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SUBJECT TO FEDERAL RULE OF EVIDENCE 408

April 18, 2014

**VIA ELECTRONIC MAIL**

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Re: State of Washington's Proposal to Amend the Consent Decree in State of Washington v. U.S. Department of Energy, No. 08-5085-FVS (E.D. Wash.)

Dear Mary Sue and Andy:

Pursuant to Section VII-A of the Consent Decree, this letter responds to the State of Washington's Proposal to Amend the Hanford Consent Decree and Add Provisions to Tri-Party Agreement,<sup>1</sup> *Washington v. Chu*, No. 08-5085 (received Mar. 31, 2014) (the State's Proposal). The Department of Energy (DOE) has carefully considered the State's Proposal since it was delivered on March 31. DOE was pleased to see that the State's Proposal recognized the significant impact of the technical issues and the benefits of responding to those challenges through a phased approach to completing the Waste Treatment Plant (WTP), including a direct feed of supernate to the Low Activity Waste Facility and development of a Tank Waste Characterization and Staging facility. However, while the State's Proposal reflects important areas of agreement between DOE and the State, DOE cannot accept it for a number of reasons, including the fact that it does not adequately account for the realities of technical issue resolution, project management imperatives, and fiscal constraints, and that it exceeds the scope of the Consent Decree. Nevertheless, DOE appreciates the State's recognition of the benefits of a phased approach to completing the WTP and remains committed to working with the State of Washington in an effort to arrive at a mutually acceptable Consent Decree amendment that will ensure the objectives of the Consent Decree are achieved safely, efficiently, and as soon as practicable.

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<sup>1</sup> To conform to the way this document is referenced in the Consent Decree, we refer to the Tri-Party Agreement as the Hanford Federal Facility Agreement and Consent Order, or HFFACO, herein.

### **Events Preceding the State's Proposal**

The State's Proposal and the proposal submitted to the State by DOE are the latest in a series of communications between the parties regarding the path forward under the Consent Decree in *Washington v. Chu*, No. 08-5085, which governs milestones through the startup of the WTP and the retrieval of 19 single shell tanks. Since the Consent Decree was entered on October 25, 2010, DOE and the State have maintained an ongoing and substantive engagement regarding the status of key technical, schedule, budgetary and other aspects of these Tank Farm activities and the WTP.

On three separate occasions—November 21, 2011, June 6, 2013, and October 8, 2013—DOE provided formal notice to the State that circumstances and events had given rise to serious risks that DOE may be unable to meet certain Consent Decree milestones. DOE has met and had conference calls with the Department of Ecology and the State's attorneys on several occasions to discuss the bases for these notices and DOE's preliminary views on how they may be addressed. DOE assembled a group of experts in the summer and fall of 2012 to assist the Secretary of Energy in the assessment of the technical issues associated with the WTP. As part of this assessment, the Department of Ecology participated in various webinars that DOE conducted to identify the remaining issues and begin to develop a path forward.

In September 2013, DOE delivered *The Hanford Tank Waste Retrieval, Treatment and Disposition Framework* (the Framework) to the State. DOE developed the Framework in recognition of the technical issues at the WTP and their impact on the overall WTP schedule. The Framework described options for completing the WTP utilizing a phased approach, which included the following elements: (1) completing construction of and providing a direct waste feed to the Low Activity Waste Facility; (2) resolving technical issues in the Pretreatment Facility and High Level Waste Facility; (3) developing a Tank Waste Characterization and Staging capability; and (4) completing the Pretreatment and the High Level Waste Facilities, and operating the WTP. DOE then met with the State in September, October, and December of 2013 to discuss these options as well as the risks, technical challenges and a possible path forward for completing the WTP. On March 17, 2014, Secretary Moniz traveled to Washington State to meet with Governor Inslee to discuss key elements of DOE's proposal to amend the Consent Decree.

