in compliant TSD facilities; DOE intends to retrievably store RH TRU in concrete vaults in the low-level Burial Grounds.

The carbon tetrachloride vadose zone plume is being investigated as part of an on-going CERCLA remedial investigation/feasibility study. Additional sampling and analysis is scheduled to be performed on trench substrates following suspect TRU retrieval to determine whether or not releases of contaminants to the environment have occurred, and if so, the nature and extent of the contamination and final correction of the problem. In order to minimize any potential worker exposure to carbon tetrachloride vapor during retrieval operations and to mitigate any possible releases of carbon tetrachloride to the environment, DOE initiated vapor extraction at Trench 4 in November 2003.

Comment 12: USDOE's refusal to agree to enforceable milestones for the retrieval, treatment and processing of these imported wastes increases the likelihood that these wastes will be "stored" buried for over 20 years. Thus, based on the actual experience to date for TRU stored in Hanford burial grounds, it is probable that numerous drums and containers of ETEC and BCL TRU wastes will also breach or release wastes. Therefore: M-91 should specify that NO ADDITONAL TRU will be "stored" in Hanford's unlined burial grounds.

Response to Comment 12: DOE places RH TRU waste in concrete vaults in the LLBGs for interim storage. The M-91 Change Package does not directly address management of off-site non-mixed TRU waste.

Comment 13: FY 1997 Mission Planning Guidance and Unit of Analysis Sheet (#183, 185, 189): These USDOE budget documents establish high risk from failing to proceed with TRU retrieval:
"If TRU waste retrieval operations do not occur, radioactive/hazardous waste will remain underground in deteriorating containers that have exceeded their design life potentially causing soil and eventually ground water contamination. There is a risk that ground water contamination could lead to radioactive/hazardous constituents reaching the Columbia River upstream of significant population centers....
"There is increased risk to site workers...as the levels of contamination increase due to failing waste containers." (MPG-17, USDOE, Sec. 4.4 and 4.5)
"The waste has been buried in containers that were not intended to be in the ground for more than twenty years." (MPG-16)(also MPG-17 for RH-TRU). FY 1996 Field Submission Activity Data

Sheets establish that USDOE has previously broken commitments to "accelerate" TRU retrieval. E.g.: pages 18 and 19.

Response to Comment 13: Enforceable milestones were established in the M-91 draft change package that requires retrieval of both CH and RH post-1970 suspect TRU waste from the LLBGs. Enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit ROD. Also, there are additional TPA milestones (M-13 and M-15 milestone series) identified for the 200 Area Burial grounds and waste sites.

Comment 14: <u>Why the Proposed M-91 and Settlement are Not in the State of Washington's or Public's Interest, and Need to be Either Renegotiated as Detailed, or the Existing Administrative Order Should Continue and Be Expanded:</u> 1. The agreement and proposed new milestone relax requirements from the existing administrative order, which is in effect. The new Milestone would allow USDOE to opt out of significant regulatory requirements; and, it allows USDOE to continue federal litigation to challenge the fundamental underpinning of this portion of the TPA.

Response to Comment 14: The Administrative Order is not currently in effect. In accordance with the Settlement Agreement, Ecology withdrew Administrative Order 03NWPKW-5494, and DOE dismissed its appeal concerning the Administrative Order.

The legal authority issues regarding who controls and manages TRU and TRUM waste have existed for a long time. Consequently, the parties negotiated the M-91-03-01 TPA Change Package recognizing legal issues existed that required formal resolution. The Parties created a successful resolution to the management of TRU and TRUM by seeking a legal solution in federal court.

Comment 15: 2. USDOE reserves the right, in the proposed Milestones, to unilaterally decide to store Mixed TRU (and all TRU is legally Mixed TRU unless fully characterized) for decades without meeting basic standards for storage or treatment. Storage of untreated TRU was recognized by USDOE, in the WMPEIS, to pose serious safety risks. WA State and the Federal Court both acknowledged these documented risks in The State of Washington, Columbia Riverkeeper, Heart of America Northwest. et al v. Abraham. These risks have never been addressed, but USDOE is now saying they want to unilaterally be able to evade storage and treatment standards. The proposed milestone would allow USDOE to unilaterally claim waste is destined – eventually – for WIPP, and evade all hazardous waste safe storage and treatment requirements. As the State itself noted in the litigation, USDOE has already made this specious claim for numerous TRU wastes that may never legally be acceptable at WIPP. It is ludicrous for Washington State to sign an agreement, and call it a settlement, and relax requirements via negotiation... while explicitly allowing USDOE to continue to sue Washington State to challenge the State's very authority to have safe storage of Mixed TRU. Washington needs to reject the proposed TPA change and to keep the administrative order in place without negotiated relaxations.

Response to Comment 15: Waste (including TRUM) that is accepted for storage at Hanford is required to meet the Hanford Site Solid WAC. The WAC incorporates state and federal requirements to demonstrate compliance with applicable storage regulations. Once the TRUM waste is demonstrated to meet the WAC, it is accepted and stored in compliant TSD facilities.

Once retrieved, TRU storage and management will be in accordance with DOE radioactive waste management rules. TRUM will be stored in accordance with DOE radioactive waste management rules, RCRA, and HWMA.

The DOE and the Department of Ecology disagree concerning the extent to which LDR storage prohibitions apply to TRU mixed waste at Hanford. As part of the Settlement Agreement, Ecology and DOE have agreed to submit the issue to a federal judge for resolution.

Comment 16: 3. We object to USDOE unilaterally deciding to eliminate an activity that had been called significant worker health and public risk reduction to pay for M-91. USDOE is now planning to eliminate the removal of the extremely radioactive Cesium and Strontium capsules stored in the B-Plant swimming pool (WESF). This old facility is at great risk, and the capsules pose a high risk to workers. USDOE had repeatedly acknowledged that moving the capsules to dry cask storage was a high priority. Now, to pay for M-91, USDOE is dropping this high priority work. In other words, USDOE has failed to request adequate funding to meet its compliance requirements – which, in and of itself, violates the TPA. This was done without ever identifying this cost and tradeoff in public comment documents. This lack of disclosure is unacceptable. Washington should take enforcement action if USDOE tries to fund one compliance activity by robbing another safety activity.

Response to Comment 16: There is no indication that storing the capsules at WESF poses an immediate high risk to workers. The driver for moving the capsules into dry storage was not based on the age of WESF, but on earlier feasibility studies that identified significant mortgage and life-cycle cost reductions from moving the capsules to dry storage and closing WESF.

Cleanup at Hanford sometimes involves trade-offs in scheduling. Priority decisions are intended to be made by fully considering relative risks, desired end states, and regulatory requirements. Information about such decisions is made available to the public through a number of forums such as the Hanford Advisory Board (HAB) and public meetings (e.g., Hanford State of the Site).

The dry storage capsule project proposal is not a TPA requirement; thus, any decision to delete the project would not violate the TPA. The HAB was informed of the proposal several months ago. Currently DOE has made no final decision.

Comment 17: 4. This proposed TPA milestone does NOT address highest risks first. In fact, the package admittedly goes after lowest risk wastes initially. There may be some good reasons for doing so to gain experience, but this approach is certainly not about tackling the highest risk wastes.
To go after highest risks first, rather than the low hanging fruit, the TPA needs to require USDOE to:

a. Retrieve, characterize and treat TRU buried before 1971;
b. Retrieve, characterize and treat ALL buried wastes;
c. Stop Dumping waste in unlined trenches within 90 days; and prohibit USDOE from "storing" more TRU in unlined trenches or in any noncompliant facility.
d. Investigate the releases from all Low-Level Waste Burial Grounds starting in 6 months, and adopt a schedule for remediation and legal "closure" under RCRA and Washington's Hazardous Waste Management Act, RCW Chapter 70.105.
e. Ship TRU waste for disposal within the legal limits of RCRA and RCW 70.105 for storage after characterization or treatment. (Note that Idaho and Nevada both have enforceable agreements with schedules for shipment of TRU to WIPP).

Response to Comment 17: In June 2002, the Tri-Parties, following public comment, established TPA milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Ecology and DOE currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

In addition, enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit ROD. This ROD identifies a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds.

M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and TRUM waste generated through CERCLA Actions. This work plan

will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA decision to retrieve pre-1970 buried waste.

HSW EIS analyzed alternatives including disposing of LLW generated during post-1970 suspect TRU retrieval in unlined trenches; however, the preferred alternative is to place this waste in lined trenches. In addition, DOE and the regulators are evaluating the use of lined trench disposal through the Inter-Agency Management Integration Team Working Group process.

When the parties negotiated the M-91-03-01 TPA Change Package, worker and public safety, feasibility of performance, budget and ability to ship waste were all priorities. The parties weighed the priorities and circumstances surrounding TRU and TRUM waste management and balanced them against the complicating issue of legal authority that has been with these particular milestones since their inception. The resulting M-91 milestones reflect the best and most likely to be successful path forward for accelerating TRU and TRUM retrieval.

