



Bob Ferguson
ATTORNEY GENERAL OF WASHINGTON

Ecology Division
2425 Bristol Court SW 2nd Floor • Olympia WA 98502
PO Box 40117 • Olympia WA 98504-0117 • (360) 586-6770

March 31, 2014

Mr. David J. Kaplan
Senior Attorney
United States Department of Justice
Environment & Natural Resources Division
601 D Street N.W.
Washington, D.C. 20004

Mr. Steven C. Silverman
Deputy Assistant Attorney General
United States Department of Justice
Environment & Natural Resources Division
950 Pennsylvania Avenue N.W.
Washington, D.C. 20530-0001

RE: ***Washington v. Chu***
U.S.D.C. Eastern No. 08-5085-FVS
State of Washington's Proposal to Amend Consent Decree

Dear Mr. Kaplan and Mr. Silverman:

On November 21, 2011, June 6, 2013, and October 8, 2013, you gave notice on behalf of Defendants United States Department of Energy and the Secretary of Energy that the Defendants may be unable to meet certain requirements of the Consent Decree entered in *Washington v. Chu*, No. 08-5085-FVS.

Since receiving your initial notice, the State of Washington (Washington) has repeatedly expressed its view that the Defendants are obligated to do everything within their power to expeditiously address the circumstances giving rise to these schedule risks and to promptly propose a new path forward, should the Defendants believe a new path forward is justified. While the Defendants have been clear since 2011 that they do not think key Consent Decree requirements can be met, as of the date of this letter, the Defendants have still not provided a comprehensive recovery plan to Washington, nor proposed to amend the current Consent Decree requirements.

As you know, it is critically important to Washington to have the waste in Hanford's Single Shell Tanks retrieved according to the new, extended compliance schedules established as part of our 2010 settlement (with all SSTs retrieved no later than December 31, 2040). It is also critical that all of Hanford's tank waste be treated to a stable form according to the compliance schedule also established as part of our 2010 settlement (i.e., no later than December 31, 2047), with treatment to begin as soon as possible. Some of these compliance obligations are established within the Consent Decree. Even those established outside the Consent Decree (i.e., in the Tri-Party

ATTORNEY GENERAL OF WASHINGTON

Messrs. Kaplan and Silverman
March 31, 2014
Page 2

Agreement) are still inextricably linked to the Consent Decree, in that they depend on the timely completion of actions required under the Consent Decree.

Energy's inability to meet key Consent Decree requirements, together with its failure after more than two years to present Washington with a comprehensive recovery plan, puts the entire tank waste retrieval and treatment missions at risk. To address these concerns, Washington is providing to the Defendants a formal proposal to amend the Consent Decree, which you will find enclosed with this letter.

This proposed amendment is made pursuant to Section VII of the Consent Decree. As provided in Section VII.A.1 of the Consent Decree, the Defendants must notify Washington by Tuesday, April 15, 2014 (10 working days from tomorrow's date, your official date of receipt of this letter and our formal proposal) whether or not Washington's proposed amendment is acceptable to the Defendants. As provided in Section VII.A.3 of the Consent Decree, if the proposed amendment is not acceptable to the Defendants, the Defendants must explain in writing the reasons for disagreeing with the proposed amendment. As provided in Section VII.A.3 of the Consent Decree, if the Defendants do not communicate their acceptance of Washington's proposed amendment by April 15, 2014, Washington may thereafter invoke Dispute Resolution under the Consent Decree.

We are happy to answer questions regarding Washington's proposed path forward for addressing the legal requirements governing the treatment and retrieval of Hanford's tank waste.

Sincerely,



MARY SUE WILSON
Sr. Assistant Attorney General
(360) 586-6743



for ANDREW A. FITZ
Senior Counsel
(360) 586-6752

MSW:AAF:def

By e-mail and FedEx overnight

Enclosure: March 31, 2014, State Proposal to Amend Consent Decree, including Exhibits A, D, E, F, & G

cc: Stephanie Parent, DOJ Oregon
Dennis McLerran, EPA Region 10

**Washington State’s Proposal to
Amend Hanford Consent Decree and Add
Provisions to Tri-Party Agreement
Washington v. Chu, U.S.D.C. Eastern No. 08-5085-FVS
March 31, 2014**

Introduction & Background

In 2008, the State of Washington (Washington or State) sued the Department of Energy (Energy) in federal court, alleging among other matters that Energy had violated (or was certain to violate) key compliance schedule milestones in the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement, or TPA). These milestones related to Hanford’s tank waste retrieval and treatment mission. The milestones included requirements to begin operating a Waste Treatment Plant (WTP) to treat tank waste by 2011; to complete the retrieval of tank waste from 149 single-shell tanks (SSTs) by 2018; and to complete the treatment of all tank waste by 2028.

In 2010, the parties settled the lawsuit, lodging the settlement in part in a court Consent Decree and in part in amendments to the TPA. Together, the Consent Decree and TPA amendments established a new, integrated schedule for completing the tank waste retrieval and treatment missions that significantly extended the prior timelines. Under the Consent Decree, Energy was to begin WTP operations by 2019 and complete the retrieval of 19 SSTs by 2022. The TPA amendments required Energy to complete SST retrievals no later than 2040 and complete tank waste treatment no later than 2047, with the “no later than” language tied to a planning requirement obliging Energy to identify ways to improve upon these end dates. The TPA amendments were premised on completion of the Consent Decree actions, with timely operation of the WTP required to provide the “throughput” capacity necessary to allow further SSTs to be retrieved on schedule.

In 2011, within one year of the settlement, Energy announced certain Consent Decree requirements were “at risk.” It did not specify which requirements. Despite repeated requests from Washington, Energy declined to provide any plan for recovery. Instead, Energy provided a series of further notices over the following two years of other requirements that would likely not be met. By October 2013, Energy had announced that it does not expect to meet any of the 14 outstanding Consent Decree WTP Milestones (A-1, A-2, A-3, A-4, A-6, A-7, A-8, A-9, A-13, A-14, A-15, A-16, A-17, A-19).

