



Comments and Responses to the
Tentative Agreement on Hanford
Federal Facility Agreement and
Consent Order
Comprehensive Realignment of the
M-091 Waste Management
Milestones

September 2010

Comments and Responses to TPA Changes for Mixed Low-Level Waste and Transuranic Mixed Waste

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Public Comments and Responses to the April, 2010 Changes to the Hanford Tri-Party Agreement M-091 Milestone Series

Introduction

In April 2010, the U.S. Department of Energy, the U.S. Environmental Protection Agency, and the State of Washington Department of Ecology -- the Tri-Party Agreement agencies -- completed negotiations and proposed changes to the Hanford Federal Facility Agreement and Consent Order also known as the Tri-Party Agreement consistent with M-091-45. The milestones (cleanup schedules) are for the retrieval, storage, shipment, and treatment/processing of mixed low-level waste (MLLW) and transuranic mixed (TRUM) waste. These proposed changes set a deadline of 2035 to treat or remove all legacy transuranic mixed waste to meet RCRA Land Disposal Restriction Standards or remove it from Hanford. In response to public comment this deadline has been changed to 2030 to align with the current start date for closure in the Waste Isolation Pilot Plant Hazardous Waste Facility Permit. The backlog of mixed low-level waste and transuranic mixed waste will have been treated or shipped for disposal.

A formal comment period on the proposed change package was originally scheduled to run from May 3 through June 17, 2010, but was extended to June 30, 2010. Over 2,800 copies of the fact sheets were distributed by mail or sent electronically at the start of the public comment period.

During the public comment period, the agencies briefed the Tribal Nations, the State of Oregon, and the Hanford Advisory Board. The agencies also held several discussions with stakeholder groups to obtain input in planning the public meetings. On June 23 and 24, 2010, public meetings were held in Portland, Oregon and Seattle, Washington, with approximately 20 people attending each meeting. The purpose of the workshop-styled public meeting was to ensure that stakeholders had the information needed to give valuable, informed input.

During the two public meetings the Tri-Party Agreement agencies discussed two proposed Tri-Party Agreement change packages; the M-091, Mixed Low-Level Waste and Transuranic Mixed Waste stored in the Central Plateau change package and the Central Plateau Waste Sites, Facilities and Groundwater change package. Because these meetings were conducted together, some individuals submitted one letter containing comments on both proposed change packages.

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The Tri-Party Agreement agencies decided to excerpt comments pertinent to the M-091 milestone series (the “ungrayed” comments) and respond to them in this comment response document. Responses to comments on the Central Plateau change package will be provided under a separate comment response document which has not yet been completed.

Thirty comments were received from 14 individuals and groups on the M-091 change package covering a wide range of topics and diverse perspectives. Themes of comments focused on enforceable milestones, alignment of Waste Isolation Pilot Plant schedule with Tri-Party Agreement milestones, acquisition of new treatment capabilities, safety of transuranic waste shipments, and tribal and public participation.

Copies of the original comments are in the Administrative Record and Public Information Repository located at 2440 Stevens Center Place, Room 1101, Richland, Washington, web site address: <http://www2.hanford.gov/arpir/>

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Commenter 1: Susan Leckband, Chair, Hanford Advisory Board – Advice #231

Comment 1.1:

The Hanford Advisory Board (Board) appreciates the opportunity to provide advice on the *Proposed Changes to the Tri-Party Agreement (TPA) for Central Plateau Cleanup Work, and for Mixed Low-Level Waste and Transuranic Mixed Waste (TPA Change Packages)*.

Response to Comment 1.1:

The Parties appreciate the continuous dialogue and feedback this past year from the River and Plateau committee, the Public Involvement and Communications committee and the Hanford Advisory Board concerning Mixed Low-Level Waste and Transuranic Mixed (TRUM) Waste.

Comment 1.2:

The Board supports the geographic cleanup approach for the Central Plateau and the inclusion of a major milestone to complete disposition of all Central Plateau facilities. The Board also supports integration of the cleanup of soils, facilities and groundwater.

The Board agrees with the use of final (rather than interim) milestone dates for completion of closure of treatment, storage, and disposal facilities listed in M-037-10 and M-037-11.

Response to Comment 1.2:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 1.3:

Both the Tri-Party Agreement (TPA) and DOE's baseline should be aligned with the Waste Isolation Pilot Plant (WIPP) transuranic waste repository schedule to ensure that all WIPP-eligible Hanford waste is disposed at WIPP. The change package extends the final Hanford shipments of transuranic mixed waste to 2035 while the current legally required closure date for WIPP is 2030.

The TPA should require early shipment of available transuranic waste to minimize the risk of WIPP closing prior to all Hanford shipments.

Response to Comment 1.3:

The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP Land Withdrawal Act (LWA) does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on

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a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the New Mexico Environment Department of the intent to close WIPP). Every year, the transuranic (TRU) waste inventory around the DOE complex is evaluated against the capacity and curie limitations specified in the LWA using the DOE Carlsbad Field Office (CBFO) managed Comprehensive Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

The majority of milestones in the change package are enforceable. In 2009, funds for M-091 work were deferred to shift resources to cleanup work along the Columbia River. When American Recovery and Reinvestment Act (ARRA) funds became available, DOE had the opportunity to use them to accelerate shipments of TRUM waste to WIPP. For example, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

The M-091-46 milestone includes several milestones to repackage small-package contact-handled TRU waste and make it available for shipment to WIPP.

Comment 1.4:

The Tri-Party agencies should continue to improve the safety of WIPP shipments (e.g. by avoiding inclement conditions).

Response to Comment 1.4:

The TRU waste transportation safety program avoids shipping during inclement conditions (as described in the Western Governors' Association's WIPP Transportation Safety Program Implementation Guide). A goal of the program is to increase drivers experience and proficiency in all types of weather. This is achieved by having drivers regularly drive northwestern routes during winter months when weather conditions permit.

The decision to delay a shipment is made in consultation between the TRU waste shipping site, the driver, the WIPP site, and state law enforcement agencies to help ensure all safety precautions are taken. When making shipping decisions, highest consideration is always given to safety.

Comment 1.5:

Cleanup decisions for remote-handled transuranic waste, transuranic elements disposed of prior to 1970 ("pre-1970 TRU"), and canyon facilities treatment and disposal should be compliant with the 2024 milestone for completion of cleanup of non-tank operable units of the Central Plateau.

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Response to Comment 1.5:

Remote-handled TRUM waste within the scope of the M-091 milestone series are covered within the M-091 change package. Pre-1970 TRU waste and canyon facilities will be addressed as part of the Central Plateau change package.

Comment 1.6:

Transuranic elements buried prior to 1970 should be focused on a dedicated, specific TPA milestone. Currently, this waste is included only as a component of other milestones. Given the importance of this waste category, aggressive milestones for characterization, retrieval, treatment, and disposal are important. DOE's baselines should include consideration of retrieving these transuranic elements.

Response to Comment 1.6:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 1.7:

The Tri-Party agencies should consider accelerated technology development to meet milestone M-91 remote-handled transuranic waste requirements. The TPA change package should include a milestone for construction of remote-handled transuranic waste storage and treatment facilities.

The M-91 milestones for obtaining treatment capability (remote-handled transuranic waste and mixed wastes) should be revised to allow treatment capacity onsite or offsite. (Advice #216).

TPA milestones for treating stored mixed waste and retrieved mixed waste would encourage private investment that, in addition to treating waste, could benefit the Hanford budget. The Tri-Party agencies should maintain a clear commitment to these milestones to signal potential opportunities to the private sector.

Response to Comment 1.7:

Milestones M-091-01 and M-091-44 address obtaining treatment capabilities for remote handled waste. DOE and its contractors are going through the project management process to look at alternatives and to approve the design for TRUM waste technology. Using ARRA funding, DOE and its contractor have initiated an accelerated pilot program for repackaging the large boxes TRUM waste that can be processed and handled at an offsite commercial facility.

As for the remote handled large boxes that currently have no offsite options, DOE will follow the appropriate project management process that outlines alternative analysis, design selection

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and construction or modifications to existing facilities once funding is made available in the approved project baseline.

Comment 1.8:

The Tri-Party agencies should not delay treatment of mixed waste or replace enforceable milestones with unenforceable “target schedules” (Advice #216).

Response to Comment 1.8:

The majority of milestones in the change package are enforceable. In 2009, funds for M-091 work to shift resources to cleanup work along the Columbia River. When ARRA funds became available, DOE had the opportunity to accelerate shipments of TRUM waste to WIPP. In addition, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

The use of target dates is not new to the Tri-Party Agreement. The Parties identified the use of target dates as an option in the original agreement signed in 1989. DOE tracks and reports progress against the targets to the regulatory agencies which enable all parties to quickly identify and respond to schedule problems.

Commenter 2: Mike Conlan

Comment 2.1:

I am continually amazed at the lack of concern the USDOE shows towards the Hanford facility and the very toxic substances that exist there.

Cleanup all the waste including ALL the “remote-handled” transuranic waste not just the more recent poison. ALL OF IT!!

Building a nuclear plant next to a huge river was idiotic, leaving any nuclear waste to sift into the ocean is beyond stupid. Mount St. Helen blew volcanic ash around the world, but spreading radioactive water from Hanford is another thing.

Instead of all these \$billions on killing Afghanis etc., our resources should be used to cleanup our own mess, and then help cleanup the other nuclear messes – nobody else will.

Response to Comment 2.1:

The Parties are committed to cleaning up Hanford. For over twenty years, the Parties have worked with the tribal nations, State of Oregon, stakeholders and the public to identify Hanford cleanup priorities and address the highest risks. DOE Environmental Management is committed

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to the Hanford cleanup, spending about one-third of its annual budget on Hanford cleanup priorities.

Milestones M-091-01, M-091-41, M-091-43, and M-091-44 require cleanup of remote-handled retrievably stored waste. There are also milestones to investigate and develop cleanup decisions for radioactive waste that may contain transuranic materials in the pre-1970 radioactive waste burial grounds. This radioactive waste that may contain transuranic materials will be addressed through a CERCLA process. The Parties plan to hold a Hanford Advisory Board Committee of the Whole meeting October 5, 2010 which are open to the public and conduct regional public meetings to get early input on cleanup of these burial grounds. The Parties have previously conducted a public workshop on some of the other waste sites contaminated with transuranic materials.

Comment 2.2:

NO MORE WASTE TILL HANFORD IS CLEAN !!

