

0050674

Tri-Party Agreement

March 29, 1995

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Dear Messrs:

M-34 UNIT MANAGER PROPOSAL TO PROJECT MANAGERS

The Tri-Party unit managers for the M-34 milestones for EPA, Ecology, and DOE propose the attached draft change package M-34-95-02 for consideration. The change package consists of target dates that reflect an aggressive schedule. This completes the M-34-00-T05 Target Date for the unit managers recommendations to the project managers for K-Basin.

In addition to this package EPA, Ecology, and DOE unit managers recognize the need for singular schedules that reflect a commitment for removal of the fuel and sludge from the K-basins. It is understood that commitment dates would be later than target dates. There is a desire for inclusion of the aggressive schedule at target dates. Attached (Enclosure 1), is a discussion of the options to resolve this issue for implementation of proposed interim milestones for fuel and sludge disposition.

The options are:

Option 1

Accept proposed change package as is, without any interim milestones.

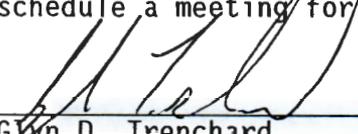
Option 2

Replace target milestones M-34-00-T11 and M-34-00-T15 with interim milestones at an alternate later date.

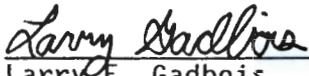
Option 3

M-34-00-T11 and M-34-00-T15 are retained as target dates and interim milestones are added with the same scope with later dates.

Please feel free to contact any of us if you desire more information or to schedule a meeting for more discussions.



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Enclosure

cc w/encls:

- L. Arnold, WHC
- C. Mooers, WHC
- D. Murphy, RL
- E. Sellers, RL
- T. Tebb, Ecology

Highlights of the Pros and Cons for K Basin Milestone Options.

Option 1

Pros

- Reflects a singular path forward, that is consistent with the project planning and documentations.
- Does not provide a slower fall-back schedule towards which people may start to plan.

Cons

- Does not carry any enforceable provisions (all dates are targets).
- Could be perceived to not reflect a real commitment to the program.
- Could be perceived to not show a commitment to take risks.

Option 2

Pros

- Enforceable milestones for the key elements.
- Singular dates are retained.

Cons

- The aggressive schedule is lost.

Option 3

Pros

- Shows the desire to meet the accelerated path forward and retains some element of enforceability (and appearance of commitment).

Cons

- Confusion over conflicting dates.
- Program end dates could tend to expand to utilize the available time.

Change Number M-34-95-02 DRAFT	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date March 28, 1995
Originator <i>LEB</i> <i>DH</i> <i>GT</i> Phone Larry Gadbois, David Holland, Glyn Trenchard 376-9884, 736-3027, 373-4016		
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Project Manager <input type="checkbox"/> III - Unit Manager		
Change Title Addition of New Target Dates and Milestone for K Basins		
Description/Justification of Change The following new milestone and target dates are added: (1) M-34-00-T09: Initiate Fuel Packaging Due Date: December 1997 (2) M-34-00-T10: Complete Fuel Packaging Due Date: December 1999 (3) M-34-00-T11: Complete Fuel Removal from the K-Basins Due Date: December 1999 (4) M-34-00-T12: Issue a Plan including Schedule for Completion of Fuel Stabilization DOE will submit a signed Tri-Party Agreement Change Request proposing new milestones. Due Date: September 1995 (continued on page 2)		
Impact of Change This change accelerates completion of fuel and sludge removal for K Basins from the current plan of December 2002 (M-34-00-T08) to December 1999 for fuel and December 2000 for sludge. New target dates are created that replace the target dates and interim milestone as indicated by M-34-00-T05.		
Affected Documents Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix D.		
Approvals _____ _____ ___ Approved ___ Disapproved DOE Date _____ _____ ___ Approved ___ Disapproved EPA Date _____ _____ ___ Approved ___ Disapproved Ecology Date		Page 1 of 6

Description/Justification of Change (continued)

- (5) M-34-00-T13: Establish Path Definition/Path Forward for Sludge
Due Date: December 1995
- (6) M-34-00-T14: Initiate Bulk Sludge Removal from K-Basins
Due Date: TBD
- (7) M-34-00-T15: Complete Bulk Sludge Removal from K-Basins
Due Date: December 2000
- (8) M-34-00-T16: Complete Removal/Disposal of Contaminated Water in K-Basins
Due Date: December 2002
- (9) M-34-00-T17: Complete Removal/Disposal of Contaminated Debris in K-Basins
Due Date: December 2001
- (10) M-34-03: Complete Removal of Fuel and Sludge from the K-Basins.
Due Date: December 2002

The above milestone and target dates replace M-34-00-T02, M-34-00-T06, M-34-00-T07, M-34-00-T08 and M-34-01.

