

## Department of Energy

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APR 14 1995

Mr. Douglas R. Sherwood  
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 U.S. Environmental Protection Agency  
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Mr. Roger F. Stanley, Director  
 Tri-Party Agreement Implementation  
 State of Washington  
 Department of Ecology  
 P.O. Box 47600  
 Olympia, Washington 98504-7600

Dear Messrs. Sherwood and Stanley:

**HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT)  
 CHANGE CONTROL FORM M-15-95-02B, 100 AREA SOURCE OPERABLE UNIT (OU) MILESTONE  
 CHANGES**

The attached Tri-Party Agreement Change Control Form M-15-95-02B, "100 Area Source Operable Unit Milestone Changes," is submitted for review and approval. This change request outlines a strategy to reduce the number of Records of Decision (RODs) and supporting paperwork necessary to complete remedial actions in the 100 Area. This strategy will save significant time and resources in accomplishing our mutual goal.

Our intent is to submit streamlined Focused Feasibility Studies (FFS) and Limited Field Investigation (LFI) Reports for the remaining waste sites in the 100 Area. The first step would be to submit a 100-BC Reactor Area FFS appendix to the 100 Area Source OU FFS Report (DOE/RL-94-61). This report would include all waste sites in 100-BC-2 OU, and the remaining high and low priority waste sites in 100-BC-1 OU, i.e., all the remaining waste sites in the 100-BC Reactor Area. This report would also include a LFI Report that would consist of historical data and identify specific data gaps to be filled during remediation using the observational approach. The FFS would focus primarily on analysis of alternatives using specific data from low priority waste sites in the 100-BC Reactor Area. When the 100-BC Reactor Area supporting documents are complete, a 100-BC Reactor Area Proposed Plan and ROD could be issued.

Because the FFS "process document" and 100-BC FFS documents would generally address all types of waste sites found across the 100 Area, the FFSs for other reactor areas could be significantly streamlined. Proposed Plans for each reactor area, or combination of reactor areas, would be prepared using the "presumptive remedy" approach developed by the U.S. Environmental Protection Agency (EPA). The U.S. Department of Energy (DOE) has discussed the current



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OU by OU ROD strategy with EPA and State of Washington, Department of Ecology (Ecology), staff at several meetings, and although no agreement was reached on a future ROD strategy, it was agreed that the current strategy needed to be streamlined. In light of upcoming milestones (M-15-10C, -13C, 13D, -16E, and -16F), agreed to by EPA and Ecology staff, DOE took the initiative to prepare an approach that would significantly reduce the number of RODs and require much less documentation than the current approach. DOE presented this approach at the February 1995 and March 1995 Tri-Party Agreement Project Managers' Meetings, but because issues concerning proposed plans for the 100-HR-1, -DR-1, and BC-1 OUs were not resolved, the discussion was tabled. DOE has in good faith attempted to provide a strategy which meets the needs of all agencies.

As discussed with EPA and Ecology at the Project Managers' Meetings, DOE has stopped work on the milestones that, through mutual agreement, are considered to be an ineffective use of resources. The funding for completion of these milestones (M-15-10C, -13C, 13D, -16E, and -16F) has been diverted to the Streamlined Approach for Environmental Restoration Demonstration Project which is slated to begin in July 1995. Significant impacts to this project will occur if EPA and Ecology determine that the current milestones should remain on track.

DOE appreciate's EPA and Ecology's assistance in resolving this item, and look forward to proceeding with remediation of the 100 Area Source units. EPA and Ecology's expeditious evaluation of the facts and an early determination is requested. If you have any questions regarding this change request, please contact Ms. Nancy Werdel on (509) 376-5500 or Ms. Julie Erickson on (509) 376-3603.

Sincerely,

  
 Steven H. Wisness  
 Hanford Project Manager

RSD:NAW

Enclosure

cc w/encl:  
 S. Alexander, Ecology  
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 S. Hajner, BHI  
 M. Harmon, EM-442  
 T. Logan, BHI  
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 W. Soper, Ecology  
 P. Staats, Ecology  
 T. Wooley, Ecology

