



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

**SEP 12 2008**

08-AMRC-0209

Mr. N. Ceto, Program Manager  
Office of Environmental Cleanup  
Hanford Project Office  
U.S. Environmental Protection Agency  
309 Bradley Blvd, Suite 115  
Richland, Washington 99352

**RECEIVED**  
SEP 18 2008  
**EDMC**

Dear Mr. Ceto:

**SUBMITTAL OF SIGNED CHANGE FORM M-16-08-06 FOR EXTENSION OF TRI-PARTY AGREEMENT MILESTONE M-016-56, "COMPLETE THE INTERIM REMEDIAL ACTIONS FOR 100-IU-2 AND 100-IU-6"**

Attached is the Tri-Party Agreement milestone change package M-16-08-06 which requests an extension to the due date for completion of remedial actions in the 100-IU-2 and IU-6 Operable Units. The U.S. Department of Energy, Richland Operations Office (RL) considers this request warranted because of unforeseen technical challenges and expansion of the work and cost required to complete this milestone. RL notes that 19 of the 32 waste sites under this milestone will be complete by December 31, 2008; however, as you are aware the remaining waste sites are not high risk because they do not contain radiological contamination and do not pose a threat to groundwater or the environment.

Two of the remaining waste sites covered by this milestone, 600-202 (Hanford Trailer Camp Landfill) and 600-109 (Hanford Townsite Four Burn and Burial Pits), have been identified as eligible for listing in the National Register of Historic Places and therefore will require additional time to complete in order to ensure the requirements of the National Historic Preservation Act are met prior to proceeding with remediation. Remediation at these two waste sites is not allowed to proceed until mitigation measures are identified in a Mitigation Plan and a Memorandum of Understanding is developed with the National Park Service and Historic Preservation Office. RL expects these activities to be complete by July 2009.

RL has also met with you and your staff to discuss the discovery of new orphan waste sites identified during the orphan site walk-downs in the 100-IU-2 and 100-IU-6 Operable Units and your desire to establish new Tri-Party Agreement commitments for addressing these new waste sites. A draft Tri-Party Agreement change package had been prepared to add additional milestones for these waste sites; however, RL cannot approve additional milestones until the cost and schedule for completing this work is approved, funded, and added to the project baseline and contract. Additionally, further evaluation is necessary to identify any precursor work or steps

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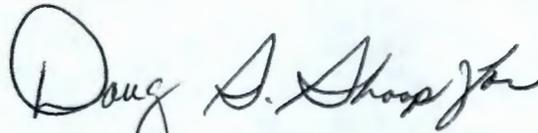
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which are fundamental in finalizing the proposed completion dates for this new work scope, including: a) finalizing the 100-IU-2 and 100-IU-6 Orphan Site Report to ensure the official number of waste sites, b) entry of the new waste sites into the Waste Information Database System (WIDS) and Appendix C of the Hanford Federal Facility Agreement and Consent Order, c) determining which waste sites require sampling and/or remediation, d) developing cost estimates for sites requiring sampling and/or remediation and, e) listing the new waste sites into an existing Record of Decision through issuance of an Explanation of Significant Difference and updating the public on the new scope and the regulatory framework to perform the required actions.

If you have any questions, please contact me, or your staff can contact Joe Franco, Assistant Manager for the River Corridor, on (509) 376-6628.

Sincerely,



David A. Brockman  
Manager

AMRC:DCS

Attachment

cc w/attach:

G. Bohnee, NPT

N. Ceto, EPA

J. B. Price, Ecology

J. W. Donnelly, WCH

R. H. Engelmann, FH

S. Harris, CTUIR

R. Jim, YN

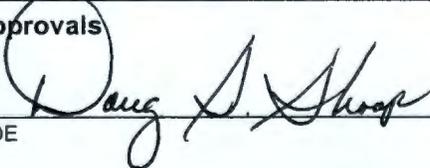
S. L. Leckband, HAB

K. Niles, ODOE

J. G. Vance, FFS

Administrative Record, H6-08

Environmental Portal, A3-01

<b>Change Number</b> M-16-08-06	<b>Federal Facility Agreement and Consent Order  Change Control Form</b> <small>Do not use blue ink. Type or print using black ink.</small>	<b>Date</b> September 2, 2008
<b>Originator</b> M. S. French (U.S. Department of Energy, Richland Operations Office [DOE])		<b>Phone</b> (509) 373-9863
<b>Class of Change</b> <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
<b>Change Title</b> Extension of M-016-56 for Interim Remedial Actions at 100-IU-2 and 100-IU-6.		
<b>Description/Justification of Change</b> This change request clarifies the original scope of M-016-56, identifies technical changes and challenges that have occurred that were unforeseen, and extends the completion date. (See continued description/justification on the next page).		
<b>Impact of Change</b> <ul style="list-style-type: none"> <li>Clarify the scope of M-016-56 to be waste sites known when the milestone was established in April 2002 and that are listed in the 100 Area Remaining Sites Record of Decision (ROD) approved in July 1999 (i.e., 32 waste sites in total).</li> <li>Extend M-016-56 from December 31, 2008 to December 31, 2011 to complete interim actions on the original 32 waste sites to address technical changes and challenges, and add additional scope to M-016-56 to address an additional waste site added to the 100-IU-2 and 100-IU-6 Operable Units in Change Notice C-07-06 approved by EPA and DOE in February 2008. Addition of this new waste (600-146) was not within the original scope of M-016-56.</li> </ul>		
<b>Affected Documents</b> <i>Hanford Federal Facility Agreement and Consent Order, Appendix D  Remedial Design Report/Remedial Action Work Plan for the 100 Area, DOE/RL-96-17, Rev. 5</i>		
<b>Approvals</b>  DOE _____ Date <u>9/12/08</u> <input checked="" type="checkbox"/> Approved _____ Disapproved _____ EPA _____ Date _____ <input type="checkbox"/> Approved _____ Disapproved _____ Ecology <u>N/A</u> _____ Date _____ <input type="checkbox"/> Approved _____ Disapproved _____		Page 1 of 3