Since receiving the first “at risk” notice in 2011, Washington has repeatedly requested that Energy describe the efforts it was taking to try to stay on schedule, or come as close as possible to meeting the schedule. Washington asked that if staying on schedule was not possible, Energy provide a proposed new path forward that comprehensively addresses all tank waste retrieval and treatment requirements. In September 2013, Energy provided a draft conceptual document (Draft Hanford Tank Waste Retrieval, Treatment, and Disposition Framework) that did not address all tank waste retrieval and treatment requirements, lacked detail even as to the items addressed, and included no

schedule. Energy was clear that the conceptual document was not intended as a formal proposal to amend or change the current requirements. Thus, nearly two and a half years after Energy first notified the State that it cannot likely meet the current court-ordered schedule, Energy appears to be operating according to a different schedule it has decided upon without State and Court approval.

To date, Energy has still not proposed a new path forward to address the current situation. Energy has not identified a new schedule for completing WTP construction and achieving initial operations of the WTP. Nor has Energy identified how the likely delays in completing WTP construction and achieving initial operations of the WTP impact other requirements of the tank waste retrieval and treatment missions, such as the requirements to complete all remaining SST retrievals no later than 2040 and complete all tank waste treatment no later than 2047.

In sum, Energy has not exercised reasonable diligence in response to circumstances and events and cannot establish good cause to justify a schedule extension under Sections VII.B and D of the Consent Decree. Nevertheless, unless steps are taken now to ensure that the tank waste retrieval and treatment deadlines are achieved, the likely consequence of the delay in WTP construction and operations will mean yet another delay to these mission deadlines. This is unacceptable to Washington. Completing the SST retrieval mission on the current compliance schedule is essential given the already compromised leak integrity of the SST system and the fact that the risk of further deterioration and leakage increases as a function of time. Timely completing the tank waste treatment mission is essential to completing the retrieval mission; necessary to convert Hanford's tank waste to a form safe for permanent disposal; and necessary to maximize the use of existing infrastructure before it too needs to be replaced. Washington has thus developed the Consent Decree Amendment proposal (proposal) below to address the Consent Decree requirements Energy has identified as "at risk," include additional enforceable measures to ensure that the tank waste retrieval and treatment missions are timely completed even in light of likely WTP delays, mitigate environmental risks while those missions are being completed, and provide for Energy's greater accountability and responsiveness under the Consent Decree.

Summary of Proposal; Description of Key Components of Proposal

Washington's proposal to amend the Consent Decree would: (1) establish new requirements and new deadlines related to Energy's obligation to complete construction of and achieve initial operations of all facilities that comprise the WTP, as well as complete treatment of all tank waste; (2) establish a schedule and new requirements designed to ensure that all SST retrievals are completed by "no later than 2040" in light of the change to the WTP schedule set forth in #1, including constructing and operating a minimum number of new double-shell tanks (DSTs) providing new DST capacity of

8 million gallons;¹ (3) require the following actions to account for environmental risks while the SSTs are being retrieved, as informed by new information since 2010: (a) implement interim stabilization for 24 specified SSTs, and (b) construct interim barriers for seven specified tank farms; and (4) add “accountability” terms to the Consent Decree designed to ensure that Energy stays on track to meet all newly established requirements and is able to meet existing requirements for completing all SST retrievals by “no later than 2040” and for completing all waste treatment by “no later than 2047.”

Washington also proposes to amend the Tri-Party Agreement (TPA) to require Energy to install and operate a new groundwater remediation system in the Central Plateau.

Details of Proposal to Amend Consent Decree

1. Waste Treatment Plant – new deadlines and new requirements related to Energy’s obligation to complete construction, achieve initial operations of all facilities that comprise the WTP, and complete all tank waste treatment.

Reasons for Proposed Amendments Set Forth in this Part 1: A delay in the WTP schedule appears to be inevitable. The State understands the delay to be a result of technical issues, Energy’s failure to manage the project and failure to manage its contractors, and funding shortfalls. The following new schedule includes specific requirements with enforceable deadlines so the State and Court will have more ability to ensure that Energy meets the new schedule. The State’s proposed schedule is based on the same staggered completion/operation sequence outlined in Energy’s Framework (including the start up of a Direct Feed Low Activity Waste facility before starting up the High Level Waste and Pretreatment facilities).

New deadlines for WTP are identified in Exhibit A, which is incorporated by reference into this document. All requirements in Exhibit A will be added as new requirements of the Consent Decree. Exhibit A (attached hereto) will replace Appendix A of the existing Consent Decree. Section IV.A of the Consent Decree will be modified to reflect the new scope of work contained in new Exhibit A.

Key requirements of Exhibit A are summarized below; however, all requirements and associated deadlines included in the exhibit will be made requirements of the Court’s order:

WTP – Full Plant

New milestones to achieve full plant hot start by 2027 (moved from 2019), to achieve full plant operations by 2028 (moved from 2022), to achieve treatment of

¹ New DST capacity of 8 million gallons means new DSTs with a total new capacity of 8 million gallons. For example, if Energy elects to construct new DSTs each with a capacity of 1 million gallons, then Energy is required to construct eight new DSTs. If Energy elects to construct new DSTS each with a capacity of 500,000 gallons, then Energy is required to construct 16 new DSTs.

various percentages of tank waste by volume by specified deadlines, and to complete all waste treatment no later than 2047.

Effluent Treatment Facility (ETF)/Liquid Effluent Retention Facility (LERF)

New milestones to complete design and permit modification request, complete construction, and to complete cold (2019) and hot commissioning (2021).

Secondary Waste

New milestones to produce project plan to treat solids to specified criteria and to complete design and permit modification request, complete construction, and to complete cold (2020) and hot commissioning (2022).