Response to Comment 2.2:

Thank you for your comment. Currently, Hanford has not received offsite waste since the 2006 Settlement regarding Washington v. Bodman, Civil No. 2:03-cv-05018-AAM where the Parties stipulated to certain exceptions pending the finalization of the Tank Closure & Waste Management Environmental Impact Statement (TC&WM EIS). Those exceptions are as follows:

- Naval reactor compartments, reactor core barrels, reactor closure heads, and pumps from Puget Sound Naval Shipyard or Pearl Harbor Naval Shipyard that may contain low-level waste (LLW) or mixed low-level waste (MLLW). A substantially similar stipulated exception for Naval waste was included in the Initiative 297 litigation;
- Demolition wastes from the Emergency Decontamination Facility at Kadlec Hospital in Richland, Washington. The demolition is completed;
- Materials resulting from DOE-related work at Battelle Pacific Northwest National Laboratory's (PNNL) facilities in Richland, Washington. This exception is based on the fact that some of PNNL's facilities are located in the City of Richland outside the Hanford boundaries, thus technically making any waste generated by PNNL "offsite waste."

The remaining exceptions all relate to wastes that originated from Hanford but at some point has been shipped offsite and then returned. These exceptions are:

- Materials from treatability studies conducted offsite on waste samples from the Hanford Site's underground tanks;
- Samples of waste from Hanford;
- Materials shipped from Hanford for offsite treatment and returned to Hanford for later disposition; and

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- Materials shipped from Hanford for offsite disposal, but returned to Hanford because the materials failed to meet Waste Acceptance Criteria or otherwise could not be disposed of at the intended disposal site.

These exceptions have remained effective throughout Hanford's cleanup as they support ongoing waste characterization, treatment, storage and disposal efforts. Find the Settlement at (<http://www.hanford.gov/orp/uploadfiles/settlement-agreement.pdf>).

COMMENTER 3: Tom Carpenter, Hanford Challenge

Comment 3.1:

Shifting RCRA – scope activities under CERCLA should not occur. First, the state of WA needs to retain jurisdiction and not cede jurisdiction to EPA. Secondly DOE should not be regulating itself, as it would under current proposals. Third, RCRA has better accountability and public participation requirements than CERCLA.

Response to Comment 3.1:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 3.2:

I support the effort to address pre-1970 TRU cleanup efforts, and to have those efforts ratified in the Tri-Party Agreement. I am concerned that the deadlines for shipment to WIPP are set for five years after WIPP is scheduled to close. This is a serious disconnect. Another disconnect is the lack of enforceability – no binding schedule for pre-70 TRU removal, from the soils. DOE should be required to seek budget for this activity and not rely on DOE to “behave.” Don't assume that the plutonium does not migrate.

Response to Comment 3.2:

The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current WIPP Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP LWA does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the New Mexico Environment Department of the intent to close WIPP). Every year, the TRU waste inventory around the DOE complex is evaluated against the capacity and curie limitations specified in the LWA using the DOE Carlsbad Field Office (CBFO) managed Comprehensive

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Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

Comment 3.3:

Plutonium is, for all intents & purposes relevant to human understanding forever. Act accordingly.

Response to Comment 3.3:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

COMMENTER 4: Steven Gilbert

Comment 4.1:

I would support a meeting on values and ethics about the future of Hanford.

Response to Comment 4.1:

The Parties look forward to ongoing public dialogue and appreciate agenda topics for future meetings.

COMMENTER 5: Ken Niles, Oregon Department of Energy

Comment 5.1:

Oregon appreciates the opportunity to review *the Proposed Tri-Party Agreement (TPA) Changes for Mixed Low-Level Waste and Transuranic Mixed Waste*.

Response to Comment 5.1:

The Parties appreciate the continuous dialogue and feedback we receive from the Oregon Department of Energy concerning TPA change packages.

Comment 5.2:

Oregon has long supported the removal of transuranic waste from the Hanford Site for ultimate disposal in the Waste Isolation Pilot Plant (WIPP). We are pleased that the Tri-Parties have reached agreement on a schedule to remove all legacy transuranic waste from Hanford. However, we do encourage the Tri-Parties to change the proposed milestone for completing this task from 2035 to no later than 2030. Correspondence with regulators at the New Mexico Environment Department indicate that WIPP's presumed closure date is 2030 and they recommend the proposed milestone be consistent with the WIPP permit (although they acknowledge that WIPP's operating life could certainly be extended beyond 2030).

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Response to Comment 5.2:

The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current WIPP Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP LWA does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the New Mexico Environment Department of the intent to close WIPP). Every year, the transuranic (TRU) waste inventory around the DOE complex is evaluated against the capacity and curie limitations specified in the LWA using the DOE CBFO managed Comprehensive Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

Comment 5.3:

We are concerned that this proposed change package again delays Hanford's acquisition of "capabilities" for retrieval, storage, and treatment/processing of transuranic waste. As we indicated in our comments in May 2009 to a previous TPA change package, DOE had agreed in 2003 to have that capability by 2012, and we are disappointed by yet another delay. DOE will be unable to fully complete its 2015 cleanup vision unless it is able to remediate the 618-10 and 618-11 burial grounds. Without better capabilities for dealing with remote-handled wastes, DOE may be unable to meet its schedules to remediate these burial grounds.

Response to Comment 5.3:

DOE and its contractors are looking to deploy new field technologies for the retrieval and processing of the remote-handled TRUM waste as outlined in the contractor's technical approach. Implementation of the technology is on schedule to meet Milestone M-91-41 despite delays to the M-91-01 milestone. DOE and its contractor have initiated an accelerated pilot program for repackaging the large boxes TRUM waste that can be processed and handled at an offsite commercial facility. DOE is committed to making progress where we can. The remediation at the 618-10/11 Burial Grounds is being conducted pursuant to CERCLA and the schedule is established in the remedial action work plan.

Comment 5.4:

We are also concerned that this current proposed change package ignores the pre-1970 burial grounds, which are known to have significant quantities of waste that if generated today would

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be considered transuranic waste. We expect that there are areas of significant concentration of transuranic-type waste in various locations within the pre-1970 burial grounds. We recommend that the Tri-Parties agree to a schedule to identify and characterize those “hot spots” and develop a plan for how to mitigate the risks posed by these wastes.

Response to Comment 5.4:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 5.5:

In developing schedules for shipment of transuranic waste from Hanford, we strongly encourage the U.S. Department of Energy (DOE) to avoid shipping during the winter months when at all possible. Portions of the WIPP transportation corridor in northeast Oregon are especially susceptible to unpredictable and harsh winter weather conditions. Oregon worked closely with DOE and other Western states to develop a comprehensive transportation safety program for shipments of transuranic waste. This safety program has been in place since shipments to WIPP began in 1999 and began from Hanford the following year. While we do believe that this safety plan does prevent shipments from moving when the road or weather conditions are bad, scheduling winter shipments from Hanford often results in significant delays, which wastes money and sometimes leads to pressures to get a shipment on the road. Avoiding the winter months leads to a more reliable shipping schedule.

Response to Comment 5.5:

DOE works with Oregon to prevent TRU waste shipments when road and/or weather conditions are unsafe as part of the comprehensive TRU waste transportation safety plan. This Safety Program has ensured that the shipments have been safe and uneventful since 1999, when shipments began to WIPP. This is true for all of the approved routes across the nation from TRU waste sites to WIPP. TRU is a national program, and DOE must manage the nationwide safe shipment of waste, which cannot pragmatically cease during the winter months.

Your comment identifies routes in Oregon as being susceptible to unpredictable and harsh winter weather conditions. The DOE TRU waste transportation program has successfully completed thousands of safe and uneventful shipments, traversing similarly potentially hazardous corridors in a number of other states every year. A goal of DOE’s safety program is to promote increased driver experience and proficiency and familiarity of routes in all types of weather. This is achieved by having drivers regularly drive northwestern routes during winter months when weather conditions permit.

DOE must also be mindful of the prudent use of taxpayer dollars to implement the program. Suspending shipments from Hanford during winter months would not save money since DOE must maintain the entire dedicated shipping fleet and driver roster year-round.

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In the DOE Memorandum of Understanding with Oregon, the decision to delay a shipment is made in consultation between the TRU waste shipping site, the driver, the WIPP site, and state law enforcement agencies (including Oregon) to help ensure all safety precautions are taken. When making shipping decisions, highest consideration is always given to safety.

DOE believes that the safety protocols for shipping are conservative when inclement weather conditions threaten. These safety protocols were developed in concert with the Western Governors Association and others prior to opening WIPP, and have proved their worth as evidenced by almost 9,000 safe and uneventful shipments without suspension over the winter months.

COMMENTER 6: Don Flyckt

Comment 6.1:

The proposed M-091 milestones do not address, or encourage approaches that minimize the amount of handling necessary to make the waste compliant for disposal. Alternative approaches for the handling of the waste have the potential to reduce risk to the workers, and accelerate disposal of the waste. DOE should consider revisions to the proposed milestones that minimize the handling of the waste, bring equipment to the waste rather than bringing the waste to the equipment so waste handling will be safer when it is moved, and allow treatment to occur as part of the retrieval process.

Response to Comment 6.1:

The M-091 milestones establish retrieval and treatment dates. They do not detail how the work is accomplished.

DOE and its contractors are going through the project management process to look at alternatives and to approve the design for technology. Using ARRA funding, DOE and its contractor have initiated an accelerated pilot program for repackaging the large boxes that can be processed and handled at an offsite facility.

As for the remote-handled large boxes, with no offsite options, DOE will follow the appropriate project management process that outlines alternative analysis, design selection and construction once funding is made available in the approved project baseline. This effort is subject to the M-091 milestone.

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COMMENTER 7: Gerry Pollet, Heart of America Northwest

Comment 7.1:

Heart of America Northwest (HoANW) appreciates the opportunity to provide input on the proposed changes to the Tri-Party Agreement. This letter is meant to transmit our specific comments and identify general areas of concern in the proposed changes.

Response to Comment 7.1:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.2:

Geographic Approach to Central Plateau Cleanup. Hanford's Central Plateau contains waste in unlined ditches, trenches/ponds, high-level waste tanks, and in landfills. In addition the Central Plateau also has facilities, large Plutonium and Uranium extraction facilities called "canyon" buildings, which is surrounded by an "outer area" which includes waste discharge sites. Heart of America Northwest supports the new geographical approach to the Central Plateau Cleanup. USDOE's previous plan was to only have three general decision units for all the diverse types of cleanup, and Heart of America Northwest found that plan insufficient.

The new approach has geographically-based decision units that include: two groundwater decision units, a unit for the deep soil contamination. However, HoANW supports a cleanup plan that integrates cleanup of soils, facilities and groundwater.

Incorporated in the Central Plateau cleanup changes is a huge exception to the 2024 milestone to complete cleanup of all "non-tank farms" waste sites in the Central Plateau. The proposal delays completion of cleanup and demolition of the massive contaminated "canyon" facilities (PUREX Plant, Plutonium Finishing Plant, REDOX) by removing them from the 2024 milestone. The 2024 milestone remains an important driver for Central Plateau cleanup. Additionally, HoANW does not support the 5 year delay to the milestones to complete investigation and propose cleanup plans for the soil sites.