Comment 18: The M-91-03-01 change package would be a step in the right direction, if USDOE dropped litigation challenging the authority of the state and Tri-Party Agreement over the wastes covered, and challenging the fundamental underpinnings of the proposed actions and schedule. USDOE has resisted this effort every step of the way and delayed onset of TRU retrieval for years – just last spring, USDOE Headquarter (it is rumored) barred a similar change package from being signed. That resistance and delay must not be rewarded by Washington State with these new concessions.

Response to Comment 18: The legal authority issues regarding who controls and manages TRU and TRUM waste have existed for a long time. Consequently, the parties negotiated the M-91-03-01 TPA Change Package recognizing legal issues existed that required formal resolution. The Parties created a successful resolution to the management of TRU and TRUM by seeking a legal solution in federal court.

Comment 19: An administrative order is already in place requiring retrieval of suspect TRU buried in the Low-Level Burial Grounds after 1971. The proposed TPA changes, as negotiated, actually relax requirements from this administrative order. There is no justification that can be offered for agreeing to a relaxation of any standard or timeline while USDOE continues to attack the schedule and the right of the State to require these actions. This is not a settlement, so long as USDOE and the Administration continue to fight these standards in court. Historically, formal agreements between the affected governmental agencies are required to help ensure adherence to commitments for retrieval, characterization, treatment, packaging, storage and shipment of waste on the Hanford site.

Response to Comment 19: The Parties disagree with your statement that the draft TPA change package "relaxes" the retrieval requirements for the post-1970 retrievably stored suspect TRU waste. Both the draft change package and the Order require the CH retrievably stored waste to be retrieved by December 31, 2010. In addition, the change package lays out the sequence for retrieving this waste from the low-level burial grounds. The retrieval requirements of the change package are **exactly** the same for the Order for initiating (January 1, 2011) and completing the retrieval (December 31, 2018) of RH post-1970 suspect TRU waste.

Comment 20: The TPA change package unacceptably leaves no requirement for shipping waste to WIPP for geologic disposal (as required by federal law);and, there are no facilities at Hanford for storage or treatment of Remote-Handled TRU (RH-TRU); or approved criteria for characterization, packaging and shipment of RH-TRU waste to WIPP. The TPA, at minimum, must say that USDOE is not allowed to add more TRU to this backlog. Incredibly, USDOE plans to do just that. (See Final Hanford Solid Waste Disposal EIS and litigation record referred to earlier)

Response to Comment 20: The M-91-03-01 TPA Change Package provides for storage and management of RH-TRU waste until the WIPP RH-TRU waste acceptance criteria are developed. It then requires retrieval actions that are necessarily reliant on WIPP RH-TRU WAC for management and treatment. DOE is working on the development of the WIPP Acceptance Criteria for RH-TRU and considered the current state of the criteria in negotiating the related milestones in this change package.

The M-91 change package does not directly address management of off-site non-mixed TRU. That issue is being addressed in litigation. The legal authority issues regarding who controls and manages TRU and TRUM waste have existed for a long time. Consequently, the parties negotiated the M-91-03-01 TPA Change Package recognizing legal issues existed that required formal resolution. The parties created a successful resolution to the management of TRU and TRUM by seeking a legal solution in federal court.

Comment 21: The Hanford Advisory Board's advice #143, issued February 7, 2003, identified 8 principles for application to M-91 TPA negotiations. Those principles still need to be incorporated into an M-91 Change Package:

- Complete waste characterization
- identification of impacts to adding more wastes to Hanford
- regulatory compliance
- enforceable schedules
- appropriate regulatory investigations of releases from burial grounds
- fully burdened costs of storage and treatment
- prioritizing characterization, retrieval, treatment of currently buried waste not barter the addition of more waste to Hanford for schedule change

Response to Comment 21: The eight HAB principles from Advice #143 and our responses are listed below:

1. Pre-1970 TRU waste is not covered in the change package (Advice #143, Principles 4 & 7). The Board has advised on previous occasions that retrieval of the pre-1970 TRU wastes should be a high priority. We reaffirm this advice. It is reasonable to assume that the older containers will have far greater deterioration. Every year of retrieval delay increases the risk that the contents of these older containers will escape into the environment, complicate cleanup, increase the risks to workers and increase the cost of cleanup.

   Response: In June 2002, the Tri-Parties, following public comment, established TPA milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Ecology and DOE currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

   In addition, enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit Record of Decision. The ROD identifies a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds.

   M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and TRUM waste generated through CERCLA Actions. This work plan will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA decision to retrieve pre 1970 buried waste.

2. The change package does not provide schedules for TRU waste shipments (Advice #143, Principle 4).

Response: Although this draft Change Package does not include enforceable schedules for shipping TRU waste to WIPP, we are working to identify ways to accelerate shipping TRU off of the Hanford Site.

3. While the change package addresses the carbon tetrachloride burial grounds appropriately, it does not, in general, require retrieval of the highest risk waste first.

   Response: The Parties believe the M-91 change package does place priority on addressing the highest risk wastes first through enforceable retrieval milestones. Records for waste retrievably stored in LLBG 218-W-4C, the first burial ground required to be retrieved under milestone M-91-40, indicate that the plutonium inventory represents nearly three quarters of the plutonium inventory within all of the post-1970 retrievably stored suspect TRU waste burial grounds.

   In addition, many of the containers within burial ground 218-W-4C contain soils exhumed from the 216-Z-9 Crib. These drummed soils contain approximately 40,000 grams of plutonium and volatile organic compounds, including carbon tetrachloride and its degradation products. Activities are currently underway to capture the releases of these compounds from vent risers within sections of 218-W-4C. Removal of these suspect TRU drums lessens the potential for releases to the soil column and potentially the groundwater.

4. The change package does not include provisions covering the shipment of wastes to Hanford (Advice #143, Principles 1, 2, 3, 4, and 6).

   Response: The Parties know of the Board's interest and long history with these issues. Currently DOE-HQ is taking a comprehensive look at waste issues across the complex. The draft change package covers waste at Hanford and forecast to be generated at Hanford. Currently, shipments of TRU waste to Hanford are enjoined (i.e., banned)

5. The ability for remote-handled (RH) TRU capacity must be developed as soon as possible and the delay of such a requirement by the change package is a concern to the Board.

   Response: Hanford continues to work with representatives from the WIPP to track the permit modification schedule that DOE believes will enable the disposal of Hanford RH TRU. Once the WAC are established (assumed to be no earlier than 2006), Hanford will incorporate these requirements into the RH TRU facility design criteria. We will explore opportunities to accelerate the start up of RH TRU operations prior to 2012; however, the majority of waste requiring processing in this facility is not forecasted to be generated until post 2007.

Comment 22: M91-03-01 Change Package: The change package fails to address key principles urged in the Board's advice, including complete retrieval, and, identification of impacts before adding more wastes to Hanford.
The whole basis of the change package is being challenged, and USDOE reserves the right to undermine the most basic standards to avoid application of storage and treatment requirements for Mixed TRU.

Response to Comment 22: The M-91-03-01 TPA Change Package does address TRUM waste already at Hanford, not new offsite waste. The Change Request establishes enforceable compliance schedules for the retrieval, designation, and storage of all suspect mixed waste that is retrievably stored at Hanford. It also acknowledges that decisions regarding how much waste will be retrieved that was disposed of prior to May 6, 1970, will be the result of RCRA corrective actions, RCRA closures, and CERCLA response actions at a later date.

DOE is respecting the preliminary injunction ordered by Judge MacDonald (May 9, 2003) that prohibits DOE from making shipments of TRU waste to Hanford pending final resolution of National Environmental Policy Act (NEPA) litigation.

Comment 23: Even if the State wins in Federal Court, the Proposed Agreement gives USDOE the right to unilaterally avoid treating retrieved wastes and evade application of the safe storage requirements for hazardous wastes. The Hanford Advisory Board advised that any agreement must provide for all retrieved suspect Mixed Wastes, whether TRU or LLW, be treated and stored in accord with all applicable standards to ensure safety. In the WMPEIS, USDOE acknowledged that untreated MTRU posed significant risks when stored, and even after those risks were reduced through treatment, accidents, fires, transportation accidents, and earthquakes could result in offsite fatalities at Hanford.

Response to Comment 23: All retrieved post-1970 mixed waste will be stored in compliant TSD facilities prior to disposal. MLLW will be treated to meet Land Disposal Restriction Standards prior to disposal in a permitted facility. TRUM waste will be placed in compliant interim storage pending final certification and shipment to WIPP for disposal (or pending treatment, if required as a result of the pending litigation).

Comment 24: The relevant proposed changes to the TPA state that "DOE may choose" to issue its own certification that the wastes are destined for WIPP disposal "in lieu" of meeting the standards for storage and treatment. However, the proposed change package fails to provide any enforceable schedule for shipping the wastes offsite within the legal deadlines for storing wastes without treating them. The Proposed Agreement actually delays when USDOE must have Remote Handled TRU capacity (and fails to define what type of capacity) until 2012. Thus, wastes will sit for much more than a decade without having to meet standards for storage or treatment – while USDOE continues to attempt to add more of these wastes from offsite.

Response to Comment 24: The Parties negotiated the M-91-03-01 TPA Change Package recognizing there were legal authority questions that directly affect the control and management of TRU waste shipments, storage, treatment and certification. For the parties to create a successful resolution to the management of TRU and TRUM, the parties are respecting one another's position while the legal authority questions are being resolved in federal court.

