

**START**

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Final

**Meeting Minutes Transmittal/Approval**  
**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units**  
**2440 Stevens Center, Room 1200, Richland, Washington**  
**April 20, 1995**

FROM/APPROVAL: *Nancy Werdel* Date 5/18/95  
 Nancy Werdel, 100 Area Unit Manager, RL (H4-83)

APPROVAL: *Phil Staats* Date 5/18/95  
 Phil Staats, 100 Aggregate Area Unit Manager, WA Dept of Ecology (B5-18)

APPROVAL: *Dennis Faulk* Date 5-18-95  
 Dennis Faulk, 100 Aggregate Area Unit Manager, EPA (B5-01)

Meeting Minutes are attached. Minutes are comprised of the following:

- Attachment #1 - Meeting Summary
- Attachment #2 - Attendance Record
- Attachment #3 - Agenda
- Attachment #4 - Action Item Status List
- Attachment #5 - April Unit Manager's Meeting 100 Area Status Package
- Attachment #6 - Change Order C-95-01
- Attachment #7 - Change Order M-15-95-02B



Prepared by: *Stephanie Johansen* Date: 5-18-95  
 Amoret Bunn, Stephanie Johansen, GSSC (B1-42)

Concurrence by: *Greg Eidam* Date: 5/18/95  
 Greg Eidam, BHI 100 Area Manager (H4-91)

**Attachment #1  
Meeting and Summary of Commitments and Agreements**

**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units  
April 20, 1995**

1. **SIGNING OF THE MARCH 100 AREA UNIT MANAGER'S MEETING MINUTES** - The minutes for March were reviewed and approved.
2. **ACTION ITEM UPDATE:** (See Attachment 4 for complete status, items listed below indicate the update to Action Items made during the meeting):

IAAMS.22    Open.

3. **NEW ACTION ITEMS:**

None.

4. **100 AREA ACTIVITIES:**

- Questions and Answers: Unit managers received the status packages (see Attachment #5) with general information on the 100 Areas Operable Units prior to the April 20, 1995 Unit Manager Meeting. There were no further questions regarding the status package.
- ROD Strategy Discussion: Nancy Werdel announced that two change requests have been submitted by DOE (Attachments #6 and #7). Larry Gadbois stated that EPA is not in agreement with the strategy of combining all the waste sites into a small number of Records of Decision (RODs) and then delaying action. Larry Gadbois stated that EPA is currently examining the ramifications of converting RCRA past practice units to CERCLA past practice units.

Dennis Faulk expressed dissatisfaction with DOE's approach to handling the change requests. Dennis Faulk stated that it is preferable to present change requests to Unit Managers prior to presenting them to Project Managers. Nancy Werdel replied that it had been agreed between Phil Staats, Kevin Oates, and Nancy Werdel that the current strategy for RODs was not effective, and that a change was necessary. The change requests arose out of that agreement. Dennis Faulk pointed out that he is the EPA's point of contact for the 100 Areas.

Nancy Werdel stated that the new strategy was brought up at the Project Manager meetings in February and March, but the Project Managers were not interested in discussing a new ROD strategy until the proposed plans had been submitted. It was necessary to submit the change request in April due to the impending milestones at the end of April. Nancy Werdel stated that DOE had distributed a strategy document to the regulators, and no comments were received. Dennis Faulk stated that he did not receive the strategy, and consequently could not comment on it. Dennis Faulk stated that in general EPA supports the concept of limiting the number of RODs,

but the dates do not meet their expectations. The dates need to be discussed.

Larry Gadbois reiterated that EPA is supportive of streamlining documentation, but is opposed to delays in the process as a whole. Dennis Faulk requested that DOE commit to informing Unit Managers prior to sending out signed change packages. Nancy Werdel agreed to copy Unit Managers on CCMail pertaining to change requests.

- Change Request M-15-95-02B: Nancy Werdel stated that the remaining sites not handled in the first ROD include all BC-2 sites as well as the "low priority" sites in BC-1. The new Focused Feasibility Study/Limited Field Investigation (FFS/LFI) documentation will include the normal components of an LFI without additional sampling. Dennis Faulk pointed out that the FFS and Proposed Plan for BC-2 are due in June 1995. Dennis Faulk stated that these sites could be handled in a letter report type of document, and that June 1995 is a reasonable deadline for a document of that type. Nancy Werdel stated that the current budget situation forces us to make choices; the current priority is to get out in the field and begin remediation, and the financial situation does not allow us to proceed on BC-1 remediation and complete BC-2 documentation simultaneously.