On March 31, 2014, consistent with its engagement and ongoing communications with the State of Washington, DOE submitted its Proposal to Amend the Consent Decree to the State of Washington. DOE believes its proposal provides the best opportunity for beginning tank waste treatment while DOE resolves the remaining technical issues associated with the WTP. Because of the complexity of solving these technical issues, DOE's proposal adopts a phased approach to completing the WTP, beginning with feeding low activity waste directly to the Low Activity Waste Facility to allow vitrification to begin as soon as practicable. DOE's proposal commits to a new approach to completing all of the Consent Decree objectives for WTP construction and startup through initial operations and for retrievals of 19 single shelled tanks. DOE's proposal also accounts for the technical challenges associated with this unique project and attendant nuclear safety risks, and provides an achievable and sustainable path forward.

On March 31, 2014, the State also submitted its separate proposal to amend the Consent Decree to DOE. The parties subsequently agreed to extend the 10-day period for consideration of the proposals to April 18, 2014.

**The State's Proposed Amendments To The WTP Schedule**  
**(Proposed Amendments To Consent Decree Appendix A Milestones)**

The State's Proposal makes clear that the parties agree on several important concepts that are central to the path forward for the WTP. To begin with, the parties concur that amendment of Appendix A is necessary due to the delay in the WTP construction schedule, and the State recognizes technical issues and funding shortfalls as causes of this delay. Further, the parties agree that amendment of Appendix A must be comprehensive: the State's Proposal, like DOE's, anticipates that all of the remaining milestones in Appendix A will be replaced by a set of new milestones.

Importantly, DOE is encouraged that the State's Proposal adopts in concept a phased approach to the start-up of the WTP, as presented by DOE over the course of discussions since last September. This is consistent with the approach set forth in DOE's proposal, a key component of which is development of a Direct Feed Low Activity Waste (DFLAW) capability to begin treating supernate, *i.e.*, liquid tank waste, while technical issues that affect the Pretreatment and High Level Waste Facilities are resolved. We are pleased that the State recognizes the significant benefits of DFLAW, including making progress, where possible, on tank waste treatment while resolution of the technical issues continues. This approach is advantageous because it will enable waste treatment to begin prior to the completion of the Pretreatment Facility and the High Level Waste Facility; free up space in the double shell tanks prior to the start of the Pretreatment Facility's operations; and create a second pathway for liquid waste treatment during planned maintenance or other times the Pretreatment Facility may not be operational.

The parties' proposals also both include a Tank Waste Characterization and Staging facility. To operate the WTP safely, it is important to know with accuracy the characteristics of the waste that will be fed into the Pretreatment Facility. Although DOE originally planned for sampling and characterization to take place in the existing double shell tank system, in recent years, DOE has determined that it is not possible to perform adequate mixing and sampling in these tanks without potentially damaging their internal components. The State's Proposal acknowledges the need for the Tank Waste Characterization and Staging facility.

Although the parties agree on these two important conceptual aspects of the path forward for the WTP, DOE cannot accept the State's Proposal, because it fails to consider facts that are critical to developing new facilities and a new and workable Consent Decree schedule. As discussed further below, the State's Proposal raises a number of significant technical, safety, budgetary, and legal issues that render it unworkable.

*First*, the State's Proposal sets fixed milestones for startup of the WTP premised on a fixed date for resolution of all technical issues. This approach does not adequately account for the uncertainty that the existence of technical issues—particularly in the Pretreatment Facility, the facility through which all waste flows into the WTP under the existing design—has created in the WTP schedule. The State's Proposal, while recognizing that technical issues have caused delays at the WTP, would obligate DOE to complete a plan to resolve these issues by a date certain. By their very nature, however, the technical issues, which involve operational impacts and nuclear safety, may not be resolved by a set date. The process to resolve these issues is complex, and it evolves as more information is learned and the problems are further defined,

refined, and solved. Although DOE has a path forward for resolving these issues, it would not be appropriate to set deadlines for successful completion of the needed testing and analysis.