The M-91 TPA Change Package assures that actions will be taken so that storage of TRU waste complies with DOE regulations and storage of mixed TRU complies with RCRA and HWMA. Whether DOE transuranic waste must meet RCRA and HWMA standards for storage and treatment depends on the legal questions being adjudicated in federal court. Further, the parties acknowledge that for some period of time RH-TRU will remain at Hanford until WIPP waste acceptance criteria are developed for characterization and certification.

Comment 25: The HAB board has repeatedly advised that retrieval of the TRU wastes buried before 1971 should be a high priority. It is reasonable to assume that the older containers will have far greater deterioration and every year of retrieval delay adds a greater risk that the contents of these older containers will escape into the environment. Focusing on retrieval of the most recently buried and stored wastes do not reduce the highest risk first. Milestones for retrieval and treatment of the pre-1970 TRU should be included in this change package and this work should be funded.

Response to Comment 25: The Parties believe the M-91 change package does place priority on addressing the highest risk wastes first through enforceable retrieval milestones. Records for waste retrievably stored in low-level Burial Ground 218-W-4C, the first burial ground required to be retrieved under milestone M-91-40, indicate that the plutonium inventory represents nearly three quarters of the plutonium inventory within all of the post-1970 retrievably stored suspect TRU waste burial grounds.

In addition, many of the containers within burial ground 218-W-4C contain soils exhumed from the 216-Z-9 Crib. These drummed soils contain approximately 40,000 grams of plutonium and volatile organic compounds, including carbon tetrachloride and its degradation products. Activities are currently underway to capture the releases of these compounds from vent risers within sections of 218-

W-4C. Removal of these suspect TRU drums lessens the potential for releases to the soil column and potentially the groundwater.

In June 2002, the Tri-Parties, following public comment, established TPA milestones (M-13 and M-15 series) to address the investigation and clean up of all 200 Area waste sites, including pre-1970 burial grounds. The first milestone in that series ((M-13-00O) requires a Remedial Investigation/ Feasibility Study (RI/FS) work plan for all 200 Area Burial grounds and solid waste landfills be submitted December 2004. Pre-1970 burial grounds are being addressed through the CERCLA processes. Ecology and DOE currently are working to develop the Data Quality Objectives and an appropriate sampling and analysis plan to support that RI/FS work plan preparation.

In addition, enforceable schedules for the retrieval of pre-1970 transuranic contaminated waste in the 618-10 and 618-11 burial grounds were established in the 300-FF-2 Operable Unit Record of Decision. The ROD identifies a technical approach to develop the capability to retrieve, package, and treat, as necessary, waste generated from the exhumed pre-1970 burial grounds.

M-16-93 requires submittal of an implementation work plan for the acquisition of capabilities necessary to manage TRU and TRUM waste generated through CERCLA Actions. This work plan will specifically cover any TRU or TRUM waste that is generated as a result of a CERCLA decision to retrieve pre-1970 buried waste.

Comment 26: The requirements for M-91 TRU retrieval have been in place for nearly one year, and have been under discussion for several years. USDOE should have identified these compliance costs in its annual budget submission for FY 2004, 2005 and out years. By failing to do so, USDOE again failed to comply with the requirements of TPA paragraphs 148 and 149, and prevented the public and regulators from commenting on the adequacy and priorities in USDOE-RL's budget submissions. Ecology's failure to determine or disclose if there were budget impacts from M-91 can not be entirely laid to USDOE's lack of disclosure, since several entities including the HAB inquired as to costs and tradeoffs, and Ecology was in a position to disclose and oppose this action earlier.

Response to Comment 26: Last October when the tentative agreement was signed, DOE directed its contractor to prepare a baseline change request that realigned the work scope to reflect those proposed changes. The baseline change request continues to be worked; however, DOE has been able to achieve the M-91-03-01 commitments within established funding targets.

4. Comments submitted by Anthony Johnson, Chairman, Nez Perce Tribal Executive Committee

Comment 1: The Tribe understands that the M-91 change package addresses retrieval of all RSW, designating whether or not it is mixed waste (i.e., has hazardous waste component in addition to radionuclide component). The change package also addresses compliance schedules for waste that requires treatment, safe storage and preparation of TRU waste for shipment to WIPP. The Nez Perce see this is another step forward in processing 200 Area waste and hastening removal of TRU waste from Hanford. It is clear, in addition, that it is not in the realm of the M-91 milestones to address disposal.

Response to Comment 1: You are correct about the scope of activities covered and not covered by the proposed M-91 and M-16 TPA milestones.

Comment 2: It also appears to us that these milestones do not address any possible future designation and disposition of tank waste as TRU waste. If some amount of tank waste can be handled as TRU, we would like a clearer understanding of what framework regulates its disposition.

Response to Comment 2: The Department of Energy is working closely with the Washington State Department of Ecology to ascertain what is necessary to proceed with retrieval and packaging of

Hanford Tank waste determined to be Transuranic mixed waste (TRUM). The permitting process will include an opportunity for public comment. In addition, the M-45 milestone series addresses closure of the SSTs. The tank TRUM retrieval activity would be an interim step in achieving the applicable M-45 milestones.

Comment 3: At the present time the transport of off-site TRU to Hanford is halted and in litigation. If it should resume after settlements between the Tri Parties, we understand it would be processed in the same manner as Hanford TRU waste. We repeat a primary concern from the ERWM letter to Mr. Keith Klein in January 2003 regarding bringing off-site TRU to Hanford. The Nez Perce remain deeply concerned that the WIPP is not currently licensed to accept remote-handled TRU, and we expect to be kept informed of the status of that licensing effort.

Response to Comment 3: The volume of RH TRU waste that could be received from off-site generators for interim storage and certification would be processed in conjunction with over 200 m^3 of RH TRU that are forecasted to be generated from Hanford clean up activities. Hanford continues to work with representatives from the WIPP to track the permit modification schedule that DOE believes will enable the disposal of Hanford RH TRU. DOE will keep your program staff informed of our progress on this effort.

Comment 4: Having shared these comments, the Tribe wishes to acknowledge the efforts the Tri-Party agencies have exercised to deal with these waste issues, and we hope the matters still in litigation will be settled in a manner fair to all. Ultimately, it is the health and fate of the Columbia River and its resources that the Tribe wishes to protect.

Response to Comment 4: The Parties share your desire to expeditiously resolve the litigation in a fair manner that facilitates the treatment and disposal of wastes generated from clean up activities at Hanford.

5. Comments submitted by Nancy Koening

Comment 1: I'm writing for the record regarding the proposed changes for the cleanup of buried wastes at the Hanford site (M-91, M-16). Acceleration of cleanup sounds good. But, is it real? And, of course the Department of Ecology should have authority to regulate what happens in Washington State!

Response to Comment 1: The M-91 draft Change Package was designed to accelerate retrieval of CH suspect stored Transuranic (TRU) waste, treat legacy MLLW, and acquire treatment capabilities sooner for RH and large containers of TRU and MLLW. When this draft Change Package is finalized, there will be enforceable schedules for retrieving and designating retrievably-stored suspect TRU waste and treating MLLW.

DOE and the Department of Ecology have a disagreement on the scope of the State's authority over TRUM, but have agreed to submit that question to a federal judge for resolution.

Comment 2: I am concerned that the workers shown in the photo on the first page of the notice are not wearing protective gear. One worker appears to be standing in water. Are workers being protected? These are wastes you cannot see or feel! (*reference: fact sheet photo)*

Response to Comment 2: Before retrieving any waste from the burial grounds, workers and safety and health professionals identify hazards associated with that work. The photo shows workers retrieving contact-handled suspect TRU waste from one of the low-level burial grounds. Based on the pre-work hazard analysis DOE determined that no protective clothing was required. Also, one of the individuals in the photo is an industrial hygienist whose job it is to ensure that the work is done safely.

Comment 3: Will any of these actions result in more contaminated water? Both Groundwater and Columbia River Water? Will any of these actions result in downwind air pollution? Will wastes be solidified?

Response to Comment 3: The work associated with the M-91 and M-16 draft Change Packages will not further contaminate ground or surface water nor produce levels of air pollution that exceed state and federal regulations. The purpose of these milestones is to remove waste from the burial grounds thus reducing any potential impacts to the environment.

The waste retrieval operations are expected to result in non-liquid waste. Solidification is one potential treatment for liquid wastes, therefore, it is not expected that retrieval operations will result in a significant amount of waste being solidified. For newly generated waste or waste in storage, the method used to treat wastes will depend on the characteristics of the waste and the regulatory requirements for treatment and disposal of that waste. Based on current characterization data, macroencapsulation (e.g. grout) of the waste prior to disposal will likely be the required treatment option for a large percentage of the MLLW in storage or forecasted to be generated in the future.

Comment 4: There's been so much waste of dollars – we need to get on with the task at hand!

Response to Comment 4: The Tri-Party Agreement agencies are committed to cleaning up the Hanford Site. As of March 1, 2004, 2221 drums of waste were processed and shipped offsite to the Waste Isolation Pilot Plant in New Mexico.