- Heart of America Northwest supports the new geographical approach to Central Plateau Cleanup;
- Cleanup plans should integrate cleanup of soils, facilities and groundwater;
- Do not delay the completion of the investigations and proposal of work plans for contaminated soil sites in the Central Plateau;
- Maintain the 2024 milestone for completion of all non-tank farm operable units and do not exempt the canyon facilities - this milestone is the major driver for cleanup on the Central Plateau and should not be compromised.

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Response to Comment 7.2:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.3:

New Deep Vadose Zone Operable Unit

The Tri-Party Agencies' recognition of the importance of deep vadose zone contamination, as manifest in the new operable unit in this change package, is a promising first step towards cleaning up this important aspect of Hanford's contamination. However, the milestones laid out in the Tri-Party Agreement lack specific goals and schedules for remediating the contamination. Deep vadose zone contamination on site at Hanford should be addressed in concert with tank farm leaks and other contamination investigations. Heart of America Northwest supports a comprehensive cleanup approach to contamination throughout the entire soil column and integration of the cleanup of soils, facilities and groundwater.

Response to Comment 7.3:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.4:

Currently, all 44 of the waste units included in the 200-DV-1 OU are non-tank farm units and are subject to the 2024 completion date as outlined in M-016-00. The few milestones laid out in the TPA for the new 200-DV-1 OU do not appear to put the OU on track for completion by 2024. M-015-110A requires a work plan that "shall include technology screening that identifies technologies applicable for characterization, treatment, and monitoring of deep vadose zone contaminants" by September 30, 2012. The proposed Field Research Center for deep vadose zone contamination is still theoretical, yet the Department of Energy has to have identified technologies within two years of the proposed launch (October 2010), and characterize the contamination and determine a workplan for cleanup three years after that. Then, the Department of Energy has just nine years to complete cleanup of 44 unique waste sites with deep vadose zone contamination, but there are no milestones included in this change package outlining an aggressive schedule to complete this work.

Heart of America Northwest is deeply concerned that the deep vadose zone waste units' remedial actions will not be complete by 2024 as legally required. Again, milestones outlining the entire cleanup process need to be identified now with enforceable due dates, so that the Department of Energy is held accountable to complete the remediation of the deep vadose zone and all other non-tank farm units by September 30, 2024. The Department of Energy must demonstrate real commitment, procure real funding and complete the remedial actions on schedule.

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Response to Comment 7.4:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.5:

Previously, decisions for these waste units would have covered only the shallow vadose zone below the surface of the waste sites or facilities. At the workshop in Portland on June 23, 2010, the public was told that the new deep vadose zone operable unit's waste sites are integrated from the surface through the deep vadose zone; Heart of America Northwest applauds this intent to integrate. However, this is not apparent in the TPA change package documents that were presented to the public for comment, and Heart of America Northwest wants assurance that the remedies for the proposed waste sites in the 200-DV-1 OU will be considered from top to bottom.¹ (E.g., the setting of cleanup action or remedial action levels must consider the results of actual field investigations of deep contamination as well as near surface contamination in order to be protective of groundwater (and surface waters, since the groundwater flows to the River). The combined releases have to be considered in setting protective cleanup levels)

The Tri-Party Agencies did an insufficient job presenting the new 200-DV-1 OU to the public, giving the impression that the Single Shell Tank waste units were currently proposed to be included in the operable unit. Interestingly, those units are the only ones not subject to the 2024 deadline, and, they are the poster child for deep vadose zone contamination. In the future, Heart of America Northwest requests that the agencies more thoroughly present significant changes to the TPA, making explicit what waste units are affected.

- The agencies should develop a comprehensive cleanup approach to contamination throughout the entire soil column and integrate the cleanup of soils, facilities and groundwater;
- Heart of America Northwest is concerned that the 44 waste units that comprise 200-DV-1 OU are extremely dissimilar; and, that creating one workplan for all 44 units will result in compromised cleanup;
 - o The BC-1 (BC Cribs and trenches) unit should not be delayed from its current TPA RI/FS and work schedules by inclusion in the DV-1 Operable Unit. USDOE has dragged its feet on investigating and characterizing cribs and trenches, and should not be receiving a delay for this work. This unit is an example of why work plans and work should be required for specific similar units within this grouping of 44 units, rather than deferring all to one work plan and set of dates.
 - o As has been done with other units, within the unit all similar geographic and types of sites should be grouped and have schedules. This would avoid the most difficult sites from setting the schedule for all 44 units.
- To complete 200-DV-1 OU's remedial actions by 2024 as legally required through TPA M-016-00, the Department of Energy will need to be held accountable to a set of aggressive, comprehensive & enforceable milestones. The milestones for completion of the cleanup of the deep vadose zone operable unit waste sites should be laid out now to ensure compliance with the September 30, 2024 deadline;
- The Department of Energy must demonstrate real commitment to complete the deep

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vadose zone remediation for all non-tank farm sites by 2024 by procuring real and sufficient funding – this means that there should be a clear requirement to identify the funding needed and request it in annual budget submissions starting with FY 2011;

- Heart of America Northwest requests a written description of the 200-DV-1 Operable Unit that describes the claims that the waste units included in the operable unit will be considered and remediated as one unit from the surface to the groundwater;
- The Tri-Party Agencies did not do a sufficient job of describing the new 200-DV-1 OU to the public, which led to confusion and misconceptions that the scope of the work for the new OU included the Single Shell Tank farm units.

Response to Comment 7.5:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.6: Delays to retrieval and treatment of Plutonium and other Transuranic wastes buried at Hanford

After 1970, USDOE was required to “retrievably store” Transuranic waste (TRU), instead of disposing of it in unlined trenches as it had been doing for decades. After being retrieved from storage, the TRU is to be sent to the Waste Isolation Pilot Plant (WIPP) in New Mexico for permanent disposal. Hanford workers are currently retrieving waste drums from storage ditches, preparing them for shipping, and sending shipments to the WIPP facility.

Heart of America Northwest is deeply concerned because the TPA change package allows USDOE to delay retrieval and treatment of highly toxic TRU waste. Instead of proposing legally enforceable milestones for cleanup of TRU waste, the TPA agencies propose non-binding “target dates” that will allow the agencies to delay cleanup indefinitely. Since USDOE has no obligation to set aside funding for cleanup with “target dates,” the likelihood of further delays is great. Legally enforceable milestones are essential because storage barrels are corroding, waste is spreading, and any delay in retrieval increases the risk to cleanup workers and cost of eventual retrieval. Hanford is the most contaminated area in the western hemisphere and any delay in cleanup will further compromise the overall success of the cleanup effort and endanger the health of communities throughout the Northwest.

Unless TPA milestones are stable and reliable, TPA agencies will be unable to develop adequate on-site treatment capacity. TPA agencies must recognize that without legally binding milestones requiring cleanup, private investors will be discouraged from investing in treatment and disposal capabilities and will be further discouraged by insufficient time to acquire investments and permits. A clear and enforceable cleanup schedule is critical to protecting the health of Hanford workers and the communities nearby.

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Response to Comment 7.6:

The majority of milestones in the change package are enforceable. In 2009, funds for M-091 work were deferred to shift resources to cleanup work along the Columbia River. When ARRA funds became available, DOE had the opportunity to use them to accelerate shipments of TRUM waste to WIPP. For example, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

The use of target dates is not new to the TPA. The Parties identified the use of target dates as an option in the original agreement signed in 1989. DOE tracks and reports progress against the targets to the regulatory agencies which enable all parties to quickly identify and respond to schedule problems.

There are enforceable milestones for:

- Completion of retrieval of contact-handled and remote-handled wastes
- Completion of the treatment of contact-handled MLLW
- Completion of the treatment of contact-handled TRUM waste and remote-handled TRUM waste
- Completion of remote-handled MLLW
- Completion of shipment of TRUM waste to WIPP

Milestones M-091-01 and M-091-44 address obtaining treatment capabilities for remote-handled waste. DOE and its contractors are going through the project management process to look at alternatives and to approve the design for TRUM waste technology. The additional ARRA funding allowed DOE and its contractor to initiate an accelerated pilot program for repackaging the large boxes TRUM waste that can be processed and handled at an offsite commercial facility.

As for the remote-handled large boxes that currently have no offsite options, DOE will follow the appropriate project management process that outlines alternative analysis, design selection and construction or modifications to existing facilities once funding is made available in the approved project baseline.

Comment 7.7:

We are also concerned that shipments of TRU waste from Hanford are projected to be extended to 2035 even though the Waste Isolation Treatment Plant (WIPP) is legally bound to close by 2030 and could much close sooner. The TPA change package milestones should, at minimum, align with the WIPP closure schedule to ensure that all WIPP eligible waste is disposed of at WIPP. Since WIPP is the *only* repository authorized to receive and dispose of TRU waste, once it closes any remaining TRU waste at Hanford would be stranded in violation state

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and federal law. To prevent this, HoANW urges the agencies to require early shipment of TRU waste to minimize the risk of WIPP closing prior to all shipments being sent from Hanford.

Failure to include requirement to retrieve Transuranic wastes (TRU) buried at Hanford before 1970: The TPA should include a specific commitment to retrieve TRU waste buried at Hanford before 1970. Though the term “transuranic waste” was not defined as such until 1970, as much as 1,033 kilograms of Plutonium were dumped into the soil before 1970 – enough to fuel 172 Nagasaki size atomic bombs. From the early 1940s to the early 1970s Plutonium was dumped into at least 55 sites, and at least 16 of these sites contain TRU waste that exceeds USDOE’s own standard requiring geological disposal. The pre-1970 TRU waste poses an enormous risk to human health and the environment and the TPA agencies should require characterization, retrieval, treatment, and disposal milestone schedules be established.

NOTE: This Comment will be addressed in the Central Plateau Response to Comment Document.

Additionally, TPA agencies should require USDOE to request funding for the cleanup of pre-1970 TRU to ensure that there is a capability to handle and process the pre-70 TRU. Cleanup efforts will be seriously hindered or delayed if USDOE does not have adequate funding for TRU cleanup.

- The agencies should establish legally enforceable milestones for cleanup of all TRU waste including all pre-1970 TRU waste;
- The agencies should require USDOE to request funding for TRU waste cleanup;
- The agencies should ensure that enforceable agreements are in place to guarantee a permanent disposal site for TRU waste;
- The agencies must reconcile the 2035 milestone with WIPP’s 2030 closure date to ensure that all of Hanford’s WIPP eligible waste actually goes to WIPP and none of it is stranded at Hanford.