Indeed, the uncertainties associated with technical issue resolution are the reason that DOE's proposal focuses on meaningful and achievable fixed, near-term milestones associated with technical issue resolution *followed by* a process with well-defined triggers for establishing construction milestones. Because DOE recognizes the importance of establishing construction, commissioning, and startup milestones for the WTP, DOE's proposal establishes a process tied to DOE's project management system to set those milestones once the technical issues have been resolved and the relevant revised project baselines have been established and contracts executed.

*Second*, the State's Proposal ignores the historical funding profile appropriated by Congress for the Office of River Protection. Indeed, based on the scope and schedule of the proposed milestones it initially appears that the State's Proposal would cost far more than Congress has provided in any annual appropriation for the Office of River Protection. Taken together, the cost associated with WTP and Tank Farms work required by the State's Proposal would far exceed—at least doubling in most years—these historical appropriated funding levels.<sup>2</sup> Given Congressional budget caps on defense spending, the potential for sequestration in future years, and, thus, the continuous downward pressure on Federal discretionary spending, there is no reason to believe Congress will appropriate such additional funding. Due to these fiscal constraints, to meet the proposed milestones in the State's Proposal (to the extent even feasible<sup>3</sup>), significant funding would need to be diverted from other sites within DOE's Office of Environmental Management complex, with potentially significant impacts at those sites.

*Third*, the timelines in the State's Proposal for achieving DFLAW operations are not achievable. While the State's Proposal includes DFLAW and the Low Activity Waste Pretreatment System (LAWPS), elements that DOE also has proposed, the State's proposed dates are unrealistic. The LAWPS Facility is expected to be a Hazard Category 2 Nuclear Facility. Based on the anticipated scope and cost of this new capital facility, and based on DOE's experience with construction schedules of other Hazard Category 2 nuclear facilities, DOE does not believe that the State's proposed milestone for operations of the LAWPS Facility allows sufficient time for the design, construction, and commissioning of a nuclear facility of this nature. In addition, since the LAWPS Facility feeds the Low Activity Waste Facility, they must begin operations simultaneously. Although construction of the Low Activity Waste Facility is expected to be completed sooner, the hot commissioning activities for the Low Activity Waste Facility cannot proceed until the LAWPS Facility begins hot commissioning activities. Cold commissioning and hot commissioning of the Low Activity Waste Facility are inextricably linked because once the melters become operational during cold commissioning, they cannot be shut off without causing significant damage, even to the point of requiring replacement. Thus,

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<sup>2</sup> For the current fiscal year, Congress appropriated \$1.21 billion to the Office of River Protection, which is similar to the funding levels enacted in prior fiscal years. Specifically, Congress enacted approximately \$1.091 billion (post-sequestration) in FY 2013, \$1.182 billion in FY 2012, and \$1.136 billion in FY 2011.

<sup>3</sup> Even with increased funding, certain elements of the State's Proposal still would not be achievable or advisable for other reasons, including the uncertainty concerning technical issue resolution and the need to align facilities as they become operational.

cold commissioning of the Low Activity Waste Facility cannot significantly pre-date the start of operations at the LAWPS Facility.

*Fourth*, the State's Proposal requires work to be done in a way that will lead to unnecessary expenses and inefficient use of resources because the schedules for facilities that must be operated in conjunction with each other are not aligned, which would cause inefficient use of resources. If the facilities were built on the schedule proposed by the State, certain facilities would be, in effect, mothballed as soon as construction is completed. For example, the State's Proposal would require all Balance of Facilities (BOF) buildings to be completed by June 30, 2019. However, the BOF wet chemical storage facility only supports the Pretreatment Facility, which, under the State's Proposal, would not start operations until September 30, 2028. Thus, the State's Proposal would force DOE to spend resources for construction and maintenance for a building not needed for nine years, diverting those resources from the construction and commissioning activities for DFLAW.

For these reasons, among others, DOE cannot accept the State's Proposal to amend the WTP schedule in Appendix A of the Consent Decree.