Dennis Faulk stated that he had heard that in 200-ZP-2, \$100,000 is being spent to do characterization work that is not milestone-driven. Nancy Werdel agreed to verify if this is correct.

Greg Eidam stated that DOE does not want to sign a ROD for BC-2 due to the 15 month requirement to make "substantive effort." Dennis Faulk agreed that trade-offs may be necessary, but DOE needs to demonstrate that they are limited by funding. EPA believes that the current remediation cost estimates are not realistic, and believes that DOE can continue documentation while beginning field activities. Nancy Werdel stated that in order to begin field activities, money had to be taken from lower priority documentation projects and the associated milestones had to be postponed.

Dennis Faulk stated that the public will not be supportive of a schedule that postpones future work. Mike Thompson stated that Roger Stanley and Doug Sherwood seem to be concerned that the change packages do not show tangible benefits.

It was agreed to hold a meeting on Tuesday, 4/25/95 at 1 p.m. to discuss these issues. Greg Eidam will arrange for a room and notify participants. Issues to be discussed include: applicability of April, May, June, and July milestones and whether or not DOE will be released from meeting these milestones and cost issues related to prioritization of documentation and field work.

- 100-HR-1 Proposed Plan: Nancy Werdel stated that EPA had forwarded a draft of the 100-HR-1 Proposed Plan to DOE. The following major concerns

are unresolved:

1. The language regarding "Variance" vs. "Waiver." Patrick Willison will discuss this with Andy Boyd.
2. The box which states "EPA and Ecology believe assumptions relied upon in developing the preliminary cost estimates for the cleanups have resulted in estimates that are significantly too high. The TriParties are working together to implement a series of early cleanups this summer in the 100 BC Area to address a number of concerns relating to cleanup, including the establishment of actual costs." Nancy Werdel stated that if such a statement is necessary, DOE should be included with EPA and Ecology as making the statement. Dennis Faulk concurred. Mike Thompson suggested that another option is to state that there is large uncertainty in the cost estimates.
3. For the section concerning Evaluation of Potential Environmental Impacts, DOE has added NEPA language similar to that used for ERDF. Dennis Faulk suggested creating a NEPA roadmap similar to that used for ERDF. Joan Woolard stated that the NEPA section of the FFS is sufficient and an additional document is unnecessary. The purpose of the section in the proposed plan is to summarize the NEPA evaluation that was conducted in the FFS. Dennis Faulk concurred, with the requirement that NEPA be referred to in the FFS. Joan Woolard asked the regulators what specifically was the issue with the Evaluation of Potential Environmental Impacts section provided by RL. Concerns and potential changes were discussed. It was suggested that the paragraph provided by RL could be utilized with minor changes.

Nancy Werdel stated that the schedule for the HR-1 Proposed Plan will be finalized when Kevin Oates returns Wednesday, April 26. Dennis Faulk requested that DOE submit the proposed plan so that it can be signed on Wednesday, April 26. Nancy Werdel stated that the BC-1 and DR-1 proposed plans are also being finalized. Nancy Werdel will provide revisions for all the proposed plans by Tuesday or Wednesday, April 25 or 26. This submittal will be a final check prior to formal issuance of the proposed plans by DOE. Nancy Werdel stated that as soon as EPA and Ecology have concurred with the proposed plans, they will be formally transmitted to both the regulatory agencies and the tribes, and a meeting with the tribes will be scheduled.

DOE will finalize the FFS after the proposed plans are submitted. Dennis Faulk stated that the regulators will discuss their FFS strategy soon. Nancy Werdel requested that the regulators submit comments on the FFS by April 28. After ERC and DOE comments have been incorporated, an electronic version of the FFS will be submitted to Phil Staats and Kevin Oates, who will do a redline/strikeout version. It will take at least three weeks after this redline/strikeout version is received to complete

final editing and make the document available for public review. The target date for public review is June 15, 1995. Dennis Faulk and Larry Gadbois stated that they need to discuss this schedule with their coworkers because they would like the FFS to be available sooner. Dennis Faulk will respond to DOE by Monday, April 24 with the regulators' preferred path for the FFS. DOE will transmit draft public involvement focus sheets to the regulators on Friday, April 21.