Response to Comment 7.7:

Under the TPA DOE is required to take all the necessary steps to integrate Hanford programs and obtain timely funding to meet its TPA obligations. The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current WIPP Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP LWA does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the

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New Mexico Environment Department of the intent to close WIPP). Every year, the TRU waste inventory around the DOE complex is evaluated against the capacity and curie limitations specified in the LWA using the DOE CBFO managed Comprehensive Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

The majority of milestones in the change package are enforceable. In 2009, funds for the M-091 work were deferred to shift resources to cleanup work along the Columbia River. When ARRA funds became available, DOE had the opportunity to use them to accelerate shipments of TRUM waste to WIPP. For example, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

The M-091-46 milestone includes several milestones to repackage small-package contact-handled TRU waste and make it available for shipment to WIPP.

“Grayed” comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.8: Record of Decision Authorship

The proposed TPA changes would allow DOE, instead of EPA, to draft Records of Decision (RODs) for cleanup actions under CERCLA. While EPA would still have to sign off on the final ROD, DOE would review the record and effectively choose a corrective action and write the ROD. Not only is this shift of responsibility illegal, it runs directly counter to public interest. Because it makes little sense to have DOE (the polluter) essentially regulate itself, Heart of America does not support this change.

The basis of our concern regarding this change is that, in preparing a draft for EPA approval, DOE can choose which part of the record to rely upon and which to disregard. The authority to make this kind of judgment has been properly delegated to the expert agency, the EPA, and cannot be given to DOE. If DOE effectively writes the RODs, there is little oversight of DOE action. As the polluter and the source of cleanup funds, DOE has a clear incentive to choose remedies that expedite cleanup and minimize costs. And while DOE professes to be dedicated to protection of health and the environment, the reality is that DOE has a number of interests to balance. EPA, on the other hand, is tasked only with protection of the environment. Rather than allowing DOE to essentially choose the cleanup path itself, EPA should retain its authority to pick remedies based on its own mission, not that of DOE.

In addition to our practical concerns, allowing DOE to draft the RODs is not permitted under CERCLA. EPA is the final decision-maker with respect to the selection of remedial actions at

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Hanford. CERCLA §120 requires that the EPA and the DOE jointly select a remedial action, but in the event that the two agencies are “unable to reach agreement on selection,” the EPA is vested with ultimate decision-making power.² [2 42 USC § 9620(e)(4)(A)] Moreover, the DOE concedes that this is the case. The TPA requires RODs to be signed by the EPA,³ (3 TPA §7.3.8) and the Agreement in Principle specifies that, “in any event, EPA approval of Records of Decision would still be required in accordance with CERCLA §120.”

EPA’s authority to select remedial actions may not be delegated. Under CERCLA §120, “no authority vested in the EPA under this section may be transferred, by executive order of the President or otherwise, to any other officer or employee of the United States or to any other person.”⁴ [4 42 USC § 9620(g)] Thus no modification of the TPA that purports to reassign this responsibility will be valid.

In addition to CERCLA’s clear directive that EPA write RODs, the Administrative Procedure Act also prohibits EPA from delegating authority to DOE. Agencies charged with rulemaking authority under the APA must assure that final decisions must be based on reliable facts, and the decision-maker must evaluate the facts in the record for reliability.⁵ [5 *Kennecott v. U.S. EPA*, 780 Fed.2d 445, 458 (4th Cir. 1985)]

Facts cannot be excluded from the record because an agency deems them unreliable; all information must be admitted and then evaluated for reliability at the decision-making stage. As the final decision-maker in the remedy selection process at Hanford, EPA is the rulemaking agency. As such, EPA is required to base its decision on a complete and reliable record. The theory of rulemaking requires that all relevant information appear in the record *at the decisionmaking stage*, so DOE is not permitted to manipulate that record prior to the EPA’s evaluation. Even information that is deemed unreliable by the DOE must be included for evaluation of reliability by the EPA, the rulemaking agency.

While a ROD provides a description of technical parameters and a consolidated summary of the rationale behind the choice of remedy, in no way does it represent a complete record. EPA is not permitted to simply sign-off on a ROD prepared solely by DOE. To fulfill its obligations as the rulemaking agency, EPA must evaluate a complete record, determine the reliability of facts, and consider alternative remedies. As mentioned above, there would be a clear conflict of interest for DOE to perform this duty because DOE would in effect be evaluating its own clean-up efforts at Hanford without any oversight. This self-policing would lead to a biased selection of a remedial action.

The agencies support the proposed change of ROD authorship by asserting that it will make the ROD drafting process more efficient. Because DOE is already involved in choosing a remedy and because DOE can dedicate more resources to the process, both EPA and DOE claim that

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handing over drafting responsibilities will increase efficiency. EPA's Dennis Faulk admitted at a June 24th workshop that he did not wish to expend the resources required to write initial ROD drafts as CERCLA. He further noted that "this is how it works" at many other sites around the country. However, in response to a question regarding EPA's review of DOE's drafts, Faulk stated that EPA does conduct a detailed review of DOE's work and has sufficient personnel to write the drafts themselves. If EPA does in fact have the ability to review the record and draft the ROD itself, it should do so. Alternatively, if EPA does not have the manpower to fulfill its obligations, the illegal delegation of power to DOE (the agency EPA is supposed to be regulating) is clearly improper.

Heart of America strongly urges the parties to retain the current structure in which EPA is responsible for drafting RODs. However, if DOE does assume some authority in the drafting process, we agree with the Hanford Advisory Board that the concerns of the public would be somewhat quelled if DOE drafts were subjected to public review and comment. Making drafts available for comment would add transparency to the process and provide some oversight for DOE actions.

Response to Comment 7.8:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.9: RCRA & CERCLA

Corrective Action changes will result in less stringent cleanup standards. An additional concern about the proposed TPA changes involves the administering of corrective actions. This change involves the replacement of RCRA corrective actions for past practice units with CERCLA corrective actions, a shift that HoANW does not support. A primary purpose of corrective actions is to ensure full characterization of releases to the environment; as such characterization is necessary to define the nature and extent of contamination. We do not believe that corrective actions performed under CERCLA actions will be as complete and have cleanup levels as stringent as under RCRA corrective actions (i.e., particularly the characterization of the vadose zone beneath units subject to cleanup under the TPA).

Response to Comment 7.9:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.10:

The existing language in the TPA ensures compliance with WAC 173-303 regulations by requiring the Hanford Site (as the permitted facility) to incorporate and specify corrective actions within the Permit at the time of permit issuance. The proposed modifications, however,

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seem to run contrary to the purpose and intent of the TPA's instruction on RCRA/CERCLA integration:

*"EPA and Ecology agree that when permits are issued to DOE for hazardous waste management activities ... requirements relating to remedial action for hazardous waste management units under Part Three of this Agreement **shall be the RCRA corrective action requirements** for those units, whether that permit is administered by EPA or Ecology.*

Further, the proposed changes to corrective action implementation on the Hanford site are not supported by HoANW or the Hanford Advisory Board. The HAB articulated its displeasure with the move to CERCLA corrective action on June 4th by stating:

All corrective action requirements should be incorporated into the Hanford Facility Permit according to the requirements of the Washington Administrative Code 173-303-6462 (3) and -64630(3). These state rules ensure compliance with the Resource Conservation and Recovery Act (RCRA) and the Model Toxics Control Act, and guarantee the public certain rights (including under the State Environmental Policy Act and appeals). Joint decisions compliant with both RCRA and CERCLA processes should both be issued for those units regulated under both laws.

Response to Comment 7.10:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.11: *Proposed changes will negatively impact public involvement*

In addition to the changes regarding corrective actions, we are concerned that proposed changes will impact the public involvement process of WAC 173-303-830/840 and limit public opportunities to challenge or seek modification of corrective action decisions in the future. Ecology's reservation of authority to review and impose corrective actions after completion of CERCLA actions will not afford the public the same opportunities for involvement as provided through the Dangerous Waste Regulations for RCRA modifications.

Response to Comment 7.11:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 7.12: *Public Involvement Comments*

The Tri-Party Agencies demonstrated exemplary willingness to work with stakeholders to schedule and design the public workshops in Portland and Seattle on this change package. Participants at the workshops gave feedback indicating that this type of meeting was useful and

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informative for them, and Heart of America Northwest found the workshops to be ideal considering the scope of changes under comment and the recent conclusion of an extended comment period on the draft *Tank Closure and Waste Management Environmental Impact Statement*. Heart of America Northwest recognizes the value of having senior officials from DOE, EPA and Ecology interfacing with the public and hearing the public's concerns firsthand, and we have repeatedly submitted comments to that effect.

Tri-Party Agreement change packages are not accessible to the public for them to prepare comment on their own. The TPA should include maps and guides to individual waste units so that anyone can easily look up a waste unit (currently designated by numbers, letters and dashes unintelligible to the public), see where it is located and a description of what is in it. There was a major flaw in the presentation of the new deep vadose zone operable unit, which Heart of America Northwest did not catch until two days before the close of comment, as a result of the inaccessibility of the change package document.

Perhaps the major imperfection of the workshop format is that it is not as effective of a format for capturing public comments. At the workshops in Portland and Seattle, notes on the discussion were taken on flip-charts and by a designated note-taker. We expect that all of the notes from both of the meetings will be treated as formal comments and will be responded to in the responsiveness summary.

- The Tri-Party Agreement should include maps and guides to the operable units and waste units for the public;
 - Additionally, Tri-Party Agencies should rename the groundwater operable units to "200 East" and "200 West" to avoid confusion and increase transparency;
- The notes and flip charts from the public workshops in Portland on June 23 and Seattle on June 24 should be responded to as formal comments in the responsiveness summary;
- Senior officials from the Tri-Party Agencies should always be present at public meetings and workshops to interact with the public and hear their concerns firsthand.

Response to Comment 7.12:

Most of these comments were applicable to the Central Plateau change package and will be addressed in more detail in that comments and response summary. The Parties appreciated the iterative process the stakeholders engaged in with the Parties to develop the schedule and design of the workshops. We found the small group, focused format to be very constructive and conducive to promoting good dialogue. Senior management from the Tri-Parties looks forward to ongoing opportunities to interact with the public.

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COMMENTER 8: Russell Jim, Yakama Nation

Introductory Statement:

The Yakama Nation ERWM Program appreciates the opportunity to review and provide comments on the Proposed Changes to the Tri-Party Agreement (TPA) for the Central Plateau Cleanup Work, and for the Mixed Low-Level Waste and Transuranic Mixed Waste (TPA Change Packages).

The Confederated Tribes and Bands of the Yakama Nation is a federally recognized sovereign pursuant of the Treaty of June 9, 1855 made with the United States of America (12Stat. 951). The U.S. Department of Energy's Hanford site was developed on land ceded by the Yakama Nation under the 1855 Treaty with the United States. The Yakama Nation retains reserved rights to this land under the Treaty.

