

Change Number M-16-01-05	<b>Federal Facility Agreement and Consent Order</b> Change Control Form <b>Do not use blue ink. Type or print using black ink.</b>	Date 12/31/2001												
<b>Originator</b> H. E. Bilson, RL Assistant Manager River Corridor		<b>Phone</b> 376-6628												
<b>Class of Change</b> <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager														
<b>Change Title</b> Establish Date for Completion of all 100 Area Remedial Actions (Tri-Party Agreement Milestone M-016-00F)														
<b>Description/Justification of Change</b>  This change establishes a date for the completion of all 100 Area interim remedial actions as required by M-016-00F and modifies the M-016-00A milestone description. Additionally, it aligns the M-016-00 series milestones for completion of 100 area remedial actions with the objective of completion of the 100 Area remedial actions by 2012.  The date established under the M-016-00F is the compliance date for M-016-00A. The completion of the 100 Area remedial actions includes:  Remediation of all waste sites and EPA/Ecology approval of associated closeout verification packages Backfill and re-vegetation of the waste sites Decontamination and decommissioning of all ancillary facilities  This milestone does not include the following:  Completion of reactor interim safe storage for 8 of the 9 surplus reactors. This is covered under the M-093 milestone series. Final risk assessment and final Record of Decision for the 100 NPL. This will occur after the completion of M-016-00A.  Note that there are facilities that support the Hanford Site infrastructure that will remain in the 100 Area. Additionally, there may be waste sites that will not be remediated until the final reactor disposition due to their proximity to the reactor or due to other factors. Both facilities and waste sites that will remain will be documented and the anticipated path forward identified.  Modifications/deletions of existing milestones are denoted using <del>redline/strikeout</del> ; additions are denoted with shading. Continued on pages 2 and 3.														
<b>Impact of Change</b>  Modifies regulatory requirements governing Hanford remediation activities. Administrative action required to incorporate this change into Appendix D.														
<b>Affected Documents</b> The Tri-Party Agreement Action Plan – Appendix D, as amended and Hanford site internal planning, management, and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi Year Work Plans; Sitewide Systems Engineering Control documents; Project Management Plans; and the Hanford site Integrated Priority List and, if appropriate, LDR requirements should the subject wastes be generated as a result of this modification).														
<b>Approvals</b>  <table border="0" style="width: 100%;"> <tr> <td style="width: 35%; border-bottom: 1px solid black;">K. A. Klein, RL Manager</td> <td style="width: 15%; border-bottom: 1px solid black;">Date</td> <td style="width: 15%; text-align: center;">_____Approved_____Disapproved</td> <td style="width: 35%;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;">L. J. Iani, EPA Region 10 Administrator</td> <td style="border-bottom: 1px solid black;">Date</td> <td style="text-align: center;">_____Approved_____Disapproved</td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">T. C. Fitzsimmons, Ecology Director</td> <td style="border-bottom: 1px solid black;">Date</td> <td style="text-align: center;">_____Approved_____Disapproved</td> <td></td> </tr> </table>			K. A. Klein, RL Manager	Date	_____Approved_____Disapproved		L. J. Iani, EPA Region 10 Administrator	Date	_____Approved_____Disapproved		T. C. Fitzsimmons, Ecology Director	Date	_____Approved_____Disapproved	
K. A. Klein, RL Manager	Date	_____Approved_____Disapproved												
L. J. Iani, EPA Region 10 Administrator	Date	_____Approved_____Disapproved												
T. C. Fitzsimmons, Ecology Director	Date	_____Approved_____Disapproved												

**Impact of Change (Continued):**

M-016-00F will establish the compliance date for M-16-00A. The following existing milestones were established previously to support 100 Area cleanup:

Milestone	Description	Date
M-016-01	Complete 100 N Area Decontamination and Decommissioning	TBD
M-016-10A	Initiate remedial actions in the 100KR-1 operable unit	8/1/2003
M-016-13B	Complete remediation and backfill of 16 liquid waste sites and process Effluent pipelines in the 100-FR-1 and 100-FR-2 operable units	10/29/2004
M-016-26B	Complete remediation and backfill of 51 liquid waste sites in 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2 and 100-HR-1 operable units. Complete revegetation of 36 liquid waste sites in 100-BC-1, 100-DR-1, 100-DR-2, and 100-HR-1 operable units.	3/31/2002
M-016-26E	Complete excavation and removal of 100 BC process effluent pipelines	9/30/2004
M-016-26F	Complete backfill of 100 BC process effluent pipelines excavations	2/28/2005
M-016-27C	Complete 100-HR-3 Phase III, ISRM Barrier Emplacement, Planning, Well Installation, and Barrier Emplacement	9/30/2002

Relative to these existing milestones the only change would be the deletion of M-16-01. The remaining existing milestones would not be impacted.

