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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

June 28, 2007

Mr. Matthew S. McCormick, Assistant Manager
Richland Operations Office
United States Department of Energy
P.O. Box 550, MSIN: A7-50
Richland, Washington 99352

Re: Hanford Federal Facility Agreement and Consent Order (HFFACO) Change Control Form
for Milestone M-16-07-03

Dear Mr. McCormick:

The Department of Ecology approves the referenced HFFACO Change Control Form from the United States Department of Energy-Richland Operations Office (USDOE-RL). The original HFFACO Change Control Form was transmitted to USDOE-RL on June 27, 2007. A copy of the HFFACO Change Control Form is enclosed.

If you have any questions, contact me at 509-372-7891.

Sincerely,

Laura J. Cusack
TWT&TPA Section Manager
Nuclear Waste Program

jc
Enclosure

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EDMC

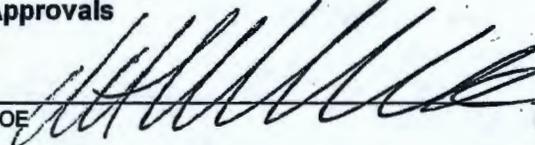
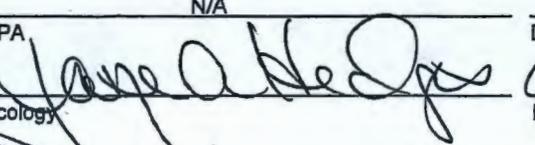
cc w/enc:

Nicholas Ceto, EPA
Larry Gadbois, EPA
Stuart Harris, CTUIR
Gabriel Bohnee, NPT
Lenora Seelatsee, Wanapum
Russell Jim, YN
Susan Leckband, HAB
Ken Niles, ODOE
Administrative Record: Milestone M-16
Environmental Portal

cc w/o enc:

Richard Engelmann, EFSH
Rob Piippo, FHI
Judy Vance, FFS



Change Number M-16-07-03	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date June 26, 2007
Originator Stacy Charboneau (U.S. Department of Energy, Richland Operations Office [DOE])		Phone (509) 373-3841
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Interim Milestone M-16-50, "Initiate Remedial Actions for Remaining Waste Sites for 100-H Area" and Interim Milestone M-16-51, "Complete Interim Remedial Actions for 100-H Area."		
Description/Justification of Change Description: M-16-50 and M-16-51 were created in April 2002 under a Class I change request (M-16-01-05). Extensive remedial actions were performed in the 100-H Area in the late 1990s and focused on high priority liquid effluent waste sites. These sites received extensive quantities of liquid wastes from operating nuclear facilities. Remediation of the 100-H liquid effluent waste sites was completed in FY2000. The schedule for beginning remediation of the remaining sites at 100-H is governed by M-16-50, and is scheduled to begin by July 31, 2007. (See continued description/justification on the next pages).		
Impact of Change <ul style="list-style-type: none"> • Change M-16-50, "Initiate Remedial Actions for the Remaining Waste Sites for the 100-H Area" due date from July 31, 2007 to October 31, 2008 • Establish a target date to "Complete excavation of 1 of the 5 (118-H-1, 118-H-2, 118-H-3, 118-H-4, or 118-H-5) 100-H Area Burial Grounds by December 31, 2009." • Establish a target date to "Complete excavation of a total of 3 of the 5 (118-H-1, 118-H-2, 118-H-3, 118-H-4, or 118-H-5) 100-H Area Burial Grounds by December 31, 2010." • Change M-16-51, "Complete the Interim Remedial Actions for 100 H Area" due date from December 31, 2010 to December 31, 2011. <p>Approval of this change package will close the dispute resolution process initiated on May 1, 2007 based on DOE letter, 07-AMRC-0172.</p>		
Affected Documents <i>Hanford Federal Facility Agreement and Consent Order, as amended and Hanford Site internal planning management, and budget documents (e.g., USDOE contractor Baseline Change Control documents and Remedial Design Report/Remedial Action Work Plan for the 100 Area, DOE/RL-96-17, Rev. 5)</i>		
Approvals  DOE _____ Date <u>6/27/07</u> <input checked="" type="checkbox"/> Approved _____ Disapproved _____ N/A _____ Date _____ Approved _____ Disapproved _____  EPA _____ Date <u>6/27/07</u> <input checked="" type="checkbox"/> Approved _____ Disapproved _____ Ecology _____ Date _____ Approved _____ Disapproved _____		Page 1 of 3