There is no issue of greater importance to the Yakama Nation than protection of, and respect for the treaty-reserved rights. The Hanford Site lies within ceded area of the Confederated Tribes & Bands of the Yakama Nation. Within this ceded area, the Yakama Nation retains the rights to natural and cultural resources including but not limited to areas of ancestral use, archaeological sites and burial grounds. These resources are sacred and sensitive to the Yakama Nation, and must be managed to preserve, protect and perpetuate the resources that are inseparable from our way of life.

The Yakama Nation ERWM Program's review comments are enclosed. The Yakama Nation ERWM Program identified three areas that have significant concerns.

Tribal and Public Involvement, Corrective Action changes and use of the CAD/ROD approach:

Response to Introductory Statement:

The Parties appreciate the continuous dialogue and feedback this past year from the Yakama Nations concerning MLLW and TRUM waste.

"Grayed" comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.1:

The Yakama Nation ERWM Program does not support the replacement of RCRA corrective actions for past practice units with CERCLA corrective actions. A primary purpose of corrective actions is to ensure full characterization of releases to the environment; as such, characterization is necessary to define the nature and extent of contamination. We do not believe that corrective actions as currently performed under CERCLA will be as complete and have cleanup levels as stringent as under RCRA corrective actions (i.e., particularly the

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characterization of the vadose zone beneath units subject to the II.Y Condition(s)). Furthermore, the Yakama Nation ERWM Program supports the recent Hanford Advisory Board advice (#231) regarding inclusion of corrective action into the Hanford Facility Permit.

All corrective action requirements should be incorporated into the Hanford Facility Permit according to the requirements of the Washington Administrative Code 173-303-64620(3) and - 64630(3). These state rules ensure compliance with the Resource Conservation and Recovery Act (RCRA) and the Model Toxic Control Act, and guarantee the public certain rights (including under the State Environmental Policy Act and appeals). Joint decisions compliant with both RCRA and Comprehensive Environmental Recovery, Compensation and Liability Act processes should be issued for those units regulated under both laws.”

Additionally, the Yakama Nation ERWM Program is concerned that the proposed changes will affect the Tribal and public involvement process of WAC 173-303-830/840 and limit opportunities to challenge or seek modification of corrective action decisions in the future. Ecology’s reservation of authority to review and impose corrective actions after completion of CERCLA actions will not afford the Tribes and the public the same opportunities for involvement as are currently provided through the Dangerous Waste WACs for permit modifications. Through substitution of the Hanford Federal Facility Agreement and Consent Order (HFFACO or the Tri Party Agreement-TPA) changes and a new CAD/ROD for permit modifications, important Tribal and public involvement rights will be lost through this one-time present and future “blanket” incorporation approach. TPA public participation processes are not as extensive and do not provide similar guarantees to the Tribes and public as permit modifications are required to provide under the Dangerous Waste Regulations.

Response to Comment 8.1:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.2: Deep Vadose Zone Operable Units

The Yakama Nation ERWM Program supports deep vadose zone remediation actions as an important component of the cleanup of Hanford. However we reiterate our concern that DOE still lacks a comprehensive, integrated approach to the vadose zone. We believe that DOE should perform interim and concurrent actions concerning the groundwater and the vadose zone to ensure that the cleanup of the source sites reduces risks of levels that are protective of Tribal subsistence uses without relying on long-term stewardship and permanent institutional controls. U.S. Nuclear Regulatory Commission regulations in 10 CFR 61.59 limit reliance upon ICs to 100 years after transfer of radioactive disposal facility property to a new owner.

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We recommend DOE consider the following in developing a systematic approach to vadose zone cleanup:

- Potential future impacts from the deep vadose zone to groundwater and to the confined aquifer in 200 areas
- Use of more publically available and advanced models for doing modeling to determine potential level of risk to human health and the environment.
- Creation of two separate deep vadose zone RODs; one for the 200 East and one for the 200 West Areas.
- Pursue an independent review of treatability technologies to apply to the deep vadose zone contamination problem.

Response to Comment 8.2:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.3: *Mixed Low-level and Transuranic Waste Cleanup*

The Yakima Nation ERWM Program is concerned that the proposed TPA milestones for the shipment of Transuranic mixed waste (TRUM) from Hanford is to be extended to 2035 while the current legally required closure date for the Waste Isolation Pilot Plant (WIPP) is 2030. This milestone and DOE's baseline should be aligned with WIPP's transuranic waste repository schedule to ensure that all WIPP-eligible Hanford waste is disposed at WIPP. Furthermore, while in agreement with HAB Advice #231 regarding these issues, the Yakama Nation ERWM Program does not support construction of waste storage facilities that are in violation of DOE Orders or RCRA or CERCLA regulatory obligations and/or will result in long-term/permanent storage of such wastes on the Hanford site.

The Yakama Nation ERWM Program looks forward to dialog on these concerns and comments.

Response to Comment 8.3:

The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current WIPP Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP LWA does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the New Mexico Environment Department of the intent to close WIPP). Every year, the transuranic (TRU) waste inventory around the DOE complex is evaluated against the capacity and curie

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limitations specified in the LWA using the DOE CBFO managed Comprehensive Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

No additional storage capabilities (either contact-handled or remote-handled) are currently planned. Should additional storage capability be needed any facilities constructed and operated to support the M-091 milestones would be in compliance with Federal, State and DOE requirements. The Yakama Nation will be consulted if new storage capability is needed.

Comment 8.4: TPA change packages M-85-10-01, M-16-09-03, and M-15-09-02

The Yakama Nation ERWM Program, while supporting the need to establish milestone deliverable due dates for Remedial Investigation/Feasibility Study Work Plans for all non-tank farm and non-canyon operable units and completion of Engineering Evaluation/Cost Analysis for all Tier 2 facilities listed in new Appendix J, is concerned that establishing Interim Milestones without a date for final completion of the major milestone will lead to missing of these milestones and requests for extension of the major milestone. *The Yakama Nation ERWM Program recommends the due date for M-085-00 coincide with M-016-00 final due date of 9/30/2024 if not earlier. Please provide rationale for not using the 9/2024 date.*

The Yakama Nation ERWM Program supports a geographic approach to cleanup on the Hanford site providing that Operable Units and their cleanups do not combine different source units and their waste streams and apply a singular, similar "one-size fits all" remedy. *The Yakama Nation ERWM Program recommends DOE perform site-specific characterization and risk assessments for each source unit.*

The Yakama Nation ERWM Program is also concerned that with this re-alignment of Operable Units, there are instances where RCRA TSD units are within an Operable Unit and under EPA as lead agency. *The Yakama Nation ERWM program recommends Ecology retain lead agency status for these particular operable units to facilitate RCRA cleanup and to ensure maximum opportunities for public involvement and participation in document review and the permit modification process remains.*

Additionally, while the Yakama Nation ERWM Program supports the integration of soils, facilities, and groundwater cleanup, we are concern there may be cleanup decisions make which artificially separate a contaminate plume in the near surface from deeper in the vadose zone. *The Yakama Nation ERWM Program recommends remedies for groundwater are based on groundwater protection (including surface receptors) from all unit sources, that there are site-specific goals and schedules for additional characterization and a range of cleanup technologies.*

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Furthermore, the Yakama Nation ERWM Program recommends that groundwater monitoring plans for TSD units undergoing closure be incorporated into the Hanford RCRA Permit (unit specific permits) per the WAC 173-303-830/840 process.

Response to Comment 8.4:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.5: TPA change package M-37-10-01

1. *The Yakama Nation ERWM Program requests clarification on whether these are Target or Interim milestones.*

a. *Target milestones under TPA Section 12.2 do not require public involvement. Target milestones can be deleted, added or accelerated or deleted or the target date may be deferred for more than 60 days as long as it does not affect an interim milestone.*

b. *Permits are required to have set dates in compliance schedules; any changes would require a modification to the Permit and public involvement/comment per WAC 173-303-830. The Yakama Nation ERWM Program requests clarification on Tribal and Public Involvement opportunities regarding changes to the WAC 173-303 modification process for incorporation of closure documents (e.g. Groundwater Monitoring Plans, SAPs, Work Plans, etc) into the Hanford RCRA Permit.*

Response to Comment 8.5:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.6: TPA change package C-09-07

The Yakama Nation ERWM Program is concerned that there may be some waste sites which have been dropped from the Appendix (it is unclear in which Operable Unit the 207-A South Retention Basin is found). The Yakama Nation ERWM Program recommends a recheck of the new Appendix C. The Yakama Nation ERWM Program also recommends that all interim closed units remain listed in Appendix C if not already included.

Response to Comment 8.6:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.7: TPA change package P-00-09-02

There are established definitions for the term "facility" under both the CERCLA and RCRA regulations. It is unclear as to the need to re-define this term for the purposes stated within this

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change package. It is unclear and confusing what is to address facilities ancillary equipment and the associated soils. *The Yakama Nation ERWM Program requests clarification on these issues.*

It is unclear whether the dispositioning process will differ or substitute for the RCRA closure process for TSD units. The inclusion of cribs, ponds, ditches, and landfill under this disposition process is noted. There is concern that corrective actions for these units will be deferred to CERCLA via the "CAD-ROD" approach and lost opportunities for public participation and appeal. Under WAC 173-303-640(8)(a) all contaminated soils and system components and structures and equipment contaminated with waste must be removed. *This is an example of why Yakama Nation ERWM Program does not support the "CAD-ROD" approach. The Yakama Nation ERWM Program requests clarification on these issues.*

It is unclear how the NEPA documentation, RCRA closure plans, and other documents supporting these efforts will be initiated and developed, under what regulatory authority these will be developed, and what lead regulatory agency will have the final approval authority for the disposition end states. *The Yakama Nation ERWM Program requests clarification on these issues.*

It is unclear whether the facility dispositioning process and reliance on DOE Order 430.1B, U.S. Department of Energy Real Property Asset Management (9/24/2003) and The Decommissioning Handbook (DOE/EM-0383, 1/2000) will retain and ensure early Tribal involvement in the development of project goals and objectives. *The Yakama Nation ERWM Program requests clarification on how DOE will initiate discussions and provide for opportunities of public involvement with the Yakama Nation ERWM Program.*

Response to Comment 8.7:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.8: *TPA change package J-09-01*

Decision documents for RCRA TSDs do not seem to be appropriately designated. These units will need Closure Plans submitted to Ecology per WAC 173-303-610 closure requirements. *The Yakama Nation ERWM Program requests clarification as to what are the required and/or anticipated documents to be listed. The Yakama Nation ERWM Program recommends that all these required or anticipated documents be listed.*

Response to Comment 8.8:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

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Comment 8.9: TPA change package A-10-01

The need for re-defining the term “facility” is unclear. This re-defining of the term “facility” suggests the potential to consider soil units (cribs, trenches, burial grounds, and landfills) as subject to disposition rather than cleanup per corrective action regulations. *The YN ERWM Program requests clarification of the potential impacts to RCRA TSD and RCRA Past Practice Units as well as CERCLA Past Practice Units.*

The YN ERWM Program also requests the following deleted text remain in paragraph of Appendix A (Page A-17):

“for corrective action, regardless of the date waste was received or discharged at a unit.”