Direct Feed Low Activity Waste Facility (DFLAW)

New milestones to resolve technical issues and re-design issues (2015), complete construction (2017), complete cold commissioning (2018), complete hot commissioning (2019), start operations (2019), and to achieve treatment of various percentages of low activity tank waste by volume by specified deadlines.

Interim Pretreatment System (IPS) Required to Support DFLAW

New milestones to complete design and project plan (2015), complete construction (2017), to complete cold (2018) and hot commissioning (2019), and to achieve initial operations (2019).

Laboratory (LAB)

New milestones to complete LAB construction (2016), cold commissioning (2018), and hot commissioning (2019).

Balance of Facilities (BOF)

New milestones to complete design and permit modification request as needed to support DFLAW (2017) and to complete all BOF activities (2019).

Integrated Disposal Facility (IDF)

New milestones to complete permit modification request to add secondary waste (2016) and to achieve permitted operations (2019).

High Level Waste Facility (HLW)

New milestones to resolve all technical issues (2015), complete any redesign and submit permit modification request (2017), complete construction (2023), to

complete cold (2024) and hot commissioning (2026), to achieve initial operations (2026), and to achieve treatment of various percentages of high level tank waste by volume by specified deadlines.

Tank Waste Characterization Facility (TWICS)

New milestones to complete plan, design and permit modification request (2015), complete construction (2023), to complete cold (2024) and hot commissioning (2026), and initial operations (2026).

Interim Immobilized HLW Storage (IIHLW)

New milestones for project plan for facility (2018), design and permit modification request (2018), complete construction (2023), and to achieve storage operations (2025).

Pretreatment Facility (PTF)

New milestones to resolve all technical issues (2018), complete any redesign and submit permit modification request (2018), complete construction (2024), to complete cold (2025) and hot commissioning (2027), to achieve initial operations (2028), and to achieve pretreatment and separation of various percentages of waste by volume by specified deadlines.

Supplemental Vitrification Treatment System for LAW

New milestones to provide additional LAW vitrification capacity in order to complete all waste treatment no later than 2047. Milestones include submitting permit modification request (2021), completing construction (2026), starting cold commissioning (2028), and completing hot commissioning (2029).

2. Single Shell Tank Retrievals – new deadlines and new requirements designed to ensure that all SST retrievals are completed by “no later than 2040” in light of the change to the WTP schedule set forth in #1.

Reasons for Proposed Amendments Set Forth in this Part 2: All 149 SSTs are past their design lives (or a reasonable engineering assessment of their design lives). Most of the SSTs have been subjected to severe operating conditions that would be expected to shorten their design lives. Consistent with this, at least 25 SSTs have already leaked due to liner failure. Sufficient information does not exist on which to project by how much or at what rate any given tank will further deteriorate over a specific period. However, it is indisputable that the likelihood of further deterioration and leakage will increase as a function of time. As a result, no extension to the current deadline for retrieving tanks (no later than December 31, 2040) can be justified based on any assumption of future tank leak integrity. Steps to ensure that the current deadline can be met must therefore be put in place.

Washington's 2008 complaint alleged that Energy has not: (1) immediately removed leaking and/or unfit-for-use SSTs from service as required by 40 C.F.R. § 265.196;² (2) within 24 hours after detection of a leak or, if removal within 24 hours is not possible, at the earliest practicable time, removed as much of the waste from the SSTs as is necessary to prevent further release of hazardous waste to the environment, as required under 40 C.F.R. § 265.196(b)(1); and (3) closed the leaking and/or unfit-for-use tank system as required under 40 C.F.R. § 265.196(e)(1), in lieu of providing secondary containment and repair to the SSTs. The 2010 settlement established new compliance schedules for satisfying these legal requirements. The "no later than 2040" requirement for completing SST retrievals is among these new compliance schedules.

Given WTP delays (which require amendment of the Consent Decree) and the limited current available capacity in the DST system, Energy cannot maintain retrievals under the retrieval compliance schedule without implementing additional actions, including building additional DST capacity. To ensure that these additional actions are undertaken, the State proposes new deadlines and requirements for Single Shell Tank Retrievals described in Exhibit D, which is incorporated by reference into this document. All requirements in Exhibit D will be added as new requirements of the Consent Decree. Exhibit D (attached hereto) will become a new Exhibit to the existing Consent Decree. Section IV.A of the Consent Decree will be modified to reflect the new scope of work contained in new Exhibit D. Key requirements are summarized below:

A. New requirements and deadlines to pace SST retrieval progress.

As of 2022, it is expected that 122 SSTs (of the original 149 SSTs) will still remain to be retrieved. As of 2022, it is expected that 27 million gallons of tank waste will remain to be retrieved from these 122 SSTs. Volume requirements specified herein are based on the per-tank volumes specified in HNF-EP-0182, Revision 308 (referred to as the Waste Tank Summary). In order to complete all retrievals no later than 2040, the following requirements will be added to the Court order:

1. By 2025, complete SST retrievals so that the remaining SST waste volume is reduced to not more than 23 million gallons by tank waste volume.
2. By 2028, complete SST retrievals so that the remaining SST waste volume is reduced to not more than 18 million gallons by tank waste volume.
3. By 2031, complete SST retrievals so that the remaining SST waste volume is reduced to not more than 14 million gallons by tank waste volume.
4. By 2034, complete SST retrievals so that the remaining SST waste volume is reduced to not more than 9 million gallons by tank waste volume.

² This and the following C.F.R. citations are as they are incorporated by reference in WAC 173-303-400(3).

5. By 2037, complete SST retrievals so that the remaining SST waste volume is reduced to not more than 5 million gallons by tank waste volume.
6. No later than 2040, complete SST retrievals so that all tanks have been retrieved and no tank waste remains.
7. “Remaining SST waste volume” means the in-tank volumes that remain after completion by 2022 of the 19 retrievals specified in the current Consent Decree, as well as the eight other tanks already retrieved under TPA requirements.