The following are the changes associated with the M-16-00F negotiations:

**Deletions:**

The following milestone will be deleted:

Milestone	Description	Date
<del>M-016-01</del>	<del>Complete 100 N Area Decontamination and Decommissioning</del>	<del>TBD</del>

The completion of the facility D&D is covered within the definition of complete remedial actions. See definitions section.

**Modifications:**

The following milestone series is modified as indicated:

Milestone	Description	Date
M-016-00A	Complete all interim response remedial actions for the 100 Areas	12/31/2012
M-016-45	Complete the interim remedial action for the 100 B/C Area (See Attachment A to Tri-Party Agreement Change Request M-016-01-05)	12/31/2006
M-016-46	Initiate remedial actions for the remaining wastes sites for the 100 D Area	7/31/2006
M-016-47	Complete the interim remedial actions for the 100 D Area	12/31/2011
M-016-48	Initiate remedial actions for the remaining wastes sites for the 100 F Area	7/31/2005
M-016-49	Complete the interim remedial actions for the 100 F Area	12/31/2008
M-016-50	Initiate remedial actions for the remaining wastes sites for the 100 H Area	7/31/2007

**Impact of Change (Continued)**

M-016-51	Complete the interim remedial actions for the 100 H Area	12/31/2010
M-016-52	Initiate response actions for the remaining wastes sites for the 100 K Area	7/31/2009
M-016-53	Complete the interim response actions for the 100 K Area	12/31/2012
M-016-54	Initiate response actions for the remaining wastes sites for the 100 N Area	7/31/2008
M-016-55	Complete the interim response actions for the 100 N Area	12/31/2012
M-016-56	Complete the interim remedial actions for 100-IU-2 and 100-IU-6	12/31/2008

**Definitions for milestones M-016-45 through M-016-56:**

Initiate Remedial Actions – This is the initiation of excavation of waste sites.

Remaining waste sites – This includes all wastes that have been designated for response actions including liquid disposal sites, solid waste burial grounds, unplanned releases, miscellaneous pipelines and other miscellaneous waste sites.

Complete Interim Remedial Actions – This includes the completion of the excavation, EPA/Ecology approval of the closeout verification package (CVP), backfill and re-vegetation for the waste sites and the completion of the D&D of ancillary facilities, and EPA/Ecology approval of the closeout verification package for the ancillary facilities.

## Attachment 1

### 100 B/C Pilot Risk Assessment Tri-Party Agreement Change Request M-016-01-05

The 100 B/C Area Pilot will be a multi-year effort targeted for completion in 2005. The pilot would feed into the post-cleanup risk assessment for the 100 BC Area in the 2006-2007 time frame. A plan will be developed in FY02, including conducting a data quality objectives (DQO) effort to scope the project. It is anticipated that this work will lay the foundation for the reactor area operable units in the river corridor area.

A demonstration of protectiveness of human health and the environment in the baseline risk assessment needed for the final ROD should focus on the three areas of concern defined below:

- I. Vadose Zone - Address the direct exposure to humans and ecological receptors of residual soil contamination, particularly within the top 15 feet of the land surface.
- II. Groundwater - Evaluate the cumulative impact of residual soil contamination on groundwater, given that it is already contaminated.
- III. Riparian Zone - Evaluate the potential risk to humans and ecological receptors from contaminated groundwater where it intercepts the river shoreline.

The three parts will then have to be integrated to provide an assessment of risk to human health and the environment that will be used to demonstrate protectiveness prior to issuance of the final Proposed Plan and Record of Decision.

#### ~~Tasks to Be Performed in FY02:~~

Implement a comprehensive risk assessment that addresses the requirements of CERCLA, including the revised Model Toxics Control Act (MTCA) ecological evaluation standards as Applicable Relevant and Appropriate Requirements and as appropriate for the ecosystem of the Hanford Site. Work with local EPA/Ecology staff to reach agreement on an appropriate risk model using Hanford species.

Coordinate and implement a consensus approach (among the contractors, DOE, and the regulators) to the management of post-remediation risks that address ecological as well as human health protection. The work will continue to focus on the 100 Area.

Coordinate with DOE, EPA/Ecology, and the Natural Resource Trustee Council (NRTC) on the design and implementation of targeted studies to evaluate the impact of soil and groundwater contamination on riparian and aquatic receptors for selected 100 Area reactor areas. These studies will address EPA/Ecology and NRTC concerns and support final risk assessments.

#### ~~Multi-Year Completion Dates:~~

FY02 - Initiate DQO  
FY03-04 - Data collection  
FY05 - Issue report