**Description/Justification of Change (continued):**

**Background for 100-IU-2 and 100-IU-6:**

M-016-56, "Complete the Interim Remedial Actions for 100-IU-2 and 100-IU-6," was created in April 2002 under a Class I change request (M-16-01-05). The 100-IU-2 and 100-IU-6 Operable Units within the River Corridor 100 Area were primarily areas used for homesteads and farms prior to the Manhattan Project. After the start of the Manhattan Project, these areas became primary locations for housing Hanford workers during the construction era. Waste sites associated with these areas are primarily debris sites or old homestead landfills, and do not contain waste sites resulting from dumping or discharging waste from nuclear reactor areas, or nuclear operations. Furthermore, there are no known soil waste sites contributing to groundwater contamination in these areas. Groundwater in these two areas has no remedial actions in progress other than continued monitoring.

**Progress to date on interim actions at the 32 original waste sites:** Interim remedial actions began at 100-IU-2 and 100-IU-6 in March 2004 and have been completed for 17 of the 32 waste sites. Interim actions are progressing on two (2) high priority waste sites; 600-149 (Small Arms Range, Rifle and Pistol Ranges, 661 Complex, 600-54) and 600-111 (P-11 Critical Mass Laboratory Crib, 116-F-6), which are expected to complete by, 12/31/2008.

**Technical changes/challenges at the 32 original waste sites:** Several technical changes have occurred at the 32 waste sites as approved in the 100 Area Remaining Sites ROD and the Remedial Design Report/Remedial Action Work Plan for the 100 Area, DOE/RL -96-17, Rev. 5. These are identified as the following:

1. Waste sites 600-109 (Hanford Trailer Camp Landfill) and 600-202 (Hanford Townsite Four Burn and Burial Pits) have been identified as historic properties. DOE is currently coordinating with the National Park Service/Historic Preservation Office to assist in developing mitigation actions to comply with 36 Code of Federal Regulation (CFR) 800, "National Historic Preservation Act and "Protection of Historic Properties." Identification of historic properties within waste sites was not foreseen by DOE or EPA as approved in the Remedial Design Report/Remedial Action Work Plan for the 100 Areas. This Work Plan states, "There are no known historically significant properties within the proposed footprints of the waste site excavations." This technical change requires additional consultations and consideration of mitigation factors that were not anticipated. These activities are expected to complete by July 2009.
2. Of the 32 sites listed in the 100 Area Remaining Sites ROD, waste site 600-149 is the only waste site identified for action under the Remove, Treat and Dispose remedy. The other 31 waste sites are identified as candidate waste sites that may be plugged-in to the Remove, Treat and Dispose remedy based on further sampling information. Of the 31 candidate sites, 23 waste sites require interim remedial actions (8 waste sites required no action) based on the sampling campaigns or historical data, and thus require remediation. The ROD estimated that only 20% of the candidate sites would require remediation, but for 100-IU-2 and 100-IU-6 this percentage is nearly 75% (23 of 31 candidate sites).
3. As stated in Item 1 above, 19 of 32 sites will be completed by 12/31/2008. Of the remaining 13 sites, the original volume estimate was 352,000 tons of waste. Based on experience to date and sampling information, this waste volume has been estimated to be approximately 517,000 tons of waste from the remaining 13 sites, resulting in a significant increase in scope and cost to complete the work.

**Authorized Changes:**

DOE and EPA agree to clarify the scope of M-016-56 to include the original 32 sites, add (1) additional waste site from approved Change Notice C-07-06, as well as extend the due date of M-016-56 accordingly to address the unforeseen technical changes/challenges discussed above regarding the original 32 sites, as well as the addition of (1) waste site and consideration of the types of waste sites and operations within 100-IU-2 and 100-IU-6 Operable Units. This additional time allows DOE and EPA to update and add waste sites to the 100 Area Remaining Sites Interim ROD, provide an update to the public, Tribes, and stakeholders on the significant changes above, including the estimated remediation costs, and add new scope to ensure a comprehensive cleanup for the 100-IU-2 and 100-IU-6 Operable Units. This change does not address cleanup actions for 43 new sites in 100-IU-2 and 100-IU-6 discovered by the orphan site evaluation (i.e., orphan waste sites).

*Hanford Federal Facility Agreement and Consent Order* Interim Milestones are modified or created as shown below using ~~strikeout~~ to indicate text deletions and **shading** to indicate text additions:

Milestone Number	Milestone Description	Completion Date
M-016-56	Complete the Interim Remedial Actions for 100-IU-2 and 100-IU-6 listed in the 1999 100 Area Remaining Sites Record of Decision (32 sites) and 600-146 (added waste site in approved Change Notice C-07-06). Completion entails waste excavated and sent for disposal, sites backfilled, and Remaining Sites Verification Package submitted to EPA. Revegetation is allowed to occur after the milestone due date, but shall be completed no later than February 2012.	<del>12/31/2008</del> <b>12/31/2011</b>