B. New requirements and deadlines to meet the above SST retrieval requirements through creating new DST capacity and other actions.

New DST capacity of 8 million gallons³ is mandated to support the retrieval pace requirements in 1 and 2 above (tank waste volume reduced to not more than 23 million gallons by 2025 and to not more than 18 million gallons by 2028). For the remaining retrieval requirements, the need to construct additional new DST capacity is presumed unless an alternative means of meeting the requirements can be demonstrated.

1. Design, construct, and put into operation 8 million gallons of new, dedicated HWMA-compliant storage capacity (i.e., DSTs) to support the retrieval pace requirements in 2.A.1 and 2.A.2 above (tank waste volume reduced to not more than 23 million gallons by 2025 and to not more than 18 million gallons by 2028). The first 4 million gallons of new tank capacity must be in operation by 2022. The second 4 million gallons of new tank capacity must be in operation by 2024. Energy is required to submit a detailed task list and schedule to Washington and the Court by 2016 setting forth the steps and schedule needed so that the DSTs with 8 million gallons of new capacity are designed, permitted, constructed, and put into operation according to the specified schedule. Upon Court approval, the task list and schedule will be incorporated into the Consent Decree as enforceable requirements of the Decree.
2. Submit a proposed plan for Washington and Court approval by 2020 detailing with task milestones how Energy will meet the retrieval pace requirements in 2.A.3 above (tank waste volume reduced to not more than 14 million gallons by 2031). The proposed plan must include provision for new DST capacity sufficient to accommodate the required tank waste volume reduction, unless Energy demonstrates that all or some portion of this new DST capacity is not necessary to achieve the retrieval criterion, in

³ New DST capacity of 8 million gallons means new DSTs with a total new capacity of 8 million gallons. For example, if Energy elects to construct new DSTs each with a capacity of 1 million gallons, then Energy is required to construct eight new DSTs. If Energy elects to construct new DSTS each with a capacity of 500,000 gallons, then Energy is required to construct 16 new DSTs.

which case the plan must dictate how the additional retrieval by tank volume will be accomplished given available DST capacity. If the proposed plan is not approved by Washington and the Court by July 1, 2021, Energy will be required to construct 4 million gallons of new, dedicated HMWA-compliant storage capacity (i.e., DSTs), which will be required to become operational by 2028. Upon Court approval, the plan for reducing tank waste volume to not more than 14 million gallons by 2031 will be incorporated into the Consent Decree as enforceable requirements of the Decree.

3. Submit a proposed plan for Washington and Court approval by 2025 detailing with task milestones how Energy will meet the retrieval pace requirements in 2.A.4 above (tank waste volume reduced to not more than 9 million gallons by 2034). The proposed plan must include provision for new DST capacity sufficient to accommodate the required tank waste volume reduction, unless Energy demonstrates that all or some portion of this new DST capacity is not necessary to achieve the retrieval criterion, in which case the plan must dictate how the additional retrieval by tank volume will be accomplished given available DST capacity. If the proposed plan is not approved by Washington and the Court by July 1, 2026, Energy will be required to construct 4 million gallons of new, dedicated HWMA-compliant storage capacity (i.e., DSTs), which will be required to become operational by 2031. Upon Court approval, the plan for reducing tank waste volume to not more than 9 million gallons by 2034 will be incorporated into the Consent Decree as enforceable requirements of the Decree.
4. Submit a proposed plan for Washington and Court approval by 2030 detailing with task milestones how Energy will meet the retrieval pace requirements in 2.A.5 and 2.A.6 above (tank waste volume reduced to not more than 5 million gallons by 2037 and tank waste retrievals completed no later than 2040). The plan must include provision for new DST capacity sufficient to accommodate the required tank waste volume reduction, unless Energy demonstrates that all or some portion of this new DST capacity is not necessary to achieve the retrieval criterion, in which case the plan must dictate how the additional retrieval by tank volume will be accomplished given available DST capacity. If the proposed plan is not approved by Washington and the Court by July 1, 2031, Energy will be required to construct 4 million gallons of new, dedicated HWMA-compliant storage capacity (i.e., DSTs), which will be required to become operational by 2034. Upon Court approval, the plan for completing all remaining SST waste retrievals will be incorporated into the Consent Decree as enforceable requirements of the Decree.

3. Actions required to address environmental risks.

Reasons for Proposed Amendments Set Forth in this Part 3: Two developments have occurred since the 2010 settlement. First, despite interim stabilization, we have evidence of further tank leaks from SSTs; e.g., T-111. Second, Energy released its final *Tank Closure & Waste Management EIS*, which concludes that near-term actions are necessary to address the existing source-term of tank waste releases, as well as any further near-term releases. Thus, while Washington believes that a “no later than 2040” deadline for completing tank retrievals is still appropriate (with the requirement to evaluate improvements to this deadline), Washington believes three additional actions are necessary in the interim to: (1) minimize the potential for further leaks from tanks with supernatant and/or significant remaining volumes of drainable liquid; (2) slow the migration of released tank waste through the vadose zone, as well as prevent water intrusion into SSTs; and (3) advance remedial action to address already released tank waste.

Items (1) and (2), described below under 3.A and 3.B, would become requirements of the Consent Decree. Item (3) would be the subject of a TPA Amendment and is described in more detail following the Consent Decree Amendment proposal. All requirements of Exhibits E and F will be added as new requirements of the Consent Decree. Exhibits E and F (attached hereto) will become new Exhibits to the existing Consent Decree. Section IV.A of the Consent Decree will be modified to reflect the new scope of work contained in new Exhibits E and F. The first and second actions are as follows:

A. Implement additional interim stabilization measures for 24 SSTs.

Implement interim stabilization measures for 24 specified SSTs identified on Exhibit E, which is incorporated by reference into this document.

