

Advice #231, *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)* was sent to the TPA agencies during the formal public comment period and was responded to in the Comments and Responses documents (www.hanford.gov/?page=86). Below is a compilation of the Parties responses to Advice #231 from the two comment and response documents.

Susan Leckband, Chair, Hanford Advisory Board (Advice #231)

Comment 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)*.

The Board compliments the U.S. Department of Energy (DOE) for providing early opportunities for input on the Central Plateau Cleanup Completion Strategy. Discussions between the Tri-Party agencies [DOE, U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (Ecology)] and the River and Plateau Committee were helpful and constructive. The change package is responsive to several concerns raised during these discussions including the desire to increase the number of Central Plateau Records of Decision.

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: The Parties appreciate the continuous dialogue and feedback this past year from the River and Plateau committee, the Public Involvement and Communication committee and the Hanford Advisory Board on the *Central Plateau Cleanup Completion Strategy and Mixed Low-Level Waste and Transuranic Mixed (TRUM) Waste*. The proposed changes to the TPA reflect your input.

Comment 2: Both the 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 2: 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 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 3: The Tri-Party agencies should continue to improve the safety of WIPP shipments (e.g. by avoiding inclement conditions).

Response to Comment 3: 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 4: 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.

Response to Comment 4: The Tri-Party Agreement milestone M-016-00 requires remediation to be completed for non-tank farm, and non-canyon operable units by 2024. Soil waste sites that may contain transuranic isotopes, such as those in the 200-PW-1/3/6, 200-CW-5 (plutonium-rich sites), and 200-SW-2 (burial grounds) operable units, are included within the scope of that milestone.

The canyon buildings were not previously included as part of the operable units subject to the M-016-00 milestone for completing remedial actions. The changes made to the TPA establish a path forward for completion of canyon remediation and cleanup of other Central Plateau facilities. However, the final date for completing facility cleanup is still to be determined. It is Parties' goal to complete facility cleanup as soon as possible, however, the complexity of the issues associated with the canyon facilities and the interfaces and interferences with other activities on the Central Plateau may impede completing canyon or other facility remediation by 2024.

For example, tank farm storage and retrieval activities and the operation of the Waste Treatment Plant require continued operation of the 222-S laboratory and other support facilities into the 2040s or 2050s. The proximity of REDOX to 222-S, while it is still in use, could present unacceptable hazards during REDOX remediation depending on the remedial alternative selected. T Plant Canyon is expected to continue operation into the early 2020s in support of M-091 milestone activities.

Some soil waste sites are associated with the canyon operable units that will also be included in the scope of the M-085-00 milestone to complete remediation of the canyon facilities. The number of waste sites included in the canyon operable units was limited to those adjacent to the canyon building that will be directly impacted by the remedy selected for the canyon.

DOE is required to submit a change package proposing a completion date for major milestone M-85-00 to complete facility response actions by September 30, 2012 (M-085-01). Disposition of materials contaminated with transuranic isotopes will be addressed in accordance with applicable regulations and requirements. The first canyon building to undergo remediation – U Plant (221-U Facility) – will have TRU waste shipped to WIPP by September 30, 2024 in accordance with the Record of Decision.

Comment 5: 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 5: The pre-1970 burial grounds and other waste sites that contain transuranic contaminants are addressed by the change package. The pre-1970 burial grounds are included in the 200-SW-2 operable unit. There are two interim milestones for the pre-1970 burial grounds: the M-015-93A milestone which calls for the submittal of a RCRA Facility Investigation/Corrective Measures Study and Remedial Investigation/Feasibility Study work plan for the 200-SW-2 operable unit by 12/31/2011 and milestone M-015-93B which requires submittal of a RCRA Facility Investigation/Corrective Measures Study and Remedial Investigation/Feasibility Study report and a Proposed Corrective Action Decision/Proposed Plan for the 200-SW-2 operable unit by 12/31/2016. The compliance date to complete the cleanup of this operable unit is September 30, 2024.

The Parties held a Hanford Advisory Board Committee of the Whole meeting (public invited) October 5 and will conduct regional public meetings to get early input on cleanup of these burial grounds. The Parties previously conducted a public workshop on some of the other waste sites and expect to hold a 30-day public comment period in March 2011 on a document (the 200-PW-1/3/6 and CW-5 Proposed Plan) that evaluates and identifies a preferred alternative to clean up waste sites that contain transuranic contaminants.

Comment 6: 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 6: 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 and construction or modifications to existing facilities once funding is made available in the approved project baseline.