The deliverable for the revised TPA target date, M-34-00-T05 (*COMPLETE DEVELOPMENT OF UNIT MANGER RECOMMENDATIONS REGARDING K BASINS*) requires a plan and schedule be provided for the following activities: (1) initiating fuel packaging, (2) completion of fuel packaging, (3) removal of fuel from the K-Basins, (4) completion of fuel stabilization (such as passivation), (5) development of path forward for sludge, (resolution of fuel/waste issue), (6) initiating removal of sludge from K-Basins, (7) completion of sludge removal from K-Basins, (8) disposition of water in K-Basins following fuel/sludge removal, according to the appropriate Hanford site tritiated water disposition plan in effect at the time, (9) disposition of the contaminated debris.

References to the planning documents which support the above schedule are provided below, along with summaries of the supporting assumptions and technical bases/documents. The recommended dates are more aggressive than the revised TPA milestone M-34-00-T05 requirement that the plan and schedule be consistent with removal of all K-Basins fuel by December 2000.

FUEL PACKAGING AND REMOVAL

- 1. Initiate Fuel Packaging (M-34-00-T09, December 1997)
- 2. Complete Fuel Packaging (M-34-00-T10, December 1999)
- 3. Complete Fuel Removal from K Basins (M-34-00-T11, December 1999)

Description/Justification of Change (continued)

Assumptions

The recommended path forward is based on the following assumptions:

- Any new facilities will be required to meet the intent of Nuclear Regulatory Commission (NRC) licensing requirements through equivalency.
- Modifications to existing facilities will be in accordance with DOE Orders and requirements.
- Forty-year dry interim storage will meet the intent of NRC licensing requirements.
- Alternatives will not prejudice the DOE Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Environmental Impact Statement (Programmatic EIS). [This revision of TPA milestone M-34-00-T05 includes a requirement that the recommended plan "...incorporate flexibility related to the NEPA ROD for K-Basins fuel."]
- Filled overpacks will be moved immediately upon filling with little or no further storage in the K Basins.

Technical Basis

1. Initiate Fuel Packaging

See WHC-EP-0830, *Hanford Spent Nuclear Fuel Project Recommended Path Forward* (Volume 1, Revision 0), Westinghouse Hanford Company, Richland, WA.

The recommended path forward was chosen to meet technical objectives and to be achievable within the expected constraints of the Records of Decision (ROD) for the Environmental Impact Statements (EIS) required by the National Environmental Policy Act (NEPA).

The specific technical basis requirements include: (1) rapid removal of fuel and sludge from the K-Basins and relocation away from the Columbia River; (2) placement of Hanford spent nuclear fuel (SNF) in safe, economic, and environmentally sound dry storage until the ultimate final disposition of the fuel is determined; (3) preparation of the K-Basins for deactivation, including debris removal and water treatment.

Description/Justification of Change (continued)

2. Complete Fuel Packaging

The end date for this activity is supported by the Path Forward document's technical basis (see item 1 above) and complies with the revised TPA milestone M-34-00-T05 requirement that the plan and schedule be consistent with removal of all K-Basins fuel by December 2000.

3. Remove Fuel from K Basins

The start and end dates for this activity are supported by the Path Forward document's technical basis (see item 1 above) and comply with the revised milestone requirement that the plan and schedule be consistent with removal of all K-Basins fuel by December 2000. Note that the start dates provided in M-34-00-T09 ("INITIATE FUEL PACKAGING") and this activity must be identical because of limited in-basin space to stage the Multi Canister Overpacks (MCO) once they have been loaded with fuel. The same logic applies to the end dates for M-34-00-T10 ("COMPLETE FUEL PACKAGING") and this activity.

FUEL STABILIZATION

Issue a plan including schedule for fuel stabilization (M-34-00-T12, September 1995).