Complete stabilization actions on six specified S-farm tanks by 2019; complete stabilization actions on three specified U- and SX-farm tanks by 2022; complete stabilization actions on five specified BY-farm tanks by 2025, and complete stabilization actions on seven specified tanks from AX, A, B, T, and BX farms by 2028.

For purposes of these requirements, “complete stabilization actions” will be defined as: removing supernatant liquid to less than or equal to 5,000 gallons and removing total liquid (drainable interstitial and supernatant) to less than or equal to 30,000 gallons per tank.

B. Construct interim barriers for specified tank farms and for T-111 according to schedule identified on Exhibit F.

Construct interim barriers over the seven tank farms and Tank T-111 as specified in Exhibit F, which is incorporated by reference into this document. Each tank farm interim barrier will cover all tanks within that specified tank farm and extend outward at least 100 feet from the edge of the tanks and any known soil

contamination. The interim barrier for Tank T-111 will cover the single tank in a manner to prevent further migration of the contaminants in the soil. Interim barriers are intended to be operational until final closure for each tank farm is implemented. At least one year before the date Energy is required to begin installation of each tank farm barrier, Energy shall submit a proposed construction plan to Ecology and the Court for approval.

4. New “accountability” terms added to Court order to ensure that Energy stays on track to meet all newly established requirements and is able to meet existing requirements for completing all SST retrievals by “no later than 2040” and for completing all waste treatment by “no later than 2047.”

Reasons for Proposed Amendments Set Forth in this Part 4: The 2010 Consent Decree afforded Energy considerable leeway in how it satisfied Decree requirements with an underlying assumption that Energy would be motivated to comply with the order. Since the 2010 Settlement was finalized, Washington has not seen evidence that Energy has taken the necessary steps to do everything within its power to meet the legal obligations contained in the Consent Decree and TPA. We have not seen evidence of Energy exercising reasonable diligence to identify and respond to technical issues, performing effective project management, exercising strong oversight of its contractors, or seeking sufficient funds or reprogramming funds to meet its obligations.

The 2010 Consent Decree contained no reporting requirements to the Court. It also contained no express requirement to, as soon as schedule risks are identified, create and submit for Court approval a recovery plan to maintain compliance with, or come as close as possible to maintaining compliance with, those requirements of the Consent Decree that are at risk. Despite informing Washington of schedule risks in November 2011, Energy has still not presented Washington with a formal proposal for how it proposes to address these risks under the Consent Decree. In order to provide for greater accountability and responsiveness by Energy to events and circumstances, the following requirements will be added to the Consent Decree:

A. Quarterly status reports to Court.

Energy will provide quarterly reports to Washington and the Court on the status of compliance with all Court order requirements. A new subsection will be added to the Consent Decree and labeled IV.C.4. The reports required under this new section IV.C.4 shall: (1) identify with detail Energy’s progress on existing work initiatives (including technical progress, emerging technical issues, and procurement initiatives and issues), any new work initiatives (including emerging requirements and methods to accommodate them), any requirements for alternative needs, notice of any schedule risks (provided under new Section IV.E, see below); (2) include a definitive statement describing whether or not Energy has complied with milestones that have already come due as of the date of the report and how any missed milestones may affect compliance with other milestones; and (3) include a definitive statement for all remaining unmet milestones indicating whether or not Energy is on track to meet the requirements

on time, or if not, the steps Energy is taking to get back on track or the date by which Energy has determined it can meet the requirement. The State may file comments with the Court within 45 days of receiving the report. Such comments may include a request that Energy clarify or provide further information regarding the report, or provide further information within the scope of the report.

B. Detailed process that applies if Energy identifies schedule risk in future.

A new subsection will be added to the Consent Decree and labeled as IV.E. This new provision will require the following: As soon as a schedule risk is identified, Energy will notify Washington and the Court that the issue exists. This may or may not be in conjunction with the quarterly status report, depending on the timing of the next report. In conjunction with such notice, Energy will provide a detailed description of the cause of the risk and Energy's efforts to address the risk to remain on schedule or come as close as possible to remaining on schedule.

No more than 45 days after any notification of schedule risk, or at such other time as established by the Court, Energy will submit to Washington and the Court a recovery plan for addressing the schedule risk. The plan will address the necessary administrative, procedural, technical, and operational actions required to maintain compliance with, or come as close as possible to maintaining compliance with, the Consent Decree requirements that are at risk and any other Consent Decree requirements that might be affected by the requirements at risk (collectively "recovery actions"). The plan will provide, in the form of a request for schedule amendment that meets all requirements of Section VII of the Decree, a proposed schedule for recovery actions. The proposed schedule will include milestones for recovery actions with completion dates.

C. Funding needed report.

A new subsection will be added to the Consent Decree and labeled as VIII.B. (The existing paragraph under the Consent Decree section VIII will be relabeled as section VIII.A.) This new provision will require the following: Annually on March 1, Energy will provide to Washington and the Court a seven-year "funding needed" report. The "funding needed" report will identify, for each of the upcoming seven federal fiscal years, the total funding needed to achieve compliance with all requirements of the Court's order. The level of detail supporting each of the total annual figures will show the funding needed by milestone and will identify the specific fiscal year in which specified funding amounts are needed in order to timely meet each Court requirement.

D. Other requirements will remain in effect.

All non-conflicting existing Consent Decree and TPA requirements remain in effect (e.g., Energy continues to be required to run System Plan focused on how Energy can improve upon the 2040 and 2047 end dates).

Tri-Party Agreement Amendment Proposal

To advance remedial actions to address already released tank waste, the TPA will be amended to require Energy to implement additional groundwater and vadose zone remediation requirements according to the tasks and schedule set forth in Exhibit G, which is incorporated by reference into this document.