### **The State's Proposed Milestones Outside The Scope Of The Consent Decree**

In addition to the State's proposed amendments discussed above, the State's Proposal seeks to add a number of requirements that are beyond the scope of the Consent Decree. Specifically, the State's Proposal seeks to impose new Consent Decree milestones regarding activities such as the construction of new waste storage tanks, installation of interim barriers, implementation of interim tank stabilization measures, completion of all single shell tank retrievals by December 31, 2040, and completion of tank waste treatment by December 31, 2047. DOE is committed to the cleanup of the Hanford site and has worked closely with Ecology and other regulators, and has entered into two separate regulatory agreements that govern different aspects of this cleanup, namely, the HFFACO and the Consent Decree. These two important agreements each have distinct sets of milestones as well as different requirements and processes for amending milestones. The Consent Decree was established to focus on completing the WTP and the single shell tank retrievals that were possible prior to the completion of the WTP. DOE believes this scope, which was agreed to by the parties and ordered by the Court, should remain the focus of the Consent Decree.<sup>4</sup> For this reason, DOE cannot accept the State's Proposal to expand the scope of the Consent Decree well beyond the matters originally agreed to by the parties and ordered by the Court—a schedule for milestones through initial operations of the WTP and for the retrieval of waste from 19 tanks.

DOE also cannot agree to the portions of the State's Proposal that are both outside the scope of the Consent Decree and would appear to supersede DOE's decision-making ability expressly provided in the HFFACO. For example, the HFFACO milestone M-62-045, subpart 3, expressly states that the parties will negotiate supplemental treatment selection and milestones not later than April 30, 2015. Supplemental treatment could include other waste treatment options beyond vitrification. Yet the State's Proposal specifically requires supplemental vitrification. DOE does not believe it is appropriate to create Consent Decree milestones for

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<sup>4</sup> Indeed, Section X of the Consent Decree reflects the parties' agreement on the appropriate scope and focus of the Consent Decree.

capabilities the parties have specifically agreed to address at a future date under the terms of the HFFACO.

Likewise, DOE cannot agree to terms of the State's Proposal that appear to redefine settled interim stabilization criteria. Since 1994, the parties have applied an agreed-upon definition of what must occur for a tank to be "interim stabilized"—generally, this means to pump a given tank until it contains less than 50,000 gallons of drainable interstitial liquid and less than 5,000 gallons of supernatant liquid. The parties have specifically agreed on the definition of interim stabilized in a consent decree entered in *State of Washington v. Department of Energy*, No. 99-5076 (E.D. Wash. Sept. 30, 1999). The State's Proposal now seeks to change these agreed-upon criteria, calling them by a new name, "complete stabilization actions," and requiring removal of supernate to less than or equal to 5,000 gallons and removing total liquid (drainable interstitial and supernate) to less than or equal to 30,000 gallons per tank. Not only is this outside the scope of the Consent Decree, there is no rationale for why criteria that have been applied for decades should now be redefined. Similarly, the State's attempt to redefine retrieval criteria as "no tank waste remains" is inconsistent with the resolution of that issue in prior litigation, in which the State and DOE similarly agreed on specific retrieval criteria. The State has offered no reason to change the settled retrieval criteria, nor any additional benefit that will be derived from such a restrictive re-definition of retrieval.

Moreover, DOE has several specific objections regarding the additional activities the State's Proposal seeks to add to the Consent Decree. For example, the proposed milestones associated with the Effluent Treatment Facility/Liquid Effluent Retention Basins (A-12 through A-19), including the proposed operations start date of September 30, 2022, are not properly aligned with the start of any facility it would support, such as the Low Activity Waste or the High Level Waste Facility. In addition, the State has not explained why this capability is necessary at this juncture. To force DOE to meet milestones associated with a capability that may not be necessary diverts resources from other Tank Farms operations, including single shell tank retrievals. These prescriptive and arbitrary dates will inhibit DOE's ability to efficiently manage its nuclear operations, and therefore are not acceptable.