Change Number <b>M-15-95-02B</b>	<b>Federal Facility Agreement and Consent Order                  Change Control Form</b> <small>Do not use blue ink. Type or print using black ink.</small>	Date <b>4/10/1995</b>
Originator <b>Nancy Werdel</b>		Phone <b>(509) 376-5500</b>
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Project Manager <input type="checkbox"/> III - Unit Manager		
Change Title <b>100 Area Source Operable Unit Milestone Changes</b>		
Description/Justification of Change <p>This change action revises future Tri-Party Agreement milestones for 100 Area source operable unit (OU) focused feasibility studies (FFS) proposed plans (PP) to reflect the recently proposed 100 Area Record of Decision (ROD) strategy. This strategy is described in Attachment A to this Change Control Form.</p> <p>In summary, the strategy initially specifies completion of FFSs and PPs for high priority liquid waste disposal sites at the 100-BC-1, 100-DR-1, and 100-HR-1 OUs. The strategy then specifies addressing the remainder of the 100 Area by writing RODs on a "reactor area" basis (one for 100-BC, one for 100-DR and 100-HR combined, and one for 100-FR and 100-KR combined). These reactor area RODs would address <u>all</u> sites within each reactor area.</p> <p>The specific milestones added and deleted by this change are identified on the continuation of Description/Justification of Change (Pages 2 and 3). The dates for new milestones are based on the current Environmental Restoration Program baseline.</p>		
Impact of Change Reducing the number of FFSs and PPs will simplify 100 Area remedial action planning, result in more efficient use of resources by Tri-Party agencies, and accelerate cleanup. All 100 Area source OUs (except 100-NR-1) are affected by this change.		
Affected Documents <b>Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix D.</b>		
Approvals		
DOE 	<u>4-14-95</u> Date	___ Approved    ___ Disapproved
EPA _____	_____ Date	___ Approved    ___ Disapproved
Ecology _____	_____ Date	___ Approved    ___ Disapproved

## Description/Justification of Change (continued from page 1)

The following proposed milestones reflect the revised 100 Area ROD strategy, which emphasizes RODs addressing entire reactor areas. The milestones specify a single FFS and PP for each reactor area; each FFS will include limited field investigation (LFI) results for waste sites not addressed in previous LFIs. These milestones are consistent with the intent of the 1994 Refocusing Change Packages, M-15-00A, to complete all remaining 100 Area OU pre-ROD site investigations under approved work plan schedules by 12/31/1999.

MILESTONE	DESCRIPTION	DUE DATE
M-15-08E	<p>Submit 100-BC reactor area FFS. The FFS will include all 100-BC waste sites not included in the 100-BC-1 OU FFS (e.g., low priority sites, burial grounds in 100-BC-1, and all waste sites in 100-BC-2).</p> <p>Submit the results of the 100-BC reactor area LFI as part of the FFS; the LFI will address all sites not already addressed in the 100-BC-1 and 100-BC-2 LFIs.</p>	3/31/1996*
M-15-08F	<p>Submit 100-BC reactor area PP. The PP will address all the waste sites addressed in the 100-BC reactor area FFS.</p>	9/30/1996*
M-15-07J	<p>Submit 100-DR and 100-HR reactor area FFSs. The FFSs will include all waste sites not included in the 100-DR-1 and 100-HR-1 FFSs (e.g., low priority sites, burial grounds in 100-DR-1, and all waste sites in the 100-DR-2 and 100-HR-2 OUs).</p> <p>Submit the results of the 100-DR reactor area LFI as part of the 100-DR reactor area FFS; the LFI will address all waste sites not included in the existing 100-DR-1 and 100-DR-2 OU LFIs.</p> <p>Submit the results of the 100-HR reactor area LFI as part of the 100-HR reactor area FFS; the LFI will address all waste sites not included in the existing 100-HR-1 and 100-HR-2 OU LFIs.</p>	2/28/1997
M-15-07K	<p>Submit 100-DR and 100-HR reactor area PPs. The PPs will address all the waste sites addressed in the 100-DR and 100-HR reactor area FFSs.</p>	8/31/1997
M-15-10D	<p>Submit 100-KR and 100-FR reactor area FFSs. The FFSs will address all waste sites in the 100-KR-1, 100-KR-2, 100-FR-1, and 100-FR-2 OUs.</p> <p>Complete LFI activities by 12/31/1999. Submit the results of the 100-KR reactor area LFI as part of the 100-KR reactor area FFS; the LFI will address all waste sites in the 100-KR-1 and 100-KR-2 OUs. (Note: existing information contained in the 100-KR-1 LFI previously submitted will be combined in this LFI.) Submit the results of the 100-FR reactor area LFI as part of the FFS; the LFI will address all waste sites in the 100-FR-1 and 100-FR-2 OUs.</p>	12/31/1999
M-15-10E	<p>Submit 100-KR and 100-FR reactor area PPs. The PPs will address all the waste sites addressed in the 100-KR and 100-FR reactor areas FFSs.</p>	12/31/2002

\*Dates assume Change Control Form signed and work initiated on 100-BC reactor area FFS by May 1, 1995.