- Treatability Studies: Mark Sturges is the new task lead for the treatability test reports. The report for the 118-B-1 Excavation treatability test will be transmitted to the regulators on May 1, 1995. The soil washing report will be transmitted on June 15, 1995.
- Demonstration Project Strategy: Dennis Faulk stated that the regulators are concerned about public involvement issues for the demonstration project. EPA recommends doing an Engineering Evaluation/Cost Analysis (EE/CA). This strategy has been applied previously with the North Slope Expedited Response Action (ERA). This approach will allow incorporation of public comment into the process. This will be discussed further at the B/C-1 Demonstration Project SAFER meetings.
- FR-1 Focused Feasibility Study Status: This agenda item was withdrawn.

**5. NEXT MEETINGS:** The next meetings are scheduled for:

May 18, 1995  
June 22, 1995  
July 20, 1995  
August 23, 1995  
September 21, 1995

100 Aggregate Area Unit Manager's Meeting  
 Official Attendance Record  
 April 19, 1995

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Stephanie Johansen	GSSC/Dames+Moore	Support For RL	946-3693
Amoret Bunn	GSSC/Dames+Moore	Support for RL	946-3695
Larry Godbois	EPA	UM	376-9884
K. Michael Thompson	DOE	UM	373-0750
Ralph Wilson	ERC-CH2M	100 Area	375-7402
Lynn Coleman	Ecology	Support	360 407 7194
David Holland	Ecology	UM	736-3027
Greg Eidam	ERC	PM/100 Area	375-4650
R. SCOTT HAJNER	ERC	TPA PM	2-9410
DENNIS FAULK	EPA	UM	376-8631
Nancy Werdel	DOE	DOE	376-5500
Arlene Tortoso	DOE	100 F, K, D & H Mgr.	373-9631
Chuck Hedel	ERC	100 H Tasklead	372-9613
Nicole Kimball	DOE	BC / Treat.	376-4670
ROBERT W. SCHECK	GSSC/DAMES+MOORE	100 Area Support	946-3688
Alan D. Krug	ERC	100 FIK	372-9567
JOAN WOOLARD	ERC	100 Area Remedial Action	372-9649
Mark Sturges	ERC	Treatability Task Lead.	372-9570
John April	ERC	BC Demo Project	372-9590
Richard Biggerstaff	ERC	BC, K, H, & F Groundwater	372 9572
Suzanne Clarke	PA/D/DOE	observer	

Attachment #3  
Agenda

Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units  
April 20, 1995

1:30 - 4:00, 100 Area

1:30 - 2:15, ROD Discussion - N. Werdel/A. Tortoso/G. Eidam

- \* Status
- \* Change Request M-15-95-02B

2:15 - 2:30, Treatability Studies - Mark Sturges/John April

- \* Status

2:30 - 2:45, Designation of RCRA Past Practice Units to CERCLA Past Practice Units - Greg Eidam/Arlene Tortoso

- \* Change Request C-95-01

2:45 - 3:00, 100-FR-1 Focus Feasibility Study - A. Krug

- \* Status

3:00 - 3:30, Status Report - Questions/Answers - N. Werdel/A. Tortoso/G. Eidam

## Attachment #4

Action Items Status List  
CERCLA UNIT MANAGER'S MEETINGS  
April 20, 1995

PLEASE REVIEW THESE ACTION ITEMS. IF YOU FIND THAT ANY WITHIN YOUR OPERABLE UNITS ARE NO LONGER APPLICABLE &/OR HAVE BEEN CLOSED, PLEASE NOTIFY KAY KIMMEL ON 946-3692.

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ITEM NO.	ACTION/SOURCE OF ACTION	STATUS
1AAMS.22	Determine strategy (course of action) regarding interim actions at HR-3, FR-3 & KR-4, and how to get to a Record of Decision. Action: Mike Thompson. This strategy will be provided at the March 8 meeting with the regulators.	Open 02/16/95.