Exhibit A – WTP Requirements and Schedule

	Waste Treatment Plant (WTP) Milestones	Date
	Waste Treatment Plant as a whole	
A-1	Submit to Ecology and Court for approval a level 4 technical approach and schedule for resolution of technical issues at DFLAW, HLW, PTF, and all other WTP facilities. Once approved, the approach and schedule will be incorporated into this Exhibit and become enforceable under this Decree	1/31/2015
A-2	Complete rebaselining of the WTP as a whole	9/30/2016
A-3	Submit to Ecology and Court for approval a level 4 schedule and project management plan for the WTP project as a whole. Once approved, the approach and schedule will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2016
A-4	Complete system-level readiness activities for WTP as a whole (all of the parts work together as designed)	9/30/2025
A-5	Complete hot start for the WTP as a whole	9/30/2027
A-6	- Achieve initial plant operations for the WTP as a whole	12/31/2028
A-7	- Attain treatment of 10% of waste by volume	12/31/2031
A-8	- Attain treatment of 25% of waste by volume	12/31/2035
A-9	- Attain treatment of 50% of waste by volume	12/31/2039
A-10	- Attain treatment of 75% of waste by volume	12/31/2042
A-11	- Attain treatment of 100% of waste by volume	No later than 12/31/2047
	Effluent Treatment Facility (ETF)/Liquid Effluent Retention Facility (LERF)	
A-12	Permit modification request necessary for redesign, upgrades, and operations to support volumes of waste types expected at EFT/LERF (80% design completion)	9/30/2016
A-13	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2016
A-14	Construction upgrades substantially complete	9/30/2018
A-15	Operational Readiness Review complete	9/30/2019
A-16	Cold commissioning start	9/30/2019
A-17	Hot commissioning start	9/30/2020
A-18	Hot commissioning complete	9/30/2021

Exhibit A – WTP Requirements and Schedule

A-19	Start ETF/LERF upgraded operations	9/30/2022
	Secondary Waste (SW)	
A-20	Technical approach and project plan for treating solids to meet criteria stated in the TC&WM EIS (list criteria and waste acceptance criteria for IDF)	9/30/2015
A-21	Permit modification request necessary for any ancillary facilities or capabilities to support treatment of secondary wastes not already considered (80% design completion)	9/30/2016
A-22	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2016
A-23	Construction upgrades substantially complete	9/30/2019
A-24	Operational Readiness Review complete	9/30/2020
A-25	Cold commissioning start	9/30/2020
A-26	Hot commissioning start	9/30/2021
A-27	Hot commissioning complete	9/30/2022
A-28	Start Secondary Waste upgraded operations (as applicable)	9/30/2022
	Direct Feed Low Activity Waste (DFLAW)	
A-29	Submit to Ecology and Court for approval a technical approach and schedule for resolution by the date specified in milestone A-30 below of each technical issue. Once approved, the approach and schedule will be incorporated into this Exhibit and become enforceable under this Decree	1/30/2015
A-30	Resolution of all technical issues discovered during the LAW Design and Operability Review	12/31/2015
A-31	Complete Mass Balance Flow from TF-IPS-LAW-offgas-Recycle to TF and evaporator (or ETF/LERF)	9/30/2015
A-32	Permit modification request necessary for redesign as a result of LAW Design and Operability Review and DFLAW approach	1/31/2016
A-33	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	1/31/2016
A-34	Construction substantially complete	9/30/2017
A-35	Operational Readiness Review complete	12/31/2018
A-36	Cold commissioning start	12/31/2018

Exhibit A – WTP Requirements and Schedule

A-37	Hot commissioning start	6/30/2019
A-38	Hot commissioning complete	12/31/2019
A-39	Start LAW operations	12/31/2019
	Volume completion:	
A-40	- Attain treatment of 10% of LAW waste by volume	12/31/2022
A-41	- Attain treatment of 25% of LAW waste by volume	12/31/2030
A-42	- Attain treatment of 50% of LAW waste by volume	12/31/2035
A-43	- Attain treatment of 75% of LAW waste by volume	12/31/2040
A-44	- Attain treatment of 100% of LAW waste by volume	No later than 12/31/2047
	Interim Pretreatment System (IPS), required to support DFLAW processing	
A-45	Provide Project Management Plan for facility	1/30/2015
A-46	Permit application necessary for design, construction of IPS (80% design completion)	12/31/2015
A-47	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2015
A-48	Construction substantially complete	12/31/2017
A-49	Operational Readiness Review complete	9/30/2018
A-50	Cold commissioning start	9/30/2018
A-51	Hot commissioning start	6/30/2019
A-52	Hot commissioning complete	12/31/2019
A-53	Start IPS operations	12/31/2019
	Laboratory (LAB)	
A-54	LAB construction substantially complete	9/30/2014
A-55	LAB construction complete	9/30/2016
A-56	Complete methods validation	9/30/2017
A-57	Operational Readiness Review complete	9/30/2017
A-58	Cold commissioning, if necessary	9/30/2018
A-59	Hot commissioning, if necessary	9/30/2019

Exhibit A – WTP Requirements and Schedule

A-60	Start operations of LAB	12/31/2019
	Balance of Facilities (BOF)	
A-61	Submit permit modification request and new design to support DFLAW	9/30/2017
A-62	Completion of all BOF activities	6/30/2019
	Integrated Disposal Facility (IDF)	
A-63	Permit modification to add SW	9/30/2016
A-64	Complete Performance Assessment to include Immobilized LAW and SW	9/30/2016
A-65	Complete Risk Budget Tool to include Immobilized LAW and SW	9/30/2017
A-66	IDF operational	6/30/2019
	High Level Waste Facility (HLW)	
A-67	Submit to Ecology and Court for approval a technical approach and schedule for resolution by the date specified in milestone A-68 below of each technical issue. Once approved, the approach and schedule will be incorporated into this Exhibit and become enforceable under this Decree	1/30/2015
A-68	Resolution of all technical issues discovered during the HLW Design and Operability Review	12/31/2015
A-69	Complete Mass Balance Flow from TF-TWICS-HLW-offgas-Recycle to TF and evaporator or ETF/LERF	9/30/2016
A-70	Permit modification necessary for redesign as a result of HLW Design and Operability Review	9/30/2017
A-71	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and enforceable under this Decree	9/30/2016
A-72	Construction substantially complete	9/30/2023
A-73	Operational Readiness Review complete	9/30/2024
A-74	Cold commissioning start	9/30/2024
A-75	Hot commissioning start	9/30/2025
A-76	Hot commissioning complete	9/30/2026
A-77	Start HLW operations	9/30/2026
	Volume completion:	
A-78	- Attain treatment of 10% of HLW waste by volume	12/31/2029