The following milestones would be replaced by the above milestones:

<b>MILESTONE</b>	<b>DESCRIPTION</b>	<b>DUE DATE</b>
M-15-10C	Submit the 100-KR-1 OU Focused Feasibility Study Report and the 100-KR-1 OU IRM Proposed Plan to Ecology and EPA.	4/30/1995
M-15-13C	Submit the 100-FR-1 OU Focused Feasibility Study Report to Ecology and EPA.	5/31/1995
M-15-13D	Submit the 100-FR-1 OU IRM Proposed Plan to Ecology and EPA.	5/31/1995
M-15-16E	Submit the 100-BC-2 OU Focused Feasibility Study Report to Ecology and EPA.	6/30/1995
M-15-16F	Submit the 100-BC-2 OU IRM Proposed Plan to Ecology and EPA.	6/30/1995

## 100 AREA STRATEGY FOR REMEDIAL ACTION RECORDS OF DECISION

### INTRODUCTION

This paper describes a Record of Decision (ROD) strategy that leads towards ultimate "delisting" of the 100 Area National Priority List (NPL) site. Consistent with the Hanford Past Practice Strategy, the ROD strategy specifies a progression of Interim Action RODs that, when implemented, will result in substantial completion of 100 Area Remedial Action. The essential elements of the strategy are, in sequence:

- Complete the interim action ROD for the "high priority" liquid waste disposal sites at the 100-BC-1, 100-DR-1, and 100-HR-1 source operable units (OU) and begin remediation with initial focus on 100-BC-1. Use the time that this "buys" to...
- Obtain an interim action ROD for the 100-BC-5 groundwater OU to establish vadose zone remediation requirements to protect groundwater and thereby allow completion of the source OU remediation previously initiated.
- Revise the Focused Feasibility Study (FFS) documentation as required to support writing comprehensive interim action Proposed Plans for each Reactor Area (e.g., expand FFS to address "low priority" sites, etc.).
- Write a Reactor Area interim action ROD for 100-BC to pick up all sites not addressed in the first ROD.
- Using the RODs for 100-BC as a basis, write Reactor Area interim action RODs for the remaining Reactor Areas. (The groundwater OU at each Reactor Area would be addressed individually.)

### PROPOSED ROD STRATEGY

The following paragraphs describe the strategy in greater detail with emphasis on near term activities.

- (1) Consistent with current plans, obtain an interim action ROD for liquid waste disposal sites at the 100-BC-1, 100-DR-1, and 100-HR-1 source OUs and begin remediation of 100-BC-1 sites addressed in the ROD. This will:
  - Expedite cleanup at 100-BC in accordance with the project baseline.
  - Allow flexibility to address sites at the other two reactor areas, as logistics dictate.
  - Provide time to prepare documentation for subsequent interim action RODs (described below) that incorporate the lessons learned from initial remedial actions.

Note that this interim action ROD cannot address complete remediation of the vadose zone for the initial source OUs because no interim action RODs exist for the corresponding groundwater OUs. Obtaining this groundwater ROD should, therefore, be the next priority.

- (2) Obtain an interim action ROD for the 100-BC-5 groundwater OU. The ROD will articulate remediation goals for groundwater as well as vadose zone remediation goals related to protection of groundwater (as required). Groundwater and vadose zone remediation goals will be defined by determining/considering:

- Protection of the Columbia River
- Future uses of groundwater (if any) and associated exposure scenarios/ARARs

Once an interim action ROD is signed for the 100-BC-5 OU, final remediation of the "source" units in the initial ROD can be completed (i.e., for the liquid waste sites in the 100-BC-1 OU).

- (3) Obtain an interim action ROD for the balance of waste sites at the 100-BC Reactor Area by taking the following steps:
  - Revise the source operable unit FFS "process document" to address **all** types of sites within the 100 Area (i.e., not just high priority sites). This will streamline the process for other Reactor Area RODs by reducing the need for additional documentation.

- Complete a Reactor Area-specific Limited Field Investigation/FFS and Proposed Plan addressing all sites that fall within the 100-BC Reactor Area (i.e., all the waste sites not addressed in the initial interim action ROD).
- Write an interim action ROD for all sites within 100-BC Reactor Area (i.e., all the waste sites not addressed in the initial interim action ROD).

The goal will be to have this interim action ROD completed in time to ensure continuation of 100-BC remedial actions begun under the initial ROD.

- (4) Obtain interim action RODs for the remaining Reactor Areas in time to ensure continuity of remedial action in the 100 Area. Several points:

- The Tri-Parties could write interim action ROD(s) for:
  - each Reactor Area
  - combinations of Reactor Areas
  - all remaining Reactor Areas