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STATUS PACKAGE

April Unit Managers Meeting

100-BC, 100-K, 100-D, 100-H and 100-F Areas

## Treatability Studies

### Soil Washing Treatability Study

During this reporting period work continued on the Soil Washing Treatability Study Report and all onsite and offsite laboratory data packages were received. Data validation on offsite soil samples should be completed by mid April 1995. Preliminary data was transmitted to DOE on March 31. The target date for draft report submittal is June 30th.

### 100 HR-3 Pump & Treat Study

During this reporting period the HR-3 Pump & Treat system automation was installed. Automation system testing was initiated on March 16 and was completed on March 23. Operations requirements will be reduced by fifty percent by the first week in April 1995.

As of the end of this reporting period approximately 1.2 million gallons of groundwater has been treated resulting in 5.66 Kilo grams of chromium removed.

### 118-B-1 Excavation Treatability Study

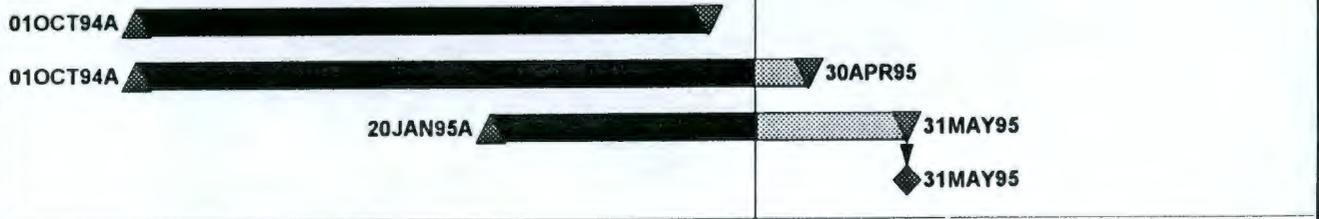
The draft Excavation Treatability Study Test Report was submitted to DOE on March 21. A meeting was held on March 27 between the DOE, ERC and Mactec team members to discuss initial impressions and comments on the report. The report was written well with comments focusing more on how the document can best be utilized by end users. A formal comment resolution meeting is scheduled for April 4, 1995. Draft report submittal to Regulators is scheduled for May 1, 1995.

**100-AREA TREATABILITY**

Project Lead - John April

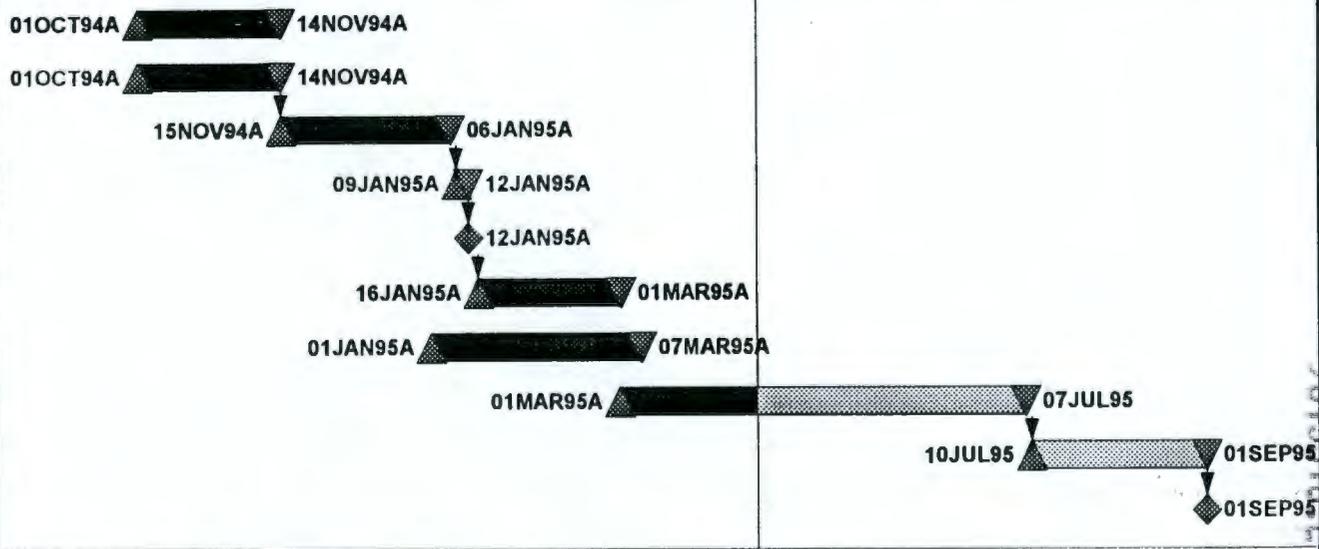
**115-1-B Excavation Treatability Test**