Exhibit A – WTP Requirements and Schedule

A-79	- Attain treatment of 25% of HLW waste by volume	12/31/2033
A-80	- Attain treatment of 50% of HLW waste by volume	12/31/2037
A-81	- Attain treatment of 75% of HLW waste by volume	12/31/2043
A-82	- Attain treatment of 100% of HLW waste by volume	No later than 12/31/2047
	Tank Waste Characterization Facility (TWICS)	
A-83	Provide Project Management Plan for facility	9/30/2015
A-84	Permit application necessary for design, construction, and operation of TWICS (80% design completion)	9/30/2015
A-85	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2015
A-86	Construction substantially complete	9/30/2023
A-87	Operational Readiness Review complete	9/30/2024
A-88	Cold commissioning start	9/30/2024
A-89	Hot commissioning start	9/30/2025
A-90	Hot commissioning complete	9/30/2026
A-91	Start TWICS operations	9/30/2026
A-92	- Attain pretreatment of 10% of waste by volume	12/31/2028
A-93	- Attain pretreatment of 25% of waste by volume	12/31/2031
A-94	- Attain pretreatment of 50% of waste by volume	12/31/2036
A-95	- Attain pretreatment of 75% of waste by volume	12/31/2041
A-96	- Attain pretreatment of 100% of waste by volume	No later than 12/31/2047
	Interim Immobilized HLW Storage (IIHLW)	
A-97	Provide Project Management Plan for facility	9/30/2018
A-98	Permit application necessary for design, construction, and operation of IIHLW storage (80% design completion)	9/30/2018
A-99	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2018

Exhibit A – WTP Requirements and Schedule

A-100	Construction substantially complete	9/30/2023
A-101	Operational Readiness Review complete	9/30/2024
A-102	Start IIHLW storage operations	9/30/2025
	Pretreatment Facility (PTF)	
A-103	Submit to Ecology and Court for approval a technical approach and schedule for resolution by the date specified in milestone A-104 below of each technical issue. Once approved, the approach and schedule will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2015
A-104	Resolution of all technical issues discovered during the PTF Design and Operability Review	9/30/2018
A-105	Permit submittal necessary for redesign as a result of PTF Design and Operability Review (80% design completion)	9/30/2018
A-106	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2018
A-107	Construction substantially complete	9/30/2024
A-108	Operational Readiness Review complete	9/30/2025
A-109	Cold commissioning start	9/30/2025
A-110	Hot commissioning start	9/30/2026
A-111	Hot commissioning complete	9/30/2027
A-112	Achieve initial PTF operations	9/30/2028
	Volume completion:	
A-113	- Attain pretreatment and separation of 10% of tank waste by volume	12/31/2031
A-114	- Attain pretreatment and separation of 25% of tank waste by volume	12/31/2033
A-115	- Attain pretreatment and separation of 50% of tank waste by volume	12/31/2038
A-116	- Attain pretreatment and separation of 75% of tank waste by volume	12/31/2043
A-117	- Attain pretreatment and separation of 100% of tank waste by volume	No later than 12/31/2047
	Supplemental Vitrification Treatment System for LAW	
A-118	Permit application necessary for design, construction, and operation of Supplemental Treatment System (80% design completion)	9/30/2021

Exhibit A – WTP Requirements and Schedule

A-119	Submit to Ecology and Court for approval semi-annual construction-specific milestones (based on level 4 deliverables or equivalent). Once approved, the milestones will be incorporated into this Exhibit and become enforceable under this Decree	9/30/2021
A-120	Construction substantially complete	9/30/2026
A-121	Operational Readiness Review complete	9/30/2027
A-122	Cold commissioning start	9/30/2028
A-123	Hot commissioning complete	9/30/2029
A-124	Achieve initial Supplemental Treatment operations	9/30/2029

Exhibit D - SST Retrieval Requirements and Schedule

	Single Shell Tank (SST) Retrieval Requirements and Schedule Milestones	Date
	SST Retrieval Pace Requirements	
D-1	Retrieval will have been completed for 27 of 149 SSTs; remaining volume of tank waste to be retrieved: 27 million gallons of tank waste	9/30/2022
D-2	Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 23 million gallons by tank waste volume	9/30/2025
D-3	Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 18 million gallons by tank waste volume	9/30/2028
D-4	Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 14 million gallons by tank waste volume	9/30/2031
D-5	Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 9 million gallons by tank waste volume	9/30/2034
D-6	Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 5 million gallons by tank waste volume	9/30/2037
D-7	Complete SST retrievals so that all SSTs have been retrieved and no tank waste remains	No later than 12/31/2040
	Design, construct, and put into operation new DST capacity of 8 million gallons	
D-8	Detailed task list and schedule to State and Court that will identify how Energy will comply with requirement to design, construct, and operate 8 million gallons of new DST capacity	1/31/2016
D-9	Design complete	6/30/2016
D-10	Permit application filed	6/30/2016
D-11	Construction begins	6/30/2018
D-12	Construction completed first 4 million gallons new DST capacity	9/30/2021
D-13	First 4 million gallons new DST capacity in operation	9/30/2022
D-14	Construction completed second 4 million gallons new DST capacity	9/30/2023
D-15	Second 4 million gallons new DST capacity in operation	9/30/2024