6. Comments submitted by Calvin Rinne

Comment 1: I applaud your coordinated efforts to address the environmental risks at Hanford posed by the radioactive elements classified as TRU beginning in 1970. It seems that those same elements, generated before 1970, pose the same environmental risks. If this approach is right for TRU, then it should be right for the elements that this classification defines, without respect for generation date. Conversely, if the approach for treatment of pre-1970 TRU (forgive the term, you know what I mean) is good enough, then the same should be good enough for post-1970 TRU. I urge the Agencies to agree on what is the right approach, and to follow that approach consistently.

Response to Comment 1: Pre-1970 waste is addressed in other TPA milestones. USDOE plans to characterize pre-1970 waste under RCRA past-practice or the CERCLA processes to determine what, if any, remedial actions would be required before closing any facilities, waste site or burial grounds that contain this waste.

ENCLOSURE 2

Change Number M-91-03-01	**Federal Facility Agreement and Consent Order** *Change Control Form* Do not use blue ink. Type or print using black ink.	Date April 22, 2004

Originator Ecology **Phone**

Class of Change
[X] I – Signatories [ ] II – Executive Manager [ ] III – Project Manager

Change Title
Modification of Hanford Federal Facility Agreement and Consent Order (Agreement) M-91 Series provisions.

Description/Justification of Change[1]
The M-91 milestone series was originally created to establish schedules for the construction and operation of facilities the Parties believed would be needed to manage transuranic waste and low-level waste. These milestones also included requirements calling for the development of project management plans for these types of waste. Because efforts to establish facility milestones did not expedite the processing of waste, the Parties have agreed to modify this milestone series. (Continued on next page.)

Impact of Change[1]
Approval of this change package, an associated M-16-03-03 change package, and the accompanying Settlement Agreement, resolves DOE's appeal of Ecology's Administrative Order No. 03NWPKW-5494, DOE's appeal of Ecology's March 10, 2003 Final Determination, and all disputes concerning HFFACO milestones M-91-01 and M-91-03. The approved change package supersedes the former M-91 milestone series. (Continued on next page.)

Affected Documents
The Hanford Federal Facility Agreement and Consent Order, as amended, DOE's Annual Land Disposal Restrictions Report, the Hanford site Integrated Priority List (IPL).

Approvals

Linda Hoffman Ecology	5/10/04 Date	✓ Approved	____ Disapproved
[illegible] DOE-RL	5/5/04 Date	✓ Approved	____ Disapproved
L. JOHN IANI, REGIONAL ADMINISTRATOR EPA, REGION 10	5/11/04 Date	✓ Approved	____ Disapproved

[1] The descriptions in the "Description/Justification of Change" and "Impact of Change" sections provide general information intended to describe in broad outlines the import of these changes. In the event of conflicts between these general sections and the Settlement Agreement and milestones, the Settlement Agreement and milestones prevail.

Description/Justification of Change (continued)

For purposes of this M-91-03-01 Change Package, the parties have agreed as follows:

1. All retrievably stored waste is suspected of being mixed waste;
2. Retrievably stored waste will be managed as mixed waste unless and until it is designated as non-mixed through the designation process (WAC 173-303-070 through 100);

This change request establishes enforceable compliance schedules for the retrieval, designation[2] and storage of all suspect mixed waste that is retrievably stored at Hanford. For mixed low-level waste (MLLW) that requires treatment and is currently in storage or will be newly generated, this package also includes compliance schedules for its treatment. This change package addresses issues of treatment and certification of mixed transuranic waste (TRUM) in light of pending litigation regarding the State's authority to impose such requirements. Specifically, and as set forth in more detail in the accompanying Settlement Agreement, requirements in this change package for treatment or certification of TRUM will not apply prior to a final appealable judgment on the merits is obtained in *Washington v. Abraham, No*. CT-03-5018-AAM, on the question of whether such wastes are subject to Land Disposal Restrictions (LDR) treatment requirements and LDR storage prohibitions, and will not apply thereafter with respect to any wastes determined by said judgment to be exempt from LDR treatment requirements and from LDR storage prohibitions by virtue of the 1996 WIPP Land Withdrawal Act Amendments, unless the judgment is reversed on appeal.

In regard to wastes disposed of prior to May 6, 1970, the parties acknowledge that the decisions regarding whether, when, and how much waste will be retrieved will be made as a result of RCRA corrective actions, RCRA closures, and CERCLA response actions. For operable units that include burial grounds where waste was disposed of before 1971, the HFFACO already requires completion of all 200 Area RI/FSs and RFI/CMSs by December 31, 2008, and completion of all 200 Area remedial actions by December 31, 2024. Following issuance of the decision documents for these Pre-1971 200 Area burial grounds, DOE will submit work plans to Ecology. The work plans will be submitted for approval pursuant to HFFACO Action Plan Section 11.6. DOE will submit draft change packages with the work plans and shall include proposed milestones, as required by Action Plan Section 11.6. Such change packages shall contain milestones for completion of remedial actions including but not be limited to milestones for retrieval, designation and, if required, certification of any transuranic waste that the decision documents determine must be retrieved.

For contact handled (CH) MLLW containing LDR constituents that is newly generated after June 30, 2009, DOE shall treat it to meet LDR treatment requirements in compliance with WAC 173-303-140 and by reference 40 CFR 268.

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[2] As used in these introductory sections, "designation" refers to the process set out in WAC 173-303-070 through 100 for characterization of waste under RCRA and the Washington HWMA, and not to the term used in section 9(a)(1)(H) of the WIPP Land Withdrawal Act.

These milestones do not separately address the retrieval, storage, or treatment of Greater Than Category 3 (GTC3) waste because GTC3 waste is a sub-set of LLW. The retrieval, storage, and treatment of the mixed waste portion of waste that would be classified as GTC3 waste is addressed by the milestones in this change package that apply to MLLW.

Impact of Change (continued)

This change package adds interim milestones M-91-40 through -45. Interim milestones M-91-40 and -41 address the retrieval, designation and storage of Hanford's Retrievably Stored Waste (RSW). Interim milestone M-91-42 addresses the designation and treatment of newly generated contact handled (CH) waste and CH waste currently in above-ground storage. Interim milestone M-91-43 addresses newly generated remote handled (RH) low-level waste, newly generated boxes and large containers of CH low-level waste, RH low-level waste currently in above-ground storage, and boxes and large containers of CH low-level waste currently in above-ground storage. Interim milestone M-91-44 addresses newly generated RH transuranic waste, newly generated boxes and large containers of CH transuranic waste, RH transuranic waste currently in above-ground storage, and boxes and large containers of CH transuranic waste currently in above-ground storage. Interim milestone M-91-45 requires DOE to report annually to Ecology on DOE's progress in completing work relating to RH waste and boxes and large containers of RH and CH waste.

This change package also modifies several existing milestones. M-91-00 is revised to focus on completion of the acquisition or modification of facilities for retrieval, storage, and treatment of Hanford Site's RCRA mixed and suspect mixed transuranic and low-level waste. Except as expressly provided herein, the M-91 milestone series addresses RCRA suspect mixed and mixed wastes. Completion of these milestones does not preclude the later application of CERCLA authorities to the wastes addressed by this series. (Concurrent with the execution of this change package, DOE and EPA will execute a change package regarding facility requirements relative to capabilities for managing CERCLA TRU/TRUM waste. Ecology, EPA, and DOE have agreed to segregate RCRA and CERLCA milestone requirements in the interest of reaching a resolution of disputes and pending litigation between Ecology and DOE. Such agreement does *not* reflect a decision to abandon integrated cleanup strategies contemplated by other provisions of the HFFACO.) In addition, this change package adds to M-91-00 definitions applicable throughout the M-91 milestone series. M-91-01 establishes a date for completion of acquisition and modification of facilities and/or capabilities needed for storage and treatment/processing of Hanford Site Post 1970 RH-TRUM and suspect RH TRUM, TRUM in boxes and large containers, and suspect TRUM in boxes and large containers. M-91-03 requires periodic revision of DOE's TRUM and Mixed Low-Level Waste Project Management Plan (PMP).

Finally, this change package also deletes interim milestones M-91-07 and M-91-22, and target dates M-91-08-T01 and M-91-21-T01.