Response to Comment 8.9:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.10: TPA change package L-09-01

1. In the explanation of ‘Impact of Change’ on the Change Control Form, the statement made that these changes will implement a coordinated RCRA/CERCLA process for certain units. *The Yakama Nation ERWM Program requests clarification of which units.*
2. Article XIV. Work: Statement: Ecology will administer RCRA Subtitle C corrective action provisions in accordance with this Agreement and issue all future modifications to the corrective action portion of the TSD permit. There appears to be some confusion regarding incorporation of corrective actions into to the RCRA permit. *The Yakama Nation ERWM Program requests clarification (including the decision basis) of which corrective action decisions will be incorporated into the Hanford Permit.*
3. Article XVI. Resolution of Disputes: Statement made: These Dispute Resolution provisions shall not apply to RCRA permit actions which are otherwise subject to administrative or judicial appeal. *The Yakama Nation requests clarification as to what is meant by “otherwise subject to administrative or judicial appeal.”*
4. Article XIV. Work, Paragraph 54: Statement made: Ecology in consultation with DOE shall select the RCRA corrective action(s). The final selection of RCRA corrective actions by Ecology shall be final and not subject to dispute. *The Yakama Nation ERWM Program requests clarification as to the application of the proposed changes and the above statements and the process for Tribal and public involvement.*

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5. The "Agreement" states: "In the event of any inconsistency between this Agreement and the attachments to this Agreement (i.e., the Articles), this Agreement shall govern unless and until duly modified pursuant to Article XXXIX of this Agreement."
 - a. Changes within the Action Plan regarding how Corrective Action is implemented on the Hanford site are not consistent with the approach outlined in the Agreement. *The Yakama Nation ERWM Program requests clarification on how use of the CAD/ROD approach meets the consistency requirements of the Agreement.*

Response to Comment 8.10:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.11: TPA change package P-00-09-01

1. Corrective Action Decisions would be prepared, issued, and implemented under the HFFACO (TPA) and in accordance with WAC 173-340 regulations. There has not been a clear explanation of how Ecology can apply this process to the Hanford Facility. Furthermore, while Ecology claims to continue to retain authority to require corrective actions under RCRA be performed or after evaluating CERCLA corrective actions, to require additional corrective actions be performed, the opportunity for Yakama Nation Tribal public involvement or appeal are reduced or eliminated. *The Yakama Nation ERWM Program takes issue with the position that WAC 173-303 regulations allow the deferral of RCRA corrective actions to CERCLA and subsequent elimination of the permit modification process requiring incorporation of corrective actions into the Hanford RCRA permit. The Yakama Nation ERWM Program requests clarification on the RCRA regulatory pathway for the CAD/ROD (including regulatory citations).*
2. The Yakama Nation ERWM Program has concerns on the following general issues evolving from the CAD/ROD:

The U.S. Department of Environmental Protection (EPA) has authorized the State of Washington to administer and enforce a state hazardous waste program in lieu of a federal program. To become authorized, a state program must, among other things, consistent with and no less stringent than the hazardous waste program under RCRA and consistent with the federal and state programs in other states (*see generally* 40 CFR Part 271). The state program must have the legal authority to implement provisions at least as stringent as designated federal hazardous waste permit provisions. 40 CFR § 271.10. The Washington State Department of Ecology, Nuclear Waste Program, through the Revised Code of Washington (RCW) Chapter 70.105, Chapter 70-105D (Corrective Action), and implementing regulations at WAC 173-303 (Washington State Dangerous Waste regulations), applies this oversight authority to the US Department of Energy Hanford Site.

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- a. Washington State has authority to implement corrective actions through WAC 173-303-646 [Dangerous Waste Regulations], not via the Hanford Federal Facility Agreement and Consent Order (HFFACO or the Tri Party Agreement-TPA). *The Yakama Nation ERWM Program is concerned that the Tri-Party Agencies (particularly Ecology) are relying, for RCRA corrective actions, on milestone schedules in the TPA to meet these requirements rather than directing cleanup and the aligning CERCLA and RCRA decision making processes and procedures through RCRA permit compliance schedules or incorporation of RCRA corrective actions into Part IV of the Hanford Permit. The Yakama Nation ERWM Program requests clarification on the regulatory authority of the TPA.*
 - b. The CAD/ROD document is not a MTCA order or decree and it is not being prepared under Ecology authority or Ecology's subsequent obligations to prepare a responsiveness summary and incorporate the corrective action decision into the Hanford Permit. *The Yakama Nation ERWM Program requests clarification on relationship of the CAD/ROD to a MTCA order or decree and clarification on process for incorporation of the CAD into the Hanford Permit.*
 - c. There is loss of opportunity for Yakama Nation Tribal public involvement opportunities if Corrective Actions are not incorporated into the Facility Permit per the requirements of WAC 173-340. *The Yakama Nation ERWM Program requests clarification on the process of making modifications to the CAD/ROD and how many opportunities there will be for Tribal public involvement.*
 - d. Incorporation of a CAD/ROD decision into the Administrative Record of any unit is not equivalent to incorporation of the document into the unit permit per WAC 173-303-646 or WAC 173-303-830/840. *The Yakama Nation ERWM Program requests clarification on whether incorporation by reference is equivalent to WAC 173-303 requirements to include corrective actions into the Hanford Permit and will allow for Tribal and public involvement opportunities.*
 - e. It is thought, should this TPA change package be approved, once the initial public participation requirements are met, that any future documents (e.g. SAPs, Work Plans, etc) submitted to fulfill work under this CAD/ROD would not have to be subject to public involvement/review& comment. *The Yakama Nation ERWM Program requests clarification as to what future documents will be provided for Tribal review and comment and how that process will occur.*
3. Statement is made regarding Figure 7-2 [HFFACO] that the CAD/ROD approach is 'functionally equivalent' to a Record of Decision process. That statement is debatable. *The Yakama Nation ERWM Program requests the Tri-Parties define the terms "functionally equivalent" and by what authority "functional equivalence" is provided.*
- a. It is incorrect to imply that the CAD/ROD is functionally equivalent to a Permit or the Permit approach to incorporate corrective actions into the Hanford Facility RCRA Permit. *The Yakama Nation ERWM Program requests basis for statements and how*

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many opportunities for Tribal and public involvement will be allowed under this approach.

- b. Stating that something is “functionally equivalent” does not ensure that work done is sufficiently comprehensive to satisfy the technical and substantive requirements of both RCRA and CERCLA. *The Yakama Nation ERWM Program requests clarification on the steps to be taken by the Tri-Parties to ensure these requirements are met for all authorities.*
4. Action Plan, Section 3.5, 1st paragraph, 2nd sentence: There is no current classification for R-CPPs in WIDS or in the MP-14 process of the TPA. *The Yakama Nation ERWM Program requests clarification on the process to address this concern.*
5. Action Plan, Section 5.4: Last sentence of last paragraph: The words “past practice process” will not ensure that corrective actions per WAC 173-303-646 are satisfied. Additionally, R-CPP authority use as defined: “generally be used for operable units that contain significant TSD units and/or lower-priority past-practice units” implies the potential use of the CAD/ROD approach when dealing with inclusion of corrective action into TSD permits as established in Part II of the HFFACO and disregard of WAC 173-303-646 requirements. *The Yakama Nation ERWM Program requests clarification on how and under what authority corrective action for TSD units will be performed and incorporated into the Hanford Permit.*
6. Action Plan, Section 7.1: Last paragraph: Statement is made that steps in Figure 7-2 are “functionally equivalent” but deletions of text in Section 7.4.2 removes the requirement that these processes be just that-“functionally equivalent.” *The Yakama Nation ERWM Program requests clarification whether or not there is a requirement that processes be “functionally equivalent.”*
7. Action Plan, Section 7.4.2, Last sentence and multiple changes in Section 7.4.3 & 7.4.4, 7.4.5, 7.4.6: Addition of new text indicates a preference to defer to CERCLA rather than follow the WAC 173-303 process for performing corrective actions on the Hanford site. Ecology appears to be abrogating/relinquishing its corrective action responsibilities to USDOE and allowing this authority to be dictated by the TPA process and milestones.
 - a. Deletion of conducting corrective actions per the schedules of compliance specified in the RCRA permit is in violation of WAC 173-303-64620(3)
 - i. [The permit will contain schedules of compliance for such corrective action where such corrective action cannot be completed prior to issuance of the permit], and
 - ii. WAC 173-303-64630(3)[In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance.] *The Yakama Nation ERWM Program requests clarification on how these WAC 173-303 requirements are to be met.*

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- b. O & M Plans: Terminating O & M while continuing it for other units within and operable unit suggest using a “partial closure permitting” approach which is not authorized by Washington State. *The Yakama Nation ERWM Program requests clarification on this issue.*
- c. Delisting after O & M is completed: Certification of completion under RCRA verses CERCLA is unclear; there does not appear to be the opportunity for public participation. *The Yakama Nation ERWM Program requests clarification on this issue.*
- d. Evaluation of effectiveness of corrective actions: Under WAC 173-303-645(11)(g) require reports on effectiveness of corrective action programs on a semi-annual basis. How is a requirement to have a review only “at least every 5 years during the O & M phase” in compliance with this regulation? *The Yakama Nation ERWM Program requests clarification on this issue.*
- e. Action Plan, Section 7.5: Deletion of text from 2nd to last paragraph of section indicates no future corrective actions to be incorporated into the Hanford permit for any unit. *The Yakama Nation ERWM Program requests clarification on this issue.*

Response to Comment 8.11:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.12: TPA change package P-07-09-02

There is concern that the decision-making basis and other valuable information will be lost should RODs not remain a part of the Administrative Record for each operable unit. *The Yakama Nation ERWM Program requests this information remain as included in the Administrative Record for each operable unit.*

Proposed changes provide for DOE to author Records of Decision for regulator approval. *The Yakama Nation ERWM Program recommends close collaboration and inclusion of alternatives that the regulators would like to evaluate in the Feasibility Studies and Proposed Plans.*

Response to Comment 8.12:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 8.13: TPA change package M-91-09-01-Mixed Low-Level Waste and Transuranic Mixed Waste

The Yakama Nation ERWM Program supports what the Hanford Advisory Board noted in recent advise (HAB Consensus Advice #231) regarding Mix Low-Level and Transuranic Mixed Waste Cleanup with the following exceptions:

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The Yakama Nation ERWM Program does not support the construction of waste storage facilities which are in violation of DOE Orders or RCRA or CERCLA regulatory obligations and/or will result in long-term/permanent storage of such wastes on the Hanford site. The Yakama Nation ERWM Program will seek additional consultation with the Tri-Party Agencies on this issue and associated issues and will be providing further technical/regulatory comments on these proposed changes.