Exhibit D - SST Retrieval Requirements and Schedule

	Develop Plan and Implement Actions to Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 14 million gallons by tank waste volume by 2031	
D-16	Submit proposed plan to State and Court describing how Energy will meet the requirement to reduce tank waste volume to not more than 14 million gallons by 9/30/2031	9/30/2020
D-17	Energy's proposed plan approved by this date or Energy will be required to construct 4 million gallons new DST capacity to be operational by 9/30/2028	7/1/2021
D-18	Milestones to be determined after 7/1/2021 to ensure Energy will meet the requirement to reduce tank waste volume to no more than 14 million gallons by 9/30/2031	New milestones determined by 12/31/2021; milestones to span 2021-2031
	Develop Plan and Implement Actions to Complete SST retrievals so that the remaining SST waste volume is reduced to not more than 9 million gallons by tank waste volume by 2034	
D-19	Submit proposed plan to State and Court describing how Energy will meet the requirement to reduce tank waste volume to not more than 9 million gallons by 9/30/2034	9/30/2025
D-20	Energy's proposed plan approved by this date or Energy will be required to construct 4 million gallons new DST capacity to be operational by 9/30/2031	7/1/2026
D-21	Milestones to be determined after 7/1/2026 to ensure Energy will meet the requirement to reduce tank waste volume to not more than 9 million gallons by 9/30/2034	New milestones determined by 12/31/2026; milestones to span 2026-2034

Exhibit D - SST Retrieval Requirements and Schedule

	Develop Plan and Implement Actions to Complete all remaining SST retrievals so that all tanks have been retrieved and no tank waste remains by “no later than” 2040	
D-22	Submit proposed plan to State and Court describing how Energy will meet the requirements to reduce tank waste volume to not more than 5 million gallons by 9/30/2037 and to reduce tank waste volume so that all tanks have been retrieved and no tank waste remains by “no later than” 12/31/2040	9/30/2030
D-23	Energy’s proposed plan approved by this date or Energy will be required to construct 4 million gallons new DST capacity to be operational by 9/30/2034	7/1/2031
D-24	Milestones to be determined after 7/1/2026 to ensure Energy will meet the requirement to reduce tank waste volume so that all tanks have been retrieved and no tank waste remains by “no later than” 12/31/2040	New milestones determined by 12/31/2031; milestones to span 2031-2040

Exhibit E – Interim Stabilization Measures for 24 SSTs

Drainable Liquid Removals			
Sequence	Farm	Date to complete removal	Specific Tanks Requiring Liquid Removal
E-1	S-farm	9/30/2019	S-101, S-103, S-104, S-105, S-107, and S-111
E-2	U and SX-farms	9/30/2022	U-105, U-108, U-109, SX-101, SX-103, and SX-104
E-3	BY-farm	9/30/2025	BY-102, BY-103, BY-104, BY-105, and BY-107
E-4	Other farms	9/30/2028	AX-101, A-103, B-104, T-102, T-110, T-112, and BX-103

Exhibit F – Interim Barriers for Specified Tank Farms/Tanks

Sequence	Farm	Date to start installation	Date to complete installation
F-1	U-farm, and individual barrier over T-111	9/30/2016	9/30/2017
F-2	TX-farm	9/30/2018	9/30/2019
F-3	BY-farm	9/30/2020	9/30/2021
F-4	SX-farm	9/30/2022	9/30/2023
F-5	S-farm	9/30/2024	9/30/2025
F-6	T-farm	9/30/2026	9/30/2027
F-7	B-farm	9/30/2028	9/30/2029

**Exhibit G – Groundwater/Deep Vadose Zone Milestones
(to be added to Tri-Party Agreement through TPA Amendment)**

	Groundwater/Deep Vadose Zone Milestones	Date
	200-DV-1 OU	
G-1	Complete the RCRA Facility Investigation/Corrective Measures Study and Remedial Investigation/Feasibility Study work plan for the 200-DV-1 OU(TPA milestone M-15-110A)	3/31/2015 Existing Milestone
G-2	Submit the Corrective Measures Study / Feasibility Study and Proposed Plan/Proposed Corrective Action Decision of 200-DV-1 OU to Ecology	9/30/2017
G-3	- Complete the characterization of the BY crib as per the Work Plan and the already approved Sampling & Analysis Plan	12/31/2015 Interim milestone
G-4	- Submit a treatability test plan to Ecology for the treatment of deep vadose zone	9/30/2015 Interim milestone
G-5	- Submit report on the treatability test results	9/30/2016
G-6	Submit Remedial Design/Remedial Action work plan six months after the Corrective Action Decision/Record of Decision is issued	6 months after CAD/ROD is issued, per TPA Action Plan section 11.6
	200-BP-5 OU	
G-7	Start removal of 200 BP-5 groundwater as per the treatability plan to treat in the 200 Area groundwater pump-and-treat system	12/31/2015
G-8	- Complete the necessary pipeline construction for the transfer of 200-BP-5 groundwater to the 200 Area treatment facility	10/31/2015 Interim Milestone
G-9	- Complete installation of uranium treatment system	6/30/2015 Interim Milestone
G-10	- Uranium treatment system will operate at full treatment capacity	12/31/2015 Interim Milestone
G-11	Submit a 200-BP-5 Remedial Investigation	9/30/2014
G-12	Submit a 200-BP-5 and 200-PO-1 OU Feasibility Study Report and Proposed Plan(s) to Ecology (TPA milestone M-015-21A)	6/30/2015 Existing Milestone
G-13	Submit Remedial Design/Remedial Action work plan six months after the Record of Decision is issued	6 months after ROD is issued, per TPA Action Plan section 11.6