As noted above, to the extent that M-91 milestones address LDR treatment requirements and LDR storage prohibitions as applied to TRUM, they 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 RECOGNITION OF THE NEED TO MODIFY AGREEMENT REQUIREMENTS GOVERNING THE MANAGEMENT OF HANFORD SITE MIXED LOW-LEVEL WASTES (MLLW) AND TRANSURANIC WASTES, THE PARTIES AGREE AS FOLLOWS:

M-91-00	COMPLETE THE ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND~~/OR~~ MODIFICATION OF PLANNED FACILITIES NECESSARY FOR RETRIEVAL, STORAGE, AND TREATMENT/PROCESSING ~~AND DISPOSAL~~ OF ALL HANFORD SITE ~~TRU/TRUM, LLMW, AND GTC3~~ RCRA MIXED AND SUSPECT MIXED LOW-LEVEL WASTE AND RCRA MIXED AND SUSPECT MIXED TRANSURANIC WASTE. ~~COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-91 SERIES IS DEFINED AS THE PERFORMANCE OF SUFFICIENT WORK TO ASSURE WITH REASONABLE CERTAINTY THAT DOE WILL ACCOMPLISH SERIES M-91 MAJOR AND INTERIM MILESTONE REQUIREMENTS.~~ ~~DOE INTERNAL WORK SCHEDULES (E.G., DOE APPROVED SCHEDULE BASELINES) AND ASSOCIATED WORK DIRECTIVES AND AUTHORIZATIONS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF THIS AGREEMENT. MODIFICATION OF DOE CONTRACTOR BASELINE(S) AND ISSUANCE OF ASSOCIATED DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS THAT ARE NOT CONSISTENT WITH AGREEMENT REQUIREMENTS SHALL NOT BE FINALIZED PRIOR TO APPROVAL OF AN AGREEMENT CHANGE REQUEST SUBMITTED PURSUANT TO AGREEMENT ACTION PLAN SECTION 12.0~~ **DEFINITIONS** THE FOLLOWING DEFINITIONS APPLY TO THIS SERIES OF MILESTONES. "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. "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).	TO BE DETERMINED*

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 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: 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 WASTE" (TRUM) WASTE" AND "NON-MIXED TRANURANIC 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 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. 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 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. 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 WAC 173-303-630(7). 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 *WASHINGTON V. ABRAHAM, NO.* CT-03-5018-AAM, AND AFTER SUCH A JUDGMENT, ONLY AS SET FORTH IN THE ACCOMPANYING SETTLEMENT AGREEMENT. ~~* NEGOTIATION OF SCHEDULES FOR FACILITY MODIFICATION WHICH MAY BE NECESSARY FOR THE MANAGEMENT OF PRE 1970 TRU/TRUM WILL BE ESTABLISHED FOLLOWING THE ISSUANCE OF OPERABLE UNIT RECORDS OF DECISION (RODS).~~ * 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-1971TRU/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).	
M-91-01	COMPLETE THE ACQUISITION OF CAPABILITIES AND/OR ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND/OR MODIFICATION OF PLANNED FACILITIES NECESSARY FOR RETRIEVAL, DESIGNATION, STORAGE AND TREATMENT/PROCESSING PRIOR TO DISPOSAL OF ALL HANFORD SITE POST 1970 RH ~~TRU/~~TRUM AND SUSPECT RH TRUM, TRUM IN BOXES AND LARGE CONTAINERS, AND SUSPECT TRUM IN BOXES AND LARGE	6/30/2012

	CONTAINERS. NOTE: THE REQUIREMENTS OF THIS MILESTONE WITH REGARD TO COMPLETING THE ACQUISITION OF CAPABILITIES AND/OR ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES AND/OR MODIFICATION OF PLANNED FACILITIES NECESSARY FOR TREATMENT/PROCESSING OF HANFORD SITE POST 1970 RH TRUM AND SUSPECT RH TRUM, TRUM IN BOXES AND LARGE CONTAINERS, AND SUSPECT TRUM IN BOXES AND LARGE CONTAINERS DO NOT APPLY AS TO CAPABILITIES AND FACILITIES FOR LDR TREATMENT (OR FOR CERTIFICATION IN LIEU OF SUCH TREATMENT) OF RH TRUM AND TRUM IN BOXES AND LARGE CONTAINERS PRIOR TO A FINAL APPEALABLE JUDGMENT ON THE MERITS OF THE LDR STORAGE AND TREATMENT CLAIM IN *WASHINGTON V. ABRAHAM, N*O. CT-03-5018-AAM, AND AFTER SUCH A JUDGMENT, ONLY AS SET FORTH IN THE ACCOMPANYING SETTLEMENT AGREEMENT.	
M-91-03	SUBMIT REVISIONS OF THE HANFORD SITE ~~TRU/~~TRUM AND MIXED LOW LEVEL WASTE PROJECT MANAGEMENT PLAN (PMP) TO ECOLOGY PURSUANT TO AND IN COMPLIANCE WITH THE REQUIREMENTS OF AGREEMENT SECTION 11.5 ~~AND ECOLOGY'S MARCH 10, 2003 M-91 MILESTONE SERIES FINAL DETERMINATION~~. REVISIONS OF THE PMP SHALL ADDRESS RCRA MIXED AND SUSPECT MIXED TRANSURANIC AND LOW LEVEL WASTE AND WILL CONSIDER AND EXPRESSLY EVALUATE THE IMPACT ON M-91 RETRIEVAL, TREATMENT AND PROCESSING CAPABILITIES, THAT MAY RESULT FROM RETRIEVAL, TREATMENT AND/OR PROCESSING OF ANY OTHER TRANSURANIC OR SUSPECT TRANSURANIC WASTE INCLUDING BUT NOT LIMITED TO OFF-SITE TRANSURANIC WASTE AND HANFORD SITE TRANSURANIC WASTE GENERATED AFTER 1/1/03. ~~DOE PMP~~ REVISIONS OF THE PMP SHALL BE SUBMITTED ON 12/31/2003, 3/31/2009 AND 3/31/2013. EACH REVISION IS A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THIS AGREEMENT. WITH RESPECT TO RH MIXED WASTE AND MIXED WASTE IN BOXES AND LARGE CONTAINERS, THE PMP SUBMITTED ON	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	12/31/2003 WILL SPECIFICALLY IDENTIFY MEASURABLE ACTIONS TO BE TAKEN BY DOE TO ACQUIRE CAPABILITIES TO MANAGE SUCH WASTES. THE PMP SHALL IDENTIFY SUCH MEASURABLE ACTIONS AT LEAST YEARLY. NOTE: WITH RESPECT TO PMP REVISIONS ON 3/31/2009 AND 3/31/2013, THE REQUIREMENTS OF THIS MILESTONE CONCERNING PMP REVISIONS TO ADDRESS TRUM SHALL 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, AND AFTER SUCH A JUDGMENT, ONLY AS SET FORTH IN THE ACCOMPANYING SETTLEMENT AGREEMENT. IN ADDITION, THE PMP SUBMITTED ON 12/31/2003 WILL NOT BE REQUIRED TO CONTAIN PLANS AND SCHEDULES FOR THE LDR TREATMENT (OR CERTIFICATION IN LIEU OF SUCH TREATMENT AS PROVIDED FOR IN M-91-42 AND M-91-44) OF TRUM WASTE. WITHIN SIX MONTHS OF ECOLOGY'S APPROVAL OF DOE'S PROPOSAL OR ECOLOGY'S ISSUANCE OF A DETERMINATION PURSUANT TO THE ACCOMPANYING SETTLEMENT AGREEMENT, FOLLOWING RECEIPT OF A FINAL APPEALABLE JUDGMENT ON THE MERITS OF THE LDR STORAGE AND TREATMENT CLAIM IN *WASHINGTON V. ABRAHAM*, NO. CT-03-5018-AAM, DOE SHALL REVISE THE PMP TO INLCUDE PLANS AND SCHEDULES FOR LDR TREATMENT (OR CERTIFICATION IN LIEU OF SUCH TREATMENT AS PROVIDED IN M-91-42 AND M-91-44) OF TRUM WASTE IN THE MANNER REQUIRED BY DOE'S APPROVED PROPOSAL OR ECOLOGY'S DETERMINATION. ~~DOE's~~ PMP REVISIONS WILL BE SUBMITTED TO ECOLOGY FOR REVIEW AND APPROVAL AS PRIMARY DOCUMENTS PURSUANT TO AGREEMENT ACTION PLAN SECTION 9.2.1. DOE SHALL IMPLEMENT THE PLAN AS APPROVED. ~~THE NEW PMP SUBMITTED IN ACCORDANCE WITH THIS MILESTONE, ONCE APPROVED, WILL SUPERCEDE ALL M-91 PMP'S PREVISOUSLY SUBMITTED.~~ ONCE APPROVED, THE PMP SUBMITTED ON 12/31/2003, IN ACCORDANCE WITH THIS MILESTONE SHALL SUPERSEDE THOSE PORTIONS OF PREVIOUSLY SUBMITTED DOE PMPs THAT CONCERNED RCRA MIXED WASTE, SUSPECT MIXED TRANSURANIC AND SUSPECT MIXED LOW LEVEL WASTE.	