Additionally, DOE cannot agree to the State's Proposal to add 8 million gallons in double shell tank capacity. One milestone is premised on the first four million-gallon (or eight 500,000-gallon) double shell tanks being constructed—from groundbreaking to completion—in three years. This is an aggressive schedule, and such a project would require additional appropriations. Building these additional double shell tanks will divert necessary resources and focus from the most important driver of double shell tank space: operation of the WTP. Furthermore, there is sufficient double shell tank space available to accommodate all of the retrievals required by the Consent Decree, support DFLAW operations, and maintain required emergency space.

Further, the State's Proposal includes milestones that would increase the difficulty and delay completion of single shell tank retrievals. Specifically, the State has proposed milestones for the installation of interim barriers above a number of the single shell tank farms (milestones F-1 through F-7). No basis is provided for the requirement to install barriers extending 100 feet (approximately the length of a basketball court) beyond any contamination, much less beyond the tank farm. Nor is it clear that barriers could effectively be designed to cover such a large area. Finally, a hole would have to be cut in the proposed interim barrier to gain access to the tank, which will increase both the complexity of the retrieval as well as the cost.

**The State's Proposal Does Not Adequately Account For  
DOE's Nuclear Safety Expertise And Authority Under The Atomic Energy Act**

The State's Proposal does not adequately account for DOE's nuclear safety expertise and its exclusive Federal regulatory authority in this area. For a number of reasons, including the vital importance of nuclear materials for national security, Congress, in the Atomic Energy Act, charged the Federal government with the responsibility to maintain exclusive control over the regulation of certain nuclear materials and nuclear safety concerns. As the Federal agency responsible for the cleanup of the Nation's nuclear weapon production complex, DOE has developed expertise in the areas of nuclear materials and safety. DOE acknowledges the State's authority to regulate hazardous waste under the Washington Administrative Code with authority derived from the Resource Conservation and Recovery Act, and recognizes that the tank waste at Hanford is a mix of both nuclear and hazardous waste. Nevertheless, in light of DOE's role under the Atomic Energy Act, DOE cannot agree to elements of the State's Proposal—such as the requirement for the Department of Ecology to approve a level 4 project schedule—that would exert State regulatory authority over matters of nuclear safety that Congress left to DOE's exclusive authority, or other elements of the State's Proposal that would substantially and directly affect DOE's decisions concerning the handling of nuclear materials and nuclear safety. DOE must maintain the ability to manage nuclear materials and nuclear facilities in a safe manner, consistent with its obligations under the Atomic Energy Act.

**The State's Proposal To Amend  
The Hanford Federal Facility Agreement And Consent Order**

Insofar as the additional relief the State seeks relates to matters governed by the HFFACO, that agreement has its own mechanisms for addressing schedule issues or disputes that may arise regarding its terms. By agreeing to the dismissal of all claims that did not relate to the matters covered by the Consent Decree, *see* Consent Decree Section X-A, and by agreeing to address certain matters through HFFACO amendments, the State agreed that those matters would be governed by the HFFACO, and there is no basis for departing from that structure now. The fact that the referenced HFFACO amendments would become effective upon entry of the Consent Decree does not make them part of the Decree itself. *See id.* Section XI-A. Moreover, amendment of the HFFACO involves a separate process than amendment of the Consent Decree. DOE recognizes that, as part of the Consent Decree amendment process, it may be appropriate to discuss impacts the proposed Consent Decree amendments may have on HFFACO milestones.

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In this letter, DOE has described key reasons for not accepting the State's Proposal. The explanation in DOE's Proposal to Amend the Consent Decree also provides additional reasons why DOE cannot accept the State's Proposal. The matters raised in these documents, however, are not an exhaustive identification of legal or other concerns DOE has with the State's Proposal, or the matters that DOE may raise in any Court proceedings should DOE and the State be unable to reach agreement on a Consent Decree amendment by way of negotiations.

Despite the objections raised above, DOE remains optimistic that the apparent conceptual alignment between the Department and the State on key aspects of the parties' proposals will serve as a good starting point for settlement discussions as we strive to develop a mutually agreeable and practicable path forward for accomplishing the objectives in the Consent Decree.

Sincerely,



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