Assumptions

- ◆ Fuel stabilization will be closely coupled to removal and staging of SNF from the K Basins.
- ◆ Stabilization will be defined by requirements to meet 40-year dry storage under NRC technical equivalency.
- ◆ Further processing of stabilized/stored SNF may be required prior to final SNF disposal.

SLUDGE

1. Establish Path Definitions/Path Forward (M-34-00-T13, December 1995)
2. Initiate Bulk Sludge Removal (M-34-00-T14, TBD)
3. Complete Bulk Sludge Removal (M-34-00-T15, December 2000)

Assumptions

- The end date for this activity is based on expedited completion of sludge characterization.
- Sludges will be managed as SNF while within the K Basins.

Description/Justification of Change (continued)

- Once loose sludges are collected and removed from the basins, they will be managed as radioactive or mixed waste, consistent with characterization results. The proposed sludge path forward alternative for loose sludges sends them to the Tank Waste Remediation System (TWRS) tank farm and/or the Hanford Solid Waste Facilities.
- The sludge that remains within fuel canisters at the time they are loaded into the MCO will continue to be managed as SNF.
- High priority must be placed on expedited completion of a sludge characterization plan that establishes the minimum characterization required to meet criteria for transportation, storage, and disposition of the alternative selection(s).
- The sludge will be recovered from the basins either by placing it into individual containers, or by pumping it into a transport tank;
- For individual containers, the solids to water ratio is assumed to be the same as the available floor sludge samples;
- For tank transport, the solids to water ratio is assumed to be conducive to pumping;
- Sludge transportation (of waste) would be from both of the K Basins to a receiving facility within the Hanford 200 Areas;
- The transport route will be entirely within the public exclusion area of the Hanford Site.
Public exclusion area requirements will be met for these shipments.

Technical Basis

In addition to the top level planing and logic provided by the SNF Project Path Forward document, the end date for this activity will be supported by WHC-SD-SNF-PD-TBD, *K Basin Sludge Path Forward Recommendation*, Westinghouse Hanford Company, Richland, WA., which is itself supported by the following documents:

WHC-SD-SNF-TI-001, *Sludge Management Options Report*, Westinghouse Hanford Company, Richland, WA.

PNL-10398, Vol I, *K Basin Spent Fuel Sludge Treatment Alternatives Study, Volume I - Regulatory Options*, Pacific Northwest Laboratory/Battelle Memorial Institute, Richland WA.

PNL-10398, Vol II, *K Basin Spent Fuel Sludge Treatment Alternatives Study, Volume II - Technical Options*, Pacific Northwest Laboratory/Battelle Memorial Institute, Richland WA.

Description/Justification of Change (continued)

CONTAMINATED WATER

Complete Removal/disposal of Contaminated Water in K-Basins (M-34-00-T16, December 2002)

Assumptions

- Water will be removed/exchanged in the basin such that is maintained at or below 300,000 pCi/l.
- The 200 Area Effluent Treatment Facility (ETF) will be operational prior to December 2000;
- Tritium will be disposed in accordance with the Hanford Site tritiated water disposal policy in effect at the time.

Technical Basis

The date for this activity is supported by: (1) the top level planning and logic provided by the SNF Project Path Forward document; (2) the revised milestone's direction that water removal be deferred until after all fuel and sludge have been removed from the basin; (3) WHC-SD-SNF-PD-007, *Schedule for Final Disposition of Contaminated K-East Basin Water*, Westinghouse Hanford Company, Richland, WA; and (4) WHC-SD-SNF-ES-005, *Options for Disposition of KE-Basin Water*, Westinghouse Hanford Company, Richland, WA.

CONTAMINATED DEBRIS

Complete Removal/Disposal of Contaminated Debris in K-basins(M-34-00-T17, Complete December 2001)

Assumptions

Debris disposal will be performed consistent with current regulated Hanford radioactive solid waste practices.

Technical Basis

The date for this activity is supported by: (1) the top level planning and logic provided by the SNF Project Path Forward document; and (2) WHC-EP-0830 (draft), *Work Plan for Debris Removal from 105-KE Basin*, Westinghouse Hanford Company, Richland, WA.

The work plan defines the work scope and schedule for debris removal, in addition to providing detailed logistical planning that defines the major activities which must occur to support that work scope.