Comment 7: The Tri-Party agencies should not delay treatment of mixed waste or replace enforceable milestones with unenforceable “target schedules” (Advice #216).

Response to Comment 7: 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.

Comment 8: Board supports the establishment of a separate vadose zone operable unit as an important component of Hanford cleanup. However, DOE still lacks a comprehensive, integrated cleanup approach to the vadose zone. The Tri-Party 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).

In making cleanup decisions, the TPA agencies should not artificially separate a contaminant plume in the near surface from deeper in the vadose zone. Further, remedies should be based on groundwater protection (in addition to surface receptors) from all unit sources.

Response to Comment 8: The Parties recognize that the contamination in the deep vadose zone must be addressed and have established the Deep Vadose Zone Operable Unit (200-DV-1 OU). The Parties will use a systematic approach to the 200-DV-1 OU. A RCRA Facility Investigation/ Corrective Measures Study (RFI/CMS) & Remedial Investigation/ Feasibility Study (RI/FS) work plan (TPA milestone M-015-110A) for the 200-DV-1 OU is required. The work plan will include technology screening that identifies technologies applicable for characterization, treatment and monitoring of deep vadose zone contaminants. DOE began this screening process by holding a Deep Vadose Zone Technical Forum on July 20-21, 2010. DOE will provide periodic updates on progress to Tribal Nations, the Hanford Advisory Board, the Oregon Hanford Cleanup Board and State of Oregon, and in other appropriate public forums. Information will also be made available through DOE’s website at www.Hanford.gov/ .

The Parties address the entire waste site, from ground surface to the water table, in the Deep Vadose Zone operable unit. Waste sites will be evaluated across the entire soil column to select remedies based on protection of human health, ecological receptors, and groundwater. Waste sites that have contaminants near the surface, as well as in the deep vadose zone, may have more than one remedial

technology applied to address the multiple risk drivers. Implementation of the selected remedies may occur at different times to permit a more efficient use of resources.

Comment 9: 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 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 Comprehensive Environmental Recovery, Compensation and Liability Act processes should be issued for those units regulated under both laws.

Changes to the Central Plateau TPA milestones will require parallel modifications to the Hanford Facility RCRA permit. The Tri-Party agencies should collaborate to ensure consistency between proposed RCRA permit modifications and TPA milestone changes.

Response to Comment 9: Ecology will continue to incorporate RCRA (HWMA) corrective action into the Hanford Facility RCRA Permit via the Permit Condition II.Y. Ecology uses the remedial action process identified in the TPA Action Plan to satisfy corrective action requirements, with TPA requirements and schedules then incorporated into the Hanford Facility RCRA Permit to satisfy WAC 173-303-64620(3). The proposed incorporation approach is identical to the manner in which the TPA's corrective action requirements and schedules have been incorporated into the Hanford Facility RCRA Permit since the year 2000 (although the scope of this incorporation is now expanded to include incorporation of a final corrective action decision made under the framework of the TPA).

The state will still be making an independent corrective action decision under the proposed permit modification and TPA changes. The state will make this decision in accordance with the corrective action requirements of the Dangerous Waste Regulations, WAC 173-303-64620(4), which require that corrective action be consistent with specified requirements of the Model Toxics Control Act's implementing regulations. These include MTCA's cleanup standards. CERCLA authority will be applied concurrently to these operable units. Issuing CERCLA RODs along with RCRA CADs ensures that regulatory authority is available to address radionuclide contamination.

The public participation processes of the TPA fully satisfy RCRA and HWMA requirements. The Parties have elected to set the duration of public comment under the TPA at 60 days for proposed corrective action decisions and proposed plans.

Outside of Hanford, Ecology typically satisfies corrective action through the conditions of an order or consent decree issued under the independent legal authority of MTCA. Just as TPA requirements are incorporated into the Site-wide Permit through Condition II.Y, the requirements of a MTCA order or decree are incorporated into a hazardous waste facility permit. Ecology takes the position that there is no appeal opportunity of the underlying requirements of a MTCA order when those requirements are incorporated into a hazardous waste facility permit. *See* 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. *Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.*") (emphasis added); *see also*, Ecology Corrective Action Program Description, Department of Ecology (January 7, 1994) at 44. In Ecology's view, Hanford Facility RCRA Permit condition II.Y offers no lesser opportunity for public comment (and appeal) of a TPA corrective action condition than is available with respect to a MTCA condition incorporated into a typical

hazardous waste facility permit issued outside of Hanford. Indeed, under WAC 173-303-830, modification or amendment of a corrective action order issued pursuant to MTCA when the MTCA public participation requirements have already been met and the order has already been incorporated into the permit is a Class 1 modification, not a Class 2 or 3 modification. (WAC 173-303-830 Appendix I.N.5.)