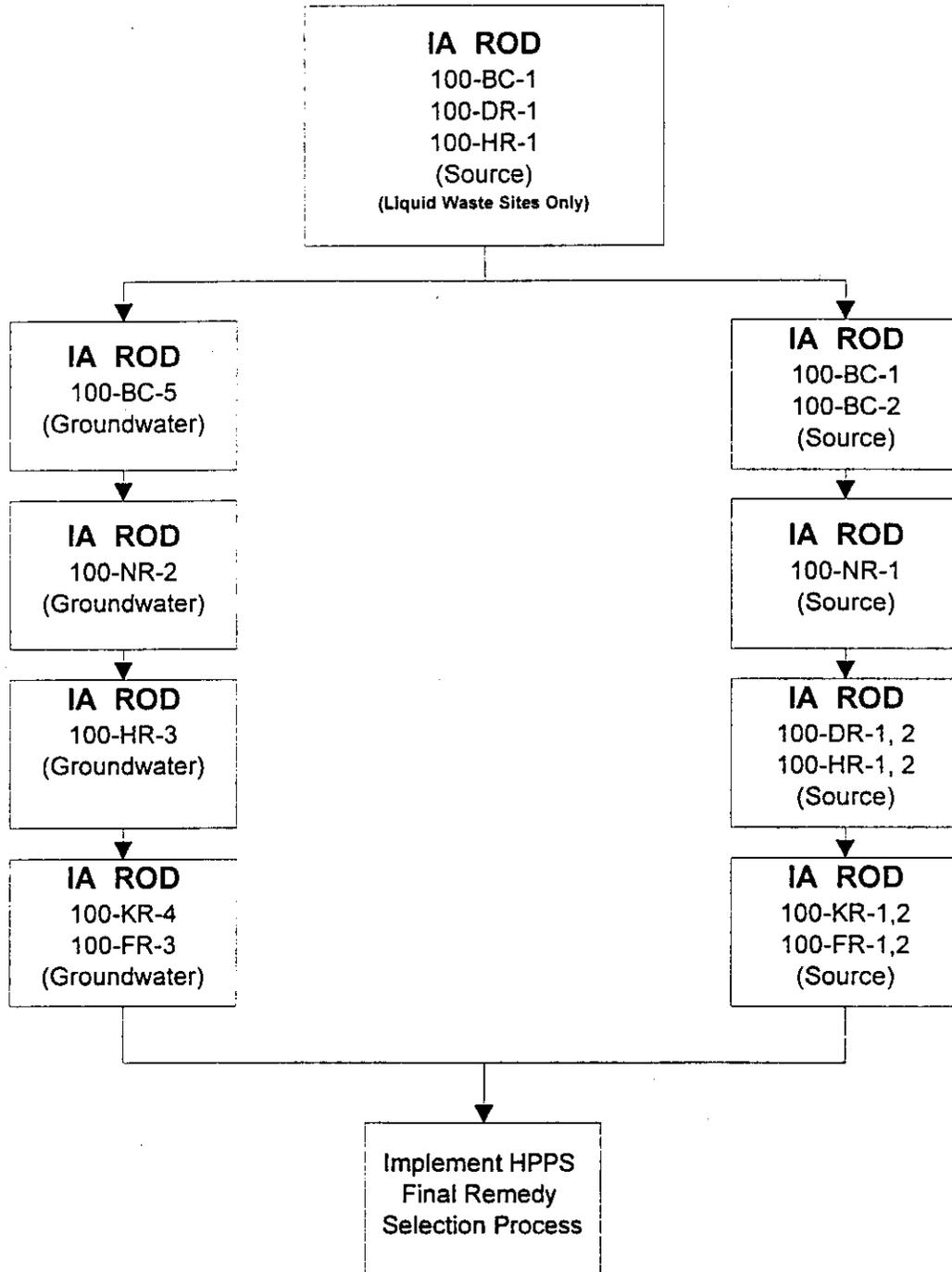
For the present, it is proposed that one interim action ROD would be written for 100-NR, one for 100-DR and 100-HR (since they "share" a common groundwater OU and remedial actions are currently projected to begin within two years of each other<sup>1</sup>) and one for 100-KR and 100-FR.

- Source unit Proposed Plans for each Reactor Area would be prepared using principles similar to the "presumptive remedy" approach developed by EPA (i.e., alternatives would be recommended based on the decisions made in the interim action RODs for 100-BC). Because the FFS "process document" and 100-BC FFS documents will generally address all types of waste sites found across the 100 Area, the FFSs for other Reactor Areas could be significantly streamlined (or even eliminated).
- For each Reactor Area, the groundwater interim action ROD should precede or coincide with the source interim action ROD. For the present, it is assumed that separate groundwater and source OU interim action RODs would be prepared for each Reactor Area (or combinations thereof).

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<sup>1</sup>Note: The current revision (in process) of the baseline shows major remediation starting at 100-NR in 1999, 100-DR in 2000, 100-HR in 2002, 100-FR in 2005, and at 100-KR in 2008.

# 100 AREA REMEDIAL ACTION ROD STRATEGY



Note: IA ROD = Interim Action Record of Decision  
HPPS = Hanford Past Practice Strategy