CONDUCT EXCAVATION	100
SAMPLING AND ANALYSIS	92
PREPARE REPORT	64
M-15-16C SUBMIT 100-B BURIAL GROUND WORK RPT	0



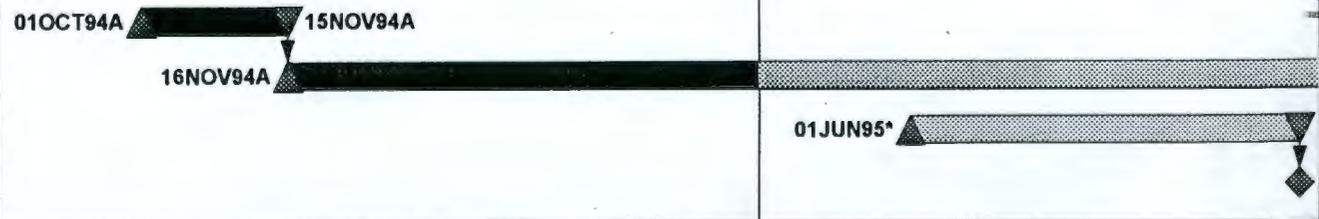
**100-DR-1 Soil Washing Test**

EQUIPMENT PROCUREMENT / INSTALLATION	100
PLANS / PROCEDURES / PERMITS	100
INITIATE SHAKE DOWN TEST	100
CONDUCT TREATABILITY TEST	100
M-15-07B COMPLETE TREATABILITY TEST	100
SECURE FACILITY	100
LABORATORY ANALYSIS	100
REPORT PREPARATION	34
REVIEW AND REVISION	0
SUBMIT REPORT TO EPA/ECOLOGY	0



**100-HR-3 Pump & Treat Treatability**

PHASE 1 TESTING / WINTERIZATION	100
PHASE 2 TESTING	40
PREPARE REPORT	0
SUBMIT REPORT TO EPA/ECOLOGY	0



Project Start	01OCT94	▲	Early Bar
Project Finish	30DEC95	▲	Progress Bar
Date Date	14APR95		
Plot Date	13APR95		

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 FY 1995 Unit Managers Meeting  
 March 1995

Date	Revision	Checked	Approved

9513716 2191 #5/ Page 3 of 12

**100-BC Operable Units**

**100-BC-1.** The 100-BC-1 FFS and 100-BC-1 PP were updated to incorporate ERC comments and are expected to be finalized by April 20, 1995. The documents were sent to the DOE-RL and the regulatory agencies for concurrent review. Comment due March 30, 1995 have not yet been received. This delay is anticipated to affect the final release date..

The ERC review for the remedial design/remedial action strategy has been completed and is being finalized for concurrent DOE-RL and regulatory agency review. The waste site prioritization strategy for remedial design and action was transmitted to the DOE-RL for review on March 31, 1995. The first of bi-weekly status meetings with the DOE-RL and the regulatory agencies has been scheduled for the week of April 11, 1995 to discuss remedial design activities. These status meetings will provide an opportunity for the DOE-RL and regulatory agencies to have early input into the tasks.

The ERC proposal to begin a treatability study was approved by the DOE-RL on March 23, 1995. The treatability study will evaluate remedial action subsystems at 100-BC-1 OU high priority waste sites. The remediation goals identified in the 100-BC-1 PP will be used to ensure that contaminated materials are adequately removed from the waste sites during the treatability study. A DOE-RL and regulatory agency streamlined approach for environmental remediation (SAFER) workshop is scheduled for April 11, 1995 to define the objectives for the treatability study.