Finally, Ecology expects to make SEPA threshold determinations while developing CADs for R-CPP Units.

Comment 10: DOE should collaborate with and include alternatives that the regulators would like to evaluate in the Feasibility Studies and Proposed Plans. This advice is particularly important given the proposed change in which DOE will author Records of Decision for regulator approval. The Tri-Party agencies should evaluate Board and public values when developing and evaluating remedies and Records of Decision. These evaluations should be available to the public. Draft Records of Decision should be made available for public review and comment concurrent with transmittal to the regulators to ensure early recognition of public values.

Response to Comment 10: DOE collaborates with the regulatory agencies in developing cleanup alternatives. Feasibility and corrective measures studies, which identify and evaluate cleanup alternatives, must be conducted in accordance with a work plan approved by the lead regulatory agency. Also, a number of commenters raised concerns about DOE writing the initial drafts of RODs. Therefore, the Parties agreed to revise the change form so it provides that EPA will write the draft ROD or it will be written jointly by EPA and Ecology, if Ecology is the lead regulatory agency. The lead regulatory agency in cooperation with DOE (and EPA if Ecology is the lead regulatory agency), will finalize the ROD.

The Parties provide opportunities to inform and involve Tribal Nations, State of Oregon, Hanford Advisory Board, stakeholders and the public before a proposed plan is released for public comment. These interactions are meant to elicit and consider their values in cleanup decisions. Responsiveness Summaries issued along with the decision document (record of decision, action memorandum) provide a record of how comments were considered.

After careful consideration of this and similar comments, the Parties decided that making the draft ROD available for public review would not be in the best interest of cleanup. The opportunity for public review and comment on the proposed remedy is at the proposed plan stage. Adding another review for the ROD would be redundant and could lead to delays in cleanup.

Comment 11: A map and chart should be added to the TPA allowing readers to easily see how operable unit decisions and milestones are organized by geographic area.

Response to Comment 11: A map and chart will not be added to the Tri-Party Agreement (TPA). Instead, DOE will post on its TPA website (www.hanford.gov/page.cfm/TriParty) a map and chart showing the organization of the operable units by geographic areas.

Comment 12: The Tri-Party agencies should rename the two consolidated Central Plateau TPA groundwater operable units "200 East" and "200 West," ending the confusing alpha-numeric code currently in use. This renaming is appropriate since the new groundwater remediation project has been named the 200-West Pump-and-Treat System. The TPA and decision documents can refer to the prior alpha-numeric names parenthetically for the units prior to consolidation.

Response to Comment 12: The Parties have decided to keep the existing numerically named groundwater operable units. The existing operable units have a well-defined scope based on

contaminant plumes. The scope of the final remedy for the 200-ZP-1 groundwater operable unit cannot include that of the 200-UP-1 groundwater operable unit through a name change, but rather requires a Record of Decision Amendment to the 200-ZP-1 Record of Decision. Since the east area groundwater operable units generally flow in different directions and have been tracked according to their source areas (200-BP-1 for B Plant and 200-PO-1 for PUREX), the Parties have decided to retain the numerically named operable units for east as well. However, whenever possible the Parties will refer to remediation of these units as either the 200 East Area or 200 West Area groundwater remediation projects to help clarify to stakeholders and the public which remedial actions are being described.

Comment 13: Given existing statutory and regulatory definitions, the Tri-Party agencies should not redefine words already defined in regulations and/or statutes (e.g. “facility”).

Response to Comment 13: It is not general practice to redefine terms that are already defined in statutes or regulations. In this case, however, the term “facility” is a very common word used regularly at the Hanford Site to describe individual structures. The definition of “facility” in the Hanford Facility Dangerous Waste Permit is very broad and means the entire Hanford Site. The Parties believe that it is necessary to clarify the meaning of the term as it is used in Section 8 of the Action Plan since the Section 8 meaning of the term is different than the permit and regulatory definitions. The definition only applies to the use of the term in Section 8 of the Action plan. The original Tri-Party Agreement already had redefined the term “facility” as it was used in Section 8 of the Agreement. The revision to the definition more accurately represents the common usage.