Response to Comment 8.13:

No additional storage capabilities (either contact-handled or remote-handled) are currently planned. Should additional storage capability be needed any facilities constructed and operated to support the M-091 milestones would be in compliance with Federal, State and DOE requirements. The Yakama Nation will be consulted if new storage capability is needed.

Comment 8.14: TPA Agreement In Principle

As It is unclear whether revisions to the Hanford Federal Facility Agreement and Consent Order (HFFACO) to ensure that investigations and remediation of soil contamination from single shell tanks be coordinated with actions taken elsewhere at the Hanford site to investigate and remediate deep vadose zone contamination implies or approves of delays in investigations and remediation of soils contaminated by leaks from the single shell tanks (SST). It is also unclear whether this statement allows or anticipates corrective actions for the SST system (and associated contaminated soils) to be performed under CERCLA actions rather than RCRA actions. The YN ERWM Program, while recognizing this is not included as a TPA change package, would appreciate clarification on these issues.

Response to Comment 8.14:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

COMMENTS 9: Lauren Goldberg, Columbia Riverkeeper

Introductory Statement:

On behalf of Columbia Riverkeeper, please accept the following public comments on the proposed changes to the Tri-Party Agreement (TPA) for the Central Plateau cleanup actions and for the Mixed Low-Level Waste (MLLW) and Transuranic Mixed Waste (TMW).

I. COLUMBIA RIVERKEEPER'S COMMITMENT TO PROMPT, EFFECTIVE CLEANUP AT HANFORD.

Columbia Riverkeeper is a membership-based 501(c)(3) nonprofit organization. CRK's mission is to protect and restore the Columbia River, from its headwaters to the Pacific Ocean. Since 1989,

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CRK has played an active role in monitoring and improving cleanup activities at the Hanford Nuclear Reservation (Hanford). A legacy of the Cold War, the Hanford site continues to leach radioactive pollution into the Columbia River. Hanford's legacy is not a local issue. Nuclear contamination from Hanford threatens the Pacific Northwest's people, a world renowned salmon fishery, as well as countless other cultural and natural resources.

CRK's staff and members are dedicated to a long-term solution for Hanford cleanup. Simply put, Hanford is one of the world's most contaminated sites. Despite this status, the public and CRK members continue to catch and consume fish from the Columbia River and recreate near and downstream of Hanford. For example, each summer CRK leads a series of kayak trips on the Hanford Reach of the Columbia River. The Hanford Reach is particularly unique because it is the last free-flowing stretch of the Columbia. On these outings, our members and staff pass the shores of the Hanford Nuclear Reservation and learn about the ESA-listed salmon and steelhead that spawn, rear, and migrate in the Hanford Reach. For these reasons, CRK is submitting comments on the Central Plateau cleanup actions and for the Mixed Low-Level Waste (MLLW) and Transuranic Mixed Waste (TMW).

II. COMMENTS ON PROPOSED TPA CHANGES.

As Hanford clean-up progresses, the TPA agencies are continually faced with important decisions on how to manage radioactive and hazardous wastes. The following comments address specific aspects of the most recent round of proposed TPA changes.

Response to Introductory Statement:

The Parties appreciate the continuous dialogue and feedback this past year from Columbia Riverkeepers concerning Mixed Low-Level Waste and Transuranic Mixed (TRUM) Waste.

"Grayed" comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 9.1: A Comprehensive Approach

For the first time, the TPA will have milestones that take a comprehensive approach to Central Plateau soils, facilities, and groundwater. Columbia Riverkeeper commends the TPA agencies for taking this critical step in improved management of the Hanford cleanup process.

Response to Comment 9.1:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 9.2: Changing a Federal Standard

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The TPA agencies are proposing a major change to how waste is categorized. Many of the contaminated Central Plateau soil sites are classified under Washington State and federal hazardous waste law—the Resource Conservation and Recovery Act (RCRA). Under the new proposal, the soil sites would be classified using the federal Superfund law (CERCLA). Columbia Riverkeeper opposes this change as the Superfund law requirements would be less stringent (*i.e.*, less rigorous monitoring and waste retrieval requirements).

Response to Comment 9.2:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 9.3: EPA Involvement

The federal Superfund law requires plans that guide cleanup at Hanford. EPA—the regulating agency—normally drafts the clean-up plans. Under the TPA agencies’ proposal, the U.S. Department of Energy (USDOE)—the *regulated* agency—would draft the plans and EPA would “approve” these plans. This raises serious concerns about oversight and bias from the plans’ inception. Columbia Riverkeeper opposes this approach to cleanup plans at Hanford.

Question #1: What is EPA’s rationale for allowing USDOE to draft the clean-up plans? Please explain.

Question #2: What are examples of other cleanup sites where EPA consents to the responsible party (*i.e.*, the polluter) preparing the cleanup plans? Please explain.

Question #3: To the extent EPA identifies cleanup sites under Question #2, are these sites similar or different from Hanford, the world’s most contaminated site? Please explain

Response to Comment 9.3:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 9.4: Need for Enforceable Deadlines

The availability of federal funding under the American Recovery and Reinvestment Act is impacting cleanup at Hanford. Nonetheless, the TPA-agencies are *not* proposing enforceable cleanup dates. Instead, the TPA-agencies want “target” dates for cleaning-up Mixed Low-Level and Transuranic Mixed Wastes. Under the agencies’ proposal, the proposed TPA changes would delay enforceable milestones for about four years (from 2012 to 2016). The TPA changes proposal also includes a 2035 deadline to remove all legacy transuranic mixed waste from Hanford. Columbia Riverkeeper strongly supports enforceable deadlines, which encourage accountability and consequences if USDOE fails to meet deadlines. Given the public health and

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natural resource threats posed by radioactive and hazardous waste, enforceable clean-up deadlines are a critical component to achieving timely, effective cleanup at Hanford.

Question #4: How will USDOE be held accountable if it does not meet its unenforceable “target” deadlines? Please explain.

Response to Comment 9.4:

The majority of milestones in the change package are enforceable. In 2009, funds for M-091 work were deferred to shift resources to cleanup work along the Columbia River. When ARRA funds became available, DOE had the opportunity to use them to accelerate shipments of TRUM waste to WIPP. For example, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

There are enforceable milestones for:

- Completion of retrieval of contact-handled and remote-handled wastes
- Completion of the treatment of contact-handled MLLW
- Completion of treatment of remote-handled MLLW
- Completion of the treatment of contact-handled TRUM waste and remote-handled TRUM waste
- Completion of shipment of TRUM waste to WIPP

Comment 9.5: Storage in the Event of Missing Deadlines

Columbia Riverkeeper is particularly concerned about how USDOE’s plans to store Mixed Low Level and Transuranic Waste if the target deadlines are not met.

Question #5: If DOE misses a “target” deadline, how will storage activities impact human health and the Columbia River? Please explain.

Response to Comment 9.5:

No additional storage capabilities (either contact-handled or remote-handled) are currently planned. Should additional storage capability be needed any facilities constructed and operated to support the M-091 milestones would be in compliance with Federal, State and DOE requirements designed to ensure protection of human health and the environment.

Comment 9.6: Protecting Public Safety

Columbia Riverkeeper concurs with the Hanford Advisory Board’s (HAB) recommendations on aligning USDOE’s baseline with the Waste Isolation Pilot Plant (WIPP) transuranic waste repository schedule. See HAB Advice #234 (Adopted June 4, 2010).

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Response to Comment 9.6:

Although you refer to HAB advice 234 we believe you mean HAB advice 231. The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current WIPP Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP LWA does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the New Mexico Environment Department of the intent to close WIPP). Every year, the transuranic (TRU) waste inventory around the DOE complex is evaluated against the capacity and curie limitations specified in the LWA using the DOE CBFO managed Comprehensive Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

The majority of milestones in the change package are enforceable. In 2009, funds for M-091 work were deferred to shift resources to cleanup work along the Columbia River. When ARRA funds became available, DOE had the opportunity to use them to accelerate shipments of TRUM waste to WIPP. For example, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

The M-091-46 milestone includes several milestones to repackage small-package contact-handled TRU waste and make it available for shipment to WIPP.

Comment 9.7:

Specifically, the current legally required WIPP closure date is 2030. Yet the TPA change package extends the final Hanford shipments of transuranic mixed waste to 2035.

Question #6: Do the TPA agencies intend to align the WIPP repository schedule with the TPA change package proposal? If not, what is the contingency plan?

Columbia Riverkeeper also concurs with the Hanford Advisory Board's recommendation that: (1) the TPA agencies require early shipment of available transuranic waste to minimize the risk of WIPP closing prior to all Hanford shipments; and (2) the TPA agencies continue to improve the safety of WIPP shipments, such as avoiding inclement conditions.

Response to Comment 9.7:

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The M-091-44 milestone has been revised to align with the current 2030 start date for closure in the current WIPP Hazardous Waste Facility Permit.

However, Public Law 102-579 WIPP LWA does not specify an end date for operation of WIPP; rather it is bounded by capacity and curie limitations (6.2 million cubic feet and 5.1 million curies, respectively). The WIPP Hazardous Waste Facility Permit is based on a ten year approval/renewal cycle but does not have a legal end date. The Permit contains an anticipated schedule for closure activities that are planned to start in 2030 (when DOE would notify the New Mexico Environment Department of the intent to close WIPP). Every year, the transuranic (TRU) waste inventory around the DOE complex is evaluated against the capacity and curie limitations specified in the LWA using the DOE CBFO managed Comprehensive Inventory Database which includes all TRUM waste within the scope of the M-091 milestone series. Any changes required to the Permit would be submitted in accordance with applicable regulatory requirements.

The majority of milestones in the change package are enforceable. In 2009, funds for M-091 work were deferred to shift resources to cleanup work along the Columbia River. When ARRA funds became available, DOE had the opportunity to use them to accelerate shipments of TRUM waste to WIPP. For example, DOE used ARRA funds to accelerate the repackaging of large package TRUM waste by using offsite commercial capabilities.

The M-091-46 milestone includes several milestones to repackage small-package contact-handled TRU waste and make it available for shipment to WIPP.