M-91-05-T01	COMPLETE AND SUBMIT RH ~~TRU/~~TRUM, SUSPECT RH TRUM, TRUM IN BOXES AND LARGE CONTAINERS, AND SUSPECT TRUM IN BOXES AND LARGE CONTAINERS RETRIEVAL AND PROCESSING FACILITY(IES) ENGINGEERING STUDY/FUNCTIONAL DESIGN CRITERIA STUDY TO ECOLOGY FOR FACILITIES REQUIRED BY M-91-01. THE ~~TRU/~~TRUM ENGINEERING/FUNCTIONAL DESIGN CRITERIA STUDY WILL COVER ACTIVITIES/FACILITIES NOT CONSIDERED COMMERCIALLY VIABLE AS DOCUMENTED IN THE APPROVED ~~TRU/~~TRUM PMP AND ASSOCIATED AGREEMENT CHANGE REQUESTS.	~~12/31/2002~~ 12/31/2007
~~M-91-07~~	~~COMPLETE PROJECT W-113 FOR POST 1970 CH TRU/TRUM RETRIEVAL.~~	~~9/30/2004~~
~~M-91-08-T01~~	~~COMPLETE CONSTRUCTION AND INITIATE HOT OPERATIONS OF RH AND LARGE SIZE TRU/TRUM PROCESSING FACILITY (A FINAL ACQUISITION SCHEDULE FOR THIS FACILITY WILL BE ESTABLISHED AS AN INTERIM MILESTONE NO LATER THAN DECEMBER 2000).~~	~~6/30/2005~~
M-91-12	COMPLETE THERMAL TREATMENT ~~AND DISPOSAL~~ OF AN ADDITIONAL 360 CUBIC METERS OF CONTACT HANDLED LLMW. THIS BRINGS THE CUMULATIVE TOTAL TO AT LEAST 600 CUBIC METERS OF CONTACT HANDLED LLMW THERMALLY TREATED ~~AND DISPOSED OF~~.	12/31/2005
M-91-12A	COMPLETE THERMAL TREATMENT ~~AND DISPOSAL~~ OF AT LEAST 240 CUBIC METERS OF CONTACT HANDLED LLMW.	12/31/2004
M-91-15	COMPLETE ACQUISITION OF FACILITIES AND/OR CAPABILITIES AND INITIATE TREATMENT OF RH MLLW AND ~~LARGE CONTAINER (CH) LLMW~~ CH MLLW IN BOXES AND LARGE CONTAINERS.	6/30/2008
M-91-20	T PLANT IS READY TO RECEIVE THE FIRST CANISTER OF K BASINS FLOOR AND PIT SLUDGE. THIS INTERIM MILESTONE WILL BE COMPLETE WHEN ALL T PLANT READINESS ACTIVITIES HAVE BEEN COMPLETED	12/31/2002 [Completed]

	TO ACCEPT PIT AND FLOOR SLUDGE. READINESS IS DEFINED AS THE ISSUANCE OF THE READINESS TO PROCEED LETTER BY THE APPROVAL AUTHORITY.	
~~M-91-21-T01~~	~~COMPLETE PHYSICAL ACTIVITIES AT T PLANT NECESSARY TO STORE CANISTER AND FUEL WASH SLUDGE.~~ ~~THIS TARGET IS COMPLETE UPON THE DECLARATION OF COMPLETION OF MODIFICATIONS REQUIRED TO STORE CANISTER AND FUEL WASH SLUDGE IN T PLANT.~~	~~11/29/2003~~
~~M-91-22~~	~~T PLANT IS READY TO RECEIVE CANISTER AND FUEL WASH SLUDGE FROM K BASINS.~~ ~~THIS INTERIM MILESTONE WILL BE COMPLETE WHEN ALL T PLANT READINESS ACTIVITIES HAVE BEEN COMPLETED TO ACCEPT CANISTER AND FUEL WASH SLUDGE. READINESS IS DEFINED AS THE ISSUANCE OF THE READINESS TO PROCEED LETTER BY THE APPROVAL AUTHORITY.~~	~~02/29/2004~~
M-91-40	REGARDING THE RETRIEVAL AND DESIGNATION OF CONTACT-HANDLED (CH) RETRIEVABLY STORED WASTE (RSW) AND TREATMENT OF SUCH WASTES DESIGNATED AS MIXED TO MEET APPLICABLE FEDERAL AND STATE LAND DISPOSAL RESTRICTION (LDR) STANDARDS (ALL CH RSW WASTE REGARDLESS OF PACKAGE SIZE): 1. DOE SHALL RETRIEVE ALL CH-RSW WITHIN BURIAL GROUNDS 218-W-4C, 218-W-4B, 218-W-3A, AND 218-E-12B BY DECEMBER 31, 2010. IN ACHIEVING THIS RETRIEVAL REQUIREMENT, DOE SHALL FIRST INITIATE RETRIEVAL AT ITS BURIAL GROUND 218-W-4C NO LATER THAN NOVEMBER 15, 2003, AND SHALL RETRIEVE RSW AT THE FOLLOWING RATES : • 1,200 CUBIC METERS (CUMMULATIVE) BY 12/31/04, • 2,700 CUBIC METERS (CUMMULATIVE) BY 12/31/05, • 4,700 CUBIC METERS (CUMMULATIVE) BY 12/31/06, • 7,200 CUBIC METERS (CUMMULATIVE) BY 12/31/07, • 9,700 CUBIC METERS (CUMMULATIVE) BY 12/31/08, • 12,200 CUBIC METERS (CUMMULATIVE) BY 12/31/09, • COMPLETE RETRIEVAL OF CH-RSW BY 12/31/2010.	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	DOE SHALL CONTINUE RETRIEVAL ACTIONS IN 218-W-4C UNTIL ALL CH RSW IS RETRIEVED. SUBSEQUENT RETRIEVAL ACTIONS, SHALL BE UNDERTAKEN SEQUENTIALLY AT BURIAL GROUNDS 218-E-12B, 218-W-3A, AND 218-W-4B. RETRIEVAL OF WASTE OUT OF THE ORDERED SEQUENCE SHALL NOT BE COUNTED TOWARD THE MILESTONE REQUIREMENT UNLESS JOINTLY AGREED TO BY ECOLOGY AND DOE. DOE MAY REQUEST SUCH APPROVAL WITH RESPECT TO WASTE IN BOXES AND LARGE CONTAINERS. IN REVIEWING SUCH REQUEST, ECOLOGY WILL CONSIDER AMONG OTHER FACTORS; WHETHER THE WASTE CONTAINER HAS BEEN UNCOVERED, INSPECTED AND FOUND TO BE INTACT AND NOT POSING A THREAT TO HUMAN HEALTH AND THE ENVIRONMENT (OR RE-PACKAGED TO PREVENT RELEASE TO THE ENVIRONMENT) AND EXISTING DOCUMENTATION DOES NOT INDICATE THE PRESENCE OF FREE LIQUIDS. ECOLOGY MAY CONDITION ITS AGREEMENT ON A DOE COMMITMENT TO PERFORM ADDITIONAL SPECIFIED REQUIREMENTS (E.G. CONTAINER INSPECTIONS, COVERING CONTAINERS, ETC.) TO PREVENT RELEASES TO THE ENVIRONMENT. THE RETRIEVAL SEQUENCE IS PRIORITIZED BASED ON ENVIRONMENTAL RISK AND INTENDED TO ENSURE THAT DOE FIRST RETRIEVE WASTE FROM THE 218-W-4C BURIAL GROUND, WHICH HAS POTENTIAL CARBON TETRACHLORIDE CONTAMINATION ISSUES, AND TO SUBSEQUENTLY RETRIEVE WASTES FROM BURIAL GROUND 218-E-12B AND 218-W-3A WHERE CONTAINERS WERE PLACED IN CONFIGURATIONS THAT ALLOWED DIRECT CONTACT WITH THE SOIL. DOE SHALL CONCLUDE RETRIEVAL ACTIONS WITH BURIAL GROUND 218-W-4B. 2. AS RSW RETRIEVAL PROCEEDS, DOE SHALL SAMPLE AND ANALYZE TRENCH SUBSTRATES WITH THE PURPOSES OF DETERMINING WHETHER OR NOT RELEASES OF CONTAMINANTS TO THE ENVIRONMENT HAVE OCCURRED, AND, IF SO, THE NATURE AND EXTENT OF CONTAMINATION. SUCH SAMPLING AND ANALYSIS SHALL BE IN ACCORDANCE WITH ECOLOGY APPROVED SAMPLING AND ANALYSIS PLANS (SAP). THE SAP WILL BE	

	DEVELOPED USING A DQO PROCESS TO ESTABLISH SAMPLING REQUIREMENTS FOR SAMPLING OF BURIAL GROUND VENT RISERS AND SUBSTRATE SOILS. DOE PROVIDED ECOLOGY WITH A DRAFT 218-W-4C SAP ON 8/12/03. ECOLOGY'S INTENTION IS TO ISSUE A FINAL SAP WITHIN 30 DAYS. WITH RESPECT TO THE REMAINING BURIAL GROUNDS, DOE WILL PROVIDE ECOLOGY WITH UPDATED SAPS, IF NEEDED, FOR REVIEW AND APPROVAL AT LEAST 45 DAYS PRIOR TO STARTING RETRIEVAL IN EACH BURIAL GROUND. DOE WILL IMPLEMENT APPROVED SAPS, AS A REQUIREMENT OF THIS MILESTONE, DURING RETRIEVAL OF ALL RSW. THE RESULTS OF BURIAL GROUND VENT AND SUBSTRATE SAMPLING AND ANALYSIS PURSUANT TO APPROVED SAPS SHALL BE SUBMITTED TO ECOLOGY BY LETTER REPORTS QUARTERLY. SUCH REPORTS SHALL DOCUMENT RESULTS AND METHODOLOGIES, SHALL ASSESS RESULTS AGAINST REGULATORY REQUIREMENTS, SHALL INCLUDE A DESCRIPTION (OR DESCRIPTIONS) OF DOCUMENTED CONTAMINANT RELEASES TO THE ENVIRONMENT, AND SHALL DESCRIBE PLANNED AND/OR SCHEDULED ADDITIONAL WORK. 3. WITHIN 90 DAYS OF RETRIEVAL, DOE SHALL DESIGNATE ALL CH RSW RETRIEVED FROM THE RSW TRENCHES PURSUANT TO WAC 173-303-070 THROUGH 100, AND SHALL SPECIFICALLY IDENTIFY INDIVIDUAL BOXES AND LARGE CONTAINERS THAT CANNOT BE DESIGNATED BASED ON AVAILABLE PROCESS KNOWLEDGE. FOR THE BOXES AND LARGE CONTAINERS DETEREMINED TO BE LOW- LEVEL WASTE THAT CANNOT BE DESIGNATED BASED ON THE AVAILABLE PROCESS KNOWLEDGE, DOE SHALL DESIGNATE SAID WASTE ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DECEMBER 31, 2008 (SIX MONTHS AFTER THE RH AND LARGE CONTAINER MLLW FACILITIES AND/OR CAPABILITIES ARE REQUIRED TO BE OPERATIONAL). FOR BOXES AND LARGE CONTAINERS DETERMINED TO BE TRANSURANIC WASTE THAT CANNOT BE DESIGNATED BASED ON THE AVAILABLE PROCESS KNOWLEDGE, DOE SHALL DESIGNATE SAID WASTE ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DECEMBER 31, 2012 (SIX MONTHS	