Description/Justification (continued)

The DOE groundwater program recently began a chromium investigation at the 100-D Area to characterize and define the upgradient end of the southwest groundwater chromium plume. One objective of the investigation was to refine the location of potential sources for further remediation. Seven new groundwater monitoring wells were installed in February and March 2007, from which samples will be collected every 2 weeks and analyzed for hexavalent chromium and other constituents. The highest initial groundwater samples from these wells had a hexavalent chromium concentration of 10,580 micrograms/liter (ug/L), and the lowest was 16 ug/L. The drinking water standard is 50 ug/L.

Remediation of 100-D Area remaining sites began in June 2006 and has been ongoing. During the course of nearly 1 year of soil remediation, significant sources of chromium have been discovered in old, abandoned pipelines and releases from these pipelines to the soil are evident (e.g., 100-D-30 and 100-D-56 waste sites). More chromium contamination sites are expected to be discovered, and are obviously impacting the underlying groundwater. These known and unknown chromium sources are posing an immediate and substantial threat to the underlying groundwater and the nearby Columbia River and as such, both DOE and Ecology continue to advocate that identification and remediation of 100-D area chromium sources as a high priority.

This change package does not require specific additional actions in the 100-D area. Ecology reserves the right to impose additional requirements or expedited response actions to mitigate threats to groundwater or the Columbia River.

Pump and treat operations at the 100-H Area have been relatively successful, and groundwater chromium concentrations are only slightly above interim action remedial action objectives of 20 ug/L. The relatively large difference in groundwater concentrations between 100-D Area and 100-H Area provides a reasonable justification to give a higher priority to work at 100-D, and to give a lesser priority to work at 100-H. The lesser priority is the reason to adjust milestone dates at 100-H Area.

Additionally, Ecology is concerned about the ability to complete the 100-H Area work in the 3 ½ years envisioned by the existing milestones and is requiring additional target dates to track progress. Two target dates were chosen because they represent critical path accomplishments and indicators that work is on track to meet the M-16-51 requirement to complete interim remedial actions at 100-H area.

This change package:

1. allows DOE to reallocate resources to focus on identification and remediation of high priority 100-D Area chromium sources in the near term,
2. provides additional progress target dates to support completion of M-16-51, and
3. supports completion of the major milestone in 2012.

Change:

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

Milestone Number	Milestone Description	Completion Date
M-16-50	Initiate Remedial Actions for the Remaining Waste Sites for the 100-H Area	July 31, 2007 October 31, 2008
M-16-51 T01	Complete Excavation of 1 of 5 100-H Burial Grounds (118-H-1, 118-H-2, 118-H-3, 118-H-4, or 118-H-5). Completion of Excavation means that all contamination has been excavated from the waste site or burial ground as determined by the relevant Interim Action Record of Decision, radiological surveys have been completed to confirm cleanup levels have been attained, waste anomalies are identified and stabilized for treatment, and the burial ground is stabilized pending backfill at a late date.	December 31, 2009

<p>M-16-51- T02</p>	<p>Complete Excavation of a total of 3 of 5 100-H Burial Grounds (118-H-1, 118-H-2, 118-H-3, 118-H-4, or 118-H-5) Completion of Excavation means that all contamination has been excavated from the waste site or burial ground as determined by the relevant Interim Record of Decision, radiological surveys have been completed to confirm cleanup levels have been attained, waste anomalies are identified and stabilized for treatment, and the burial ground is stabilized pending backfill at a later date.</p>	<p>December 31, 2010</p>
<p>M-16-51</p>	<p>Complete the Interim Remedial Actions for the 100-H Area</p>	<p>December 31, 2010 December 31, 2011</p>