Comment 9.8: Systematic Approach to Vadose Zone Cleanup

Columbia Riverkeeper concurs with the Hanford Advisory Board's recommendation to develop a systematic approach to vadose zone cleanup. To date, DOE lacks a comprehensive, integrated cleanup approach to the vadose zone. The TPA agencies should "develop a systematic approach to vadose zone cleanup that includes site-specific goals, schedules for additional characterization and a range of cleanup technologies (including those found outside of Hanford)." See HAB Advice #231 at 3.

Question #7: Are the TPA agencies considering the establishment of a separate vadose zone operable unit? See HAB Advice #231 at 3. If not, please explain why.

Response to Comment 9.8:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Commenter 10: Meme (Mecal) Samkow

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Comment 10.1:

Please do hold a public comment meeting in Portland, Oregon.

Response to Comment 10.1:

Thank you for your comment. A public meeting was held on June 23, 2010, in Portland, Oregon on the draft TPA change package.

Commenter 11: Alex Sager

Comment 11.1:

I very much hope that there will be a public comment meeting in Portland, Oregon. Beyond the importance of the issues for people in the area, my students at Portland State University are doing a semester-long project on Hanford with attention to the Tri-Party Agreement. We will plan to attend and would like the opportunity to comment.

Response to Comment 11.1:

Thank you for your comment. A public meeting was held on June 23, 2010, in Portland, Oregon on the draft TPA change package.

Commenter 12: Ira Johnson

Comment 12.1:

You have several facilities such as U plant, T Plant, B Plant and Purex. Why not use them to store haza rdous waste.

Response to Comment 12.1

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Commenter 13: Stuart Harris, Director, Confederated Tribes of the Umatilla Indian Reservation

Introductory Statement:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) appreciate the opportunity to comment on the Tri-Party Agreement changes. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) have a vital interest in the current and future condition of Hanford, the Hanford Reach, and Hanford-affected lands and resources. The USDOE's Hanford site was developed on land ceded by the CTUIR under the 1855 Treaty with the United States. The

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CTUIR reserved rights to this land and retained and reserved the perpetual rights to hunt, fish, gather, pasture livestock, and pursue other activities throughout the region, including the area in and around Hanford. The Hanford site contains critical and unique shrub steppe habitat, and the Hanford Reach is the last free-flowing segment of the Columbia River and is home of the last remaining naturally spawning fall Chinook.

Through nuclear weapons production activities, it has taken less than one lifetime to contaminate and thereby permanently affect the ability of CTUIR to safely use the Hanford Nuclear Reservation Area and its resources. The Hanford cleanup is the largest cleanup effort in the world. Yet according to the Central Plateau Cleanup Completion Strategy; "Currently no feasible technology exists to cleanup some of the contamination in the deep vadose zone that might threaten the groundwater." CTUIR assumes that the current proposed changes represent the best current thinking about how to proceed with cleanup. Since the Tri-Parties have already reached agreement, the CTUIR is only providing a few comments.

Response to Introductory Statement:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 13.1:

The CTUIR notes that DOE/RL expects the groundwater to reach drinking water standards with a century, more or less, while the TC&WM EIS shows that this will essentially never occur. The reality, therefore, lies somewhere between 'safe to drink' and 'lethal forever.' The TC&WM EIS was charged with developing the newest and best Hanford GW/VZ model, with peer review and configuration control, so the CTUIR have to conclude that reality is closer to the 'lethal forever' condition. We urge the Tri-Parties to sort this out, because no more final decisions can be reached until this uncertainty is reduced to tolerable levels.

Response to Comment 13.1:

Thank you for your comment. This comment is applicable to the TC&WM EIS and will be addressed as part of the TC&WM EIS comment response process.

Comment 13.2:

The CTUIR want to reiterate the importance of cleanup of the groundwater and the protection of the Columbia River. Therefore, it is important to continue developing the technology and a strategy to cleanup the deep vadose zone contamination.

Response to Comment 13.2:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

Comment 13.3:

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The CTUIR would like to see the outline of the Lifecycle Report as soon as it is available. The lifecycle report could become a very important guidance document that contains cost projections, schedules, endstate descriptions, and a variety of restoration, stewardship, and environmental justice goals. Or, it could be bland and uninformative.

Response to Comment 13.3:

A draft outline of the 2011 Lifecycle Scope, Schedule and Cost Report (Lifecycle Report) was shared at the January 26 and May 12, 2010 Tribal Working Sessions. At those meetings DOE discussed the status and purpose of the report, which is to enable Ecology and EPA to provide input into DOE's planning assumptions on an annual basis. This will help ensure DOE is on track to timely complete all requirements.

During the development of the annual report, the Parties' goal is to facilitate an iterative process with the Tribal Nations where the agencies share information and obtain your feedback. It has always been the intent of the Parties to status the Tribal Governments on the Lifecycle Report and to continue to inform and sustain dialogue as we develop this first draft.

Comment 13.4:

In the TPA changes, the language that states, "reaching mutually agreeable alternatives and end states" seems to have been removed. Instead, the language simply offers to discuss issues with Tribal Nations. The CTUIR want to maintain an active role in decision-making according to the DOE Indian Policy and Framework. Therefore, the language should acknowledge that Government to Government protocols exist and will be followed.

Response to Comment 13.4:

The text on "reaching mutually agreeable end states" was deleted as part of the revision of Section 8, *Facility Decommissioning Process* (now *Facility Disposition Process*). This document establishes the regulatory path forward for disposition of the canyons and other important Central Plateau facilities using established CERCLA remedial action and RCRA closure processes. The draft change package also defined the process for disposition of other facilities using a graded approach and CERCLA response actions as needed.

Deletion of this text does not change the Parties' recognition of Tribal Nation sovereignty and commitment to a government-to-government relationship with the Tribal Nations. This commitment and the actions taken by the Parties are described in Section 10.10 of the Action Plan.

Comment 13.5:

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The CTUIR are concerned about the Modification P-07-09-02. The language shifts the responsibility of writing RODs from EPA and Ecology to DOE. While the regulatory agencies retain a concurrence role, it leaves the selection of final remedies and the establishment of remedial goals up to DOE. Because DOE steadfastly refuses to acknowledge on-site Treaty rights, refuses to use the CTUIR exposure scenario as a baseline scenario, and refuses to set cleanup goals to protect Tribal health, this will become a significant focus of the NRDA process.

Response to Comment 13.5:

Comment to be addressed in the Central Plateau Cleanup Comment & Response Document.

COMMENTS 14: Madeleine Marie Smith

Comment 14.1:

I leave it to other concerned citizens to point out the inadequacies of the current plans which fail to completely clean up the nuclear waste stored at Hanford.

On May 1, 2010, I wrote Mary Beth Burandy [Burandt], Document Manager, an e-mail commenting on Draft TC and WM EIS. (see attachment.)

In it, I recommended a climate change EIS; dry casking, at each nuclear facility in the United States; and no vitrification at Hanford until all nuclear waste was removed from the ground and safely stored.

This e-mail concerns transportation of all nuclear waste to Hanford and factors in the amount of human error that continues to plague existing nuclear facilities.

Human error has been in the news due to the one mile beneath the sea oil rig disaster which has been extensively reported in the news since oil has been spouting from the hole it made.

On PBS Newshour on May 31, 2010, Bill Nye, former host of "The Science Guy" made the following comments, "there's almost a million oil wells around the world. There's a few thousand oil rigs. And this is the kind of disaster that could happen anywhere."

He adds, "And there are backup systems, but the backup systems weren't inspected. The backup systems were not regulated."

"And, when things go wrong, it's potentially troublesome. Now there's one more thing. We have tens of thousands of coal -fired power plants around the world. We have thousands and

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thousands of oil and gas-fired power plants. We have about 400,434 nuclear power plants.” (Emphasis is mine.)

BP is included in,” the industry had no blowout technology” and “they didn’t have a backup plan”.

The absolute lack of a backup plan is a major reason to cancel plans to transport nuclear waste from facilities all over the United States to Hanford.

That Hanford also has no backup plan for the likely disaster of a highway accident is made clear from the National Highway Traffic Administration 2002 report, Traffic Safety Facts 2001: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimate System.

I searched for risk factor statistics regarding the types of vehicles, specifically trucks, which were involved in accidents, but couldn’t find them. But risk factors were listed for drivers operating a motor vehicle: 1.alcohol, 2.cell phones, 3.gender, 4.young drivers, 5. senior drivers, 6.speed, 7.location. From this list, it’s clear that potentially, any type vehicle can collide with any other type vehicle.

This is a potentially dangerous situation for which the Highway Traffic Safety Administration has no recommended backup plan. Accidents are handled locally with whatever resources a local government has. It’s not likely that they have the funds to purchase the special equipment to handle a nuclear spill.

Therefore, for safety’s sake, the best immediate plan is for each nuclear site to dry cask it’s own nuclear waste, and delay building any new nuclear facilities until all the old nuclear wastes are safely stored.

We must always factor in human error. In Walking a Nuclear Tightrope: Unlearned Lessons of Year-plus Reactor Outages by David Lochbaum published by the Union of Concerned Scientists in 2006, are graphs of average lengths of outages and their costs, (pages 5,15,17, 20) and also three pages of specific information about each outage in columns which are headed: name of reactor, owner, location, day commercial operation began, outage dates, reactor age at the start of outage, outage length, NRC region, reactor type, and outage category. (pages 8,9,10)

From the study of all the specific cases listed on those three pages, Lochbaum made the following observations: problems are not spotted soon enough, the public is being ignored, corrective action programs are not adequately assessed, problems are allowed to recur, perception (not reality) guide safety decisions, owners are not made aware of non-hardwire

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problems, programmatic breakdowns are not confined to one plant, better communication is needed inside the NRC, not all poor performers have had a year-plus outage. (pages 21 to 26).

It is the failure to look reality in the face that worries me the most. "The public health risks and financial stakes of a 'surprise' nuclear disaster are too high to allow false perceptions to continue guiding nuclear safety decisions." (page 25)

It is time to stop ignoring the concerns of clear thinking citizens and do what is best for the continued survival of us and our planet. We must learn how to keep human error minimal, stop taking risks that bring irreversible climate change ever closer.

Response to Comment 14.1:

Thank you for your comments. Most of these comments are applicable to the TC&WM EIS and will be addressed as part of the TC&WM EIS comment response process.

In regards to the safety concerns, the TRU waste transportation safety program avoids shipping during inclement conditions (as described in the Western Governors' Association's WIPP Transportation Safety Program Implementation Guide). A goal of the program is to increase drivers experience and proficiency in all types of weather. This is achieved by having drivers regularly drive northwestern routes during winter months when weather conditions permit.

The decision to delay a shipment is made in consultation between the TRU waste shipping site, the driver, the WIPP site, and state law enforcement agencies to help ensure all safety precautions are taken. When making shipping decisions, highest consideration is always given to safety.