AFTER THE RH AND LARGE CONTAINER TRANSURANIC FACILITIES AND/OR CAPABILITIES ARE REQUIRED TO BE OPERATIONAL).

4. FOR ALL RETRIEVED CH-RSW DETERMINED TO BE LOW LEVEL WASTE AND 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 IN ACCORDANCE WITH THE SCHEDULE PROVIDED IN MILESTONE M-91-42(2) AND M-91-43(3).

5. IN REGARD TO THE CARBON TETRACHLORIDE VAPOR PLUME IN THE VADOSE ZONE IN THE VICINITY OF TRENCH 4 IN BURIAL GROUND 218-W-4C, DOE SHALL:

- START VAPOR EXTRACTION BY NOVEMBER 15, 2003, TO REDUCE CARBON TETRACHLORIDE VAPORS.
- START RETRIEVAL IN TRENCH 4 BY JANUARY 15, 2004
- COMPLETE RETRIEVAL OF TRENCH 4 BY DECEMBER 31, 2006. (WITH THE EXCEPTION OF THOSE BOXES AND LARGE CONTAINERS THAT THE PARTIES HAVE AGREED, IN WRITING, MAY BE RETRIEVED OUT OF SEQUENCE.)

RETRIEVAL WILL CONTINUE IN TRENCH 4 UNTIL IT IS COMPLETE. VAPOR EXTRACTION AND RETRIEVAL OPERATIONS IN TRENCH 4 WILL BE INTEGRATED BY DOE TO MINIMIZE POTENTIAL WORKER EXPOSURE TO CARBON TETRACHLORIDE VAPORS, AND TO MITIGATE ANY POSSIBLE RELEASES OF CARBON TETRACHLORIDE FROM TRENCH 4 CONTAINERS.

6. FOR ALL RETRIEVED CH-RSW DETERMINED TO BE TRANSURANIC WASTE AND 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 IN COMPLIANCE WITH THE SCHEDULE IN M-91-42(4) AND M-91-44(3).

NOTE: THE REQUIREMENTS OF ITEM 6 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. 7. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	
M-91-41	REGARDING THE RETRIEVAL AND DESIGNATION OF REMOTE HANDLED (RH) RSW (ALL RSW RH WASTE REGARDLESS OF PACKAGE SIZE, INCLUDING THE 200 AREA CAISSONS), AND LDR TREATMENT OF SUCH WASTES DETERMINED TO BE MIXED. 1. DOE SHALL INITIATE FULL SCALE RETRIEVAL OF RH RSW BY JANUARY 1, 2011. RETRIEVAL OF NON-CAISSON RH RSW SHALL BE COMPLETED BY DECEMBER 31, 2014. RETRIEVAL THE 200 AREA CAISSON RH RSW IN THE 218-W-4B BURIAL GROUND SHALL BE COMPLETED BY DECEMBER 31, 2018. 2. DOE SHALL DESIGNATE ALL RETRIEVED RH RSW PURSUANT TO WAC 173-303-070 THROUGH 100, WITHIN 90 DAYS OF RETRIEVAL. 3. FOR ALL RETRIEVED RH-RSW DETERMINED TO BE LOW-LEVEL WASTE AND DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100, AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTE TO MEET LDR REQUIREMENTS IN ACCORDANCE WITH THE SCHEDULE PROVIDED IN MILESTONE M-91-43(3). 4. FOR ALL RETRIEVED RH-RSW DETERMINED TO BE TRANSURANIC WASTE AND 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 IN ACCORDANCE WITH THE SCHEDULE PROVIDED IN MILESTONE M-91-44(3). NOTE: THE REQUIREMENTS OF ITEM 4 OF THIS MILESTONE DO NOT APPLY PRIOR TO A FINAL APPEALABLE JUDGMENT ON THE MERITS OF THE LDR	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	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. 5. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	
M-91-42	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). 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: A. 1630 CUBIC METERS (CUMULATIVE) SHALL BE	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	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. 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 OR BY

	VIRTUE OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS. 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. 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 THE EFFECTIVE DATE OF THIS CHANGE PACKAGE 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.	
M-91-43	REGARDING: (1) NEWLY GENERATED RH LOW-LEVEL WASTE; (2) NEWLY GENERATED BOXES AND LARGE CONTAINERS OF CH LOW-LEVEL WASTE; (3) RH LOW-LEVEL WASTE CURRENTLY IN ABOVE-GROUND STORAGE; AND (4) BOXES AND LARGE CONTAINERS OF CH LOW-LEVEL WASTE CURRENTLY IN ABOVE-GROUND STORAGE. THERE ARE 81 CUBIC METERS OF RH-MLLW IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE STORAGE 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-07) THAT HAS NOT BEEN TREATED TO MEET LDR REQUIREMENTS. DOE'S 2002 LDR REPORT CURRENTLY ESTIMATES THAT DOE WILL GENERATE AN ADDITIONAL YEARLY VOLUME OF 280 CUBIC METERS OF WASTE IN THIS TREATABILITY	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	GROUP. IN ADDITION, DOE WILL RETRIEVE APPROXIMATELY 800 CUBIC METERS BY 2010. THIS INCLUDES VOLUMES OF RETRIEVED RSW. 1. DOE SHALL DESIGNATE ALL RH LOW-LEVEL WASTE AND BOXES AND LARGE CONTAINERS OF CH LOW-LEVEL WASTE CURRENTLY IN ABOVE-GROUND PERMITTED STORAGE (AS OF JUNE 30, 2003) ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DECEMBER 31, 2008. 2. DOE SHALL DESIGNATE ALL NEWLY GENERATED RH LOW-LEVEL WASTE AND TRANSURANIC WASTE AND NEWLY GENERATED BOXES AND LARGE CONTAINERS OF CH-LOW-LEVEL WASTE AT THE POINT OF GENERATION. SUCH DESIGNATION SHALL COMPLY WITH THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100. 3. DOE SHALL BEGIN TREATING RH MLLW AND BOXES AND LARGE CONTAINERS OF CH MLLW TO MEET LDR TREATMENT REQUIREMENTS AT A MINIMUM RATE OF 300 CUBIC METERS PER YEAR BEGINNING NO LATER THAN JUNE 30, OF 2008. IF THERE ARE NOT 300 CUBIC METERS OF RH MLLW AND BOXES AND LARGE CONTAINERS OF CH MLLW IN STORAGE IN ANY GIVEN YEAR, THIS MILESTONE REQUIRES THAT DOE TREAT ONLY THAT AMOUNT THAT IS IN STORAGE. IF RH-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 ACTUAL VOLUMES OF NEWLY GENERATED OR RETRIEVED RH AND BOXES AND LARGE CONTAINER MLLW ARE SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES, THIS MILESTONE WILL BE REVISED TO REFLECT ACTUAL VOLUMES. 4. EACH ELEMENT OF THIS MILESTONE IS CONSIDERED A	

	DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	
M-91-44	REGARDING: (1) NEWLY GENERATED RH TRANSURANIC WASTE; (2) NEWLY GENERATED BOXES AND LARGE CONTAINERS OF CH-TRANSURANIC WASTE; (3) RH TRANSURANIC WASTE CURRENTLY IN ABOVE GROUND STORAGE; AND (4) BOXES AND LARGE CONTAINERS OF CH TRANSURANIC WASTE CURRENTLY IN ABOVE-GROUND STORAGE. 1. DOE SHALL DESIGNATE ALL RH TRANSURANIC WASTE AND BOXES AND LARGE CONTAINERS OF CH TRANSURANIC WASTE CURRENTLY IN ABOVE- GROUND STORAGE (AS OF JUNE 30, 2003) ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DECEMBER 31, 2012. 2. DOE SHALL DESIGNATE ALL NEWLY GENERATED RH TRANSURANIC WASTE AND BOXES AND LARGE CONTAINERS OF TRANSURANIC WASTE AT THE POINT OF GENERATION. SUCH DESIGNATION SHALL COMPLY WITH THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100. 3. DOE SHALL BEGIN TREATING RH TRUM AND BOXES AND LARGE CONTAINERS OF CH TRUM TO MEET LDR TREATMENT REQUIREMENTS AT A MINIMUM RATE OF 300 CUBIC METERS PER YEAR BEGINNING NO LATER THAN JUNE 30, 2012. IF THERE ARE NOT 300 CUBIC METERS OF RH TRUM AND BOXES AND LARGE CONTAINERS OF CH TRUM IN STORAGE IN ANY GIVEN YEAR, THIS MILESTONE REQUIRES THAT DOE TREAT ONLY THAT AMOUNT THAT IS IN STORAGE. IF ACTUAL VOLUMES OF NEWLY GENERATED OR RETRIEVED RH TRUM AND BOXES AND LARGE CONTAINER TRUM ARE SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES, THIS MILESTONE WILL BE REVISED TO REFLECT ACTUAL VOLUMES. 4. AS TO NEWLY GENERATED RH TRUM GENERATED AFTER 12/31/18 THAT IS DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH –100 AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	SHALL TREAT TO MEET LDR REQUIREMENTS WITHIN ONE YEAR OF GENERATION. DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF SUCH WASTES 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 OR BY VIRTUE OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS. NOTE: THE REQUIREMENTS OF ITEMS 3 AND 4 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. 5. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	
M-91-45	BY SEPTEMBER 30 OF EACH YEAR, DOE SHALL SUBMIT TO ECOLOGY A REPORT DESCRIBING COMPLETED AND SCHEDULED WORK RELATING TO RH WASTE AND BOXES AND LARGE CONTAINERS OF RH AND CH WASTE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS MILESTONE SERIES. DOE'S REPORTS WILL DOCUMENT WORK COMPLETED DURING THE PREVIOUS FEDERAL FISCAL YEAR AND WORK SCHEDULED FOR THE COMING FISCAL YEAR. DOE'S REPORTS SHALL IDENTIFY BY CITATION ALL PUBLICLY AVAILABLE REPORTS DESCRIBING PERTINENT PROJECT ISSUES AND ACCOMPLISHMENTS, AND SHALL IDENTIFY ANTICIPATED PROJECTS FOR THE COMING YEAR.	9/30/2004 AND ANNUALLY THEREAFTER

Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date:
M-16-03-03		April 22, 2004

Originator: Laura Cusack Ecology	Phone: (509) 736-3038

Class of Change:

[ ] - Signatories	[X] II - Executive Manager	[ ] III - Project Manager

Change Title:

M-016 Submission and Implementation of a work plan for acquisition of TRU and TRU mixed-waste management capabilities to support CERCLA actions at the Hanford site.

Description/Justification of Change:

This change package provides for an implementation work plan to describe how plans developed to provide capabilities for managing TRUM and suspect TRUM will be integrated with CERCLA planning for TRU/TRUM wastes. This will help ensure that there will be comprehensive planning for capabilities needed for both CERCLA and non-CERCLA TRU/TRUM streams.

Impact of Change:

Provides a comprehensive work plan to describe acquisition of TRU/TRUM management capabilities to support CERCLA actions at the Hanford site. The change also deletes or modifies references to M-091 and WIPP RH-TRU waste acceptance criteria in M-016-66 and M-016-67.

Affected Documents:

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning management, and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, LDR Report requirements).

Approvals:

Paul Hebdon J.B. Hebdon, RL IAMIT Representative	4/27/04 Date	X Approved	__ Disapproved	
Nick Ceto N. Ceto, EPA IAMIT Representative	4-27-04 Date	✓ Approved	__ Disapproved	
Michael A. Wilson M. A. Wilson, Ecology IAMIT Representative	4/27/04 Date	✓ Approved	__ Disapproved	

Modifications established by approval of this Tri-Party Agreement Change Request are denoted as ~~strikeout~~ for deletions/modification and shading for new text.

Milestone	Description	Date
M-016-66	INITIATE INTERMEDIATE DESIGN AND AUTHORIZATION SAFETY ANALYSIS FOR REMEDIAL ACTIONS AT THE 618-10 AND 618-11 BURIAL GROUNDS. THE INTERMEDIATE DESIGN SHALL INCLUDE, AT A MINIMUM, A DESIGN BASIS REPORT, REMEDIATION APPROACH (I.E., PROCESS DEFINITION) SITE LAY-OUT, EVALUATION OF INFRASTRUCTURE REQUIREMENTS ~~(I.E. M-091 AND WASTE ISOLATION PILOT PLANT [WIPP] INTEGRATION PLANNING)~~, AND PLANNING FOR TREATABILITY TESTS. INTERMEDIATE DESIGN ACTIVITIES WILL UTILIZE ANTICIPATED WIPP REMOTE HANDLED TRANSURANIC (RH-TRU/TRUM) ~~AND M-91~~ WASTE ACCEPTANCE CRITERIA, AN EVALUATION OF RH TRU/TRUM TECHNOLOGY DEVELOPMENT EFFORTS AND AN EVALUATION OF LESSONS LEARNED FROM OTHER ONGOING DOE COMPLEX TRU EXCAVATION EFFORTS. THE AUTHORIZATION SAFETY ANALYSIS SHALL INCLUDE, AT A MINIMUM, ANY APPROVALS REQUIRED TO SUPPORT ADDITIONAL SITE CHARACTERIZATION WITHIN 618-10 AND 618-11 BURIAL GROUNDS FOR DESIGN PURPOSES AND ANY TREATABILITY INVESTIGATIONS.	09/30/2004
M-016-67	SUBMIT AN INTERMEDIATE DESIGN REPORT, A REMEDIATION SCHEDULE AND A TREATABILITY INVESTIGATION WORK PLAN FOR REMEDIAL ACTIONS AT THE 618-10 AND 618-11 BURIAL GROUNDS. THE INTERMEDIATE DESIGN REPORT SHOULD REPRESENT A 60% COMPLETE DESIGN REPORT. THE REMEDIATION SCHEDULE MUST IDENTIFY: 1) DATES FOR INITIATING AND COMPLETING INTERIM REMEDIAL ACTIONS AT WASTE SITES, AND 2) ANY DOCUMENTS REQUIRING EPA AND/OR ECOLOGY APPROVAL PRIOR TO INITIATING REMEDIAL ACTIONS (E.G., RD/RA WORKPLANS, ETC.). THE TREATABILITY INVESTIGATION WORK PLAN MUST BE CONSISTENT WITH WIPP'S ACTUAL (OR, IF NOT YET APPROVED, ANTICIPATED) RH TRU/TRUM ~~AND M-91~~ WASTE ACCEPTANCE CRITERIA AND WILL BE SUBMITTED AS A TRI-PARTY AGREEMENT PRIMARY DOCUMENT.	03/31/2007
M-016-93 (LEAD AGENCY: EPA)	SUBMIT AN IMPLEMENTATION WORKPLAN TO EPA FOR THE ACQUISITION OF CAPABILITIES NECESSARY TO PREPARE TRU AND TRUM WASTE GENERATED BY CERCLA CLEAN UP ACTIONS AT THE HANFORD SITE FOR DISPOSAL AT THE WASTE ISOLATION PILOT PLANT (WIPP). THIS WORKPLAN WILL REFLECT RETRIEVAL DECISIONS, PROJECTED WASTE VOLUMES, AND SCHEDULES FROM ALL CERCLA CLEANUP ACTIONS AUTHORIZED	09/30/2006

IN RECORDS OF DECISION AND ACTION MEMORANDA AT THE HANFORD SITE, AND WILL PROVIDE FOR UPDATES AND REVISIONS AS NEW INFORMATION BECOMES AVAILABLE (AT A MINIMUM, THE WORKPLAN MUST BE REVISED IN 2009 (AFTER ALL 200 AREA RODS ARE ISSUED) AND IN 2012). AS PART OF THE APPROVAL PROCESS, EPA WILL CONSULT WITH ECOLOGY TO ENSURE THAT WASTES FROM CERCLA OPERABLE UNITS FOR WHICH ECOLOGY IS THE LEAD REGULATORY AGENCY ARE PROPERLY PLANNED FOR. THIS WORKPLAN WILL PROVIDE A SCHEDULE FOR ACQUIRING THE CAPABILITIES FOR TRU AND TRUM MANAGEMENT NECESSARY TO SUPPORT ALL CERCLA CLEANUP ACTIONS. IN ORDER TO AVOID DUPLICATIVE REQUIREMENTS, THE M-16-93 WORKPLAN WILL INTEGRATE PLANS DEVELOPED PURSUANT TO THE M-91 MILESTONES TO PROVIDE CAPABILITIES FOR RCRA MIXED AND SUSPECT MIXED TRANSURANIC WASTE WHERE SUCH CAPABILITIES ALSO CAN BE USED FOR CERCLA TRU/TRUM WASTE. THE WORKPLAN WILL BE SUBMITTED PURSUANT TO SECTION 11.6 OF THE TRI-PARTY AGREEMENT.