**100-BC-2.** The 100-BC-2 OU FFS has been placed on hold pending format and content decisions for the 100-BC-1, 100-DR-1, and 100-HR-1 Operable Unit FFS. The 100-BC-2 PP will be started following the FFS.

Activity description	Percent complete	1994				1995								
		A	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG

**100-BC-1 OU**

**Project Lead - Roberta Day**

**Focused Feasibility Study**

DOE REVIEW / COMMENT / BHI INCORPORATION	100
M-15-08D SUBMIT FFS REPORT TO EPA/ECOLOGY	100



**IRM Proposed Plan**

DOE REVIEW / COMMENT / BHI INCORPORATION	100
SUBMIT IRM PROPOSED PLAN WITH FFS REPORT	100

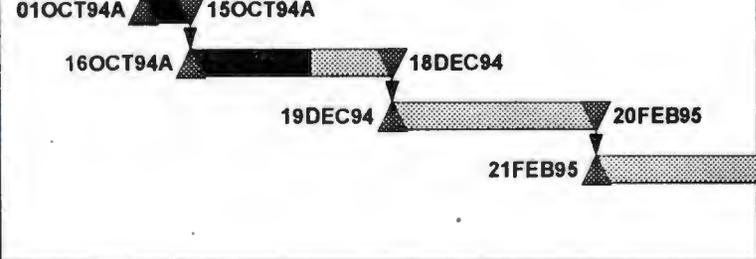


**100-BC-2 OU**

**Project Lead - Roberta Day**

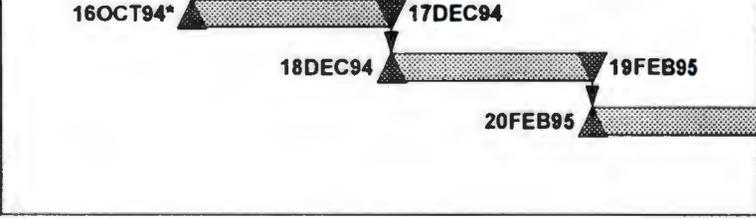
**Focused Feasibility Study**

CONDUCT FOCUSED FEASIBILITY STUDY	100
PREPARE FOCUSED FEASIBILITY STUDY REPORT	60
BHI REVIEW AND INCORPORATION	0
DOE REVIEW / BHI INCORPORATION	0
M-15-16D SUBMIT FFS REPORT TO EPA/ECOLOGY	0



**IRM Proposed Plan**

PREPARE IRM PROPOSED PLAN	0
BHI REVIEW AND INCORPORATION	0
DOE REVIEW / BHI INCORPORATION	0
M-15-16F SUBMIT IRM PROPOSED PLAN TO EPA/ECO	0



1994		1995												
A	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	O

Project Start	01OCT94
Project Finish	27DEC98
Date Date	14APR98
Plot Date	13APR98



LR823

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 FY 1995 Unit Managers Meeting  
 March 1995

Sheet 1 of 1

Date	Revision	Checked	Approved

9513316.2193 #5/Page 5 of 12

## D Area

The 100-DR Area Baseline Summary and 100-DR Area Baseline Estimate were completed in March. These documents outline the scope and budget requirements to close out remediation of the 100-DR Area by FY 2018.

100-DR-1. Completed the Focused Feasibility Study Document package (Process Document, Sensitivity Analysis, 100-BC-1, 100-HR-1 and 100-DR-1) and distributed for concurrent review by ERC, RL, EPA, and Ecology. The 100-DR-1 Proposed Plan was revised to reflect the current status of the template (100-HR-1) and submitted to the regulatory agencies. This document will be finalized once negotiations on the 100-HR-1 Proposed Plan are completed.

100-DR-2. The public review cycle for the 100-DR-2 Work Plan has been completed. No comments were received. Comments on the 100-DR-2 LFI have been received from Ecology and efforts are under way to resolve the comments. The TPA target date of May 1, 1995 for re-submittal of the final work plan with the revised LFI as an addendum will need to be extended.

The 100-DR-2 FFS and Proposed Plan has been placed on hold pending resolution of the 100 Area source ROD strategy.

100-HR Operable Units

The 100-HR Area Baseline Summary and 100-HR Baseline Estimate were completed in March. These documents outline the scope and budget requirements to close out remediation of the 100 HR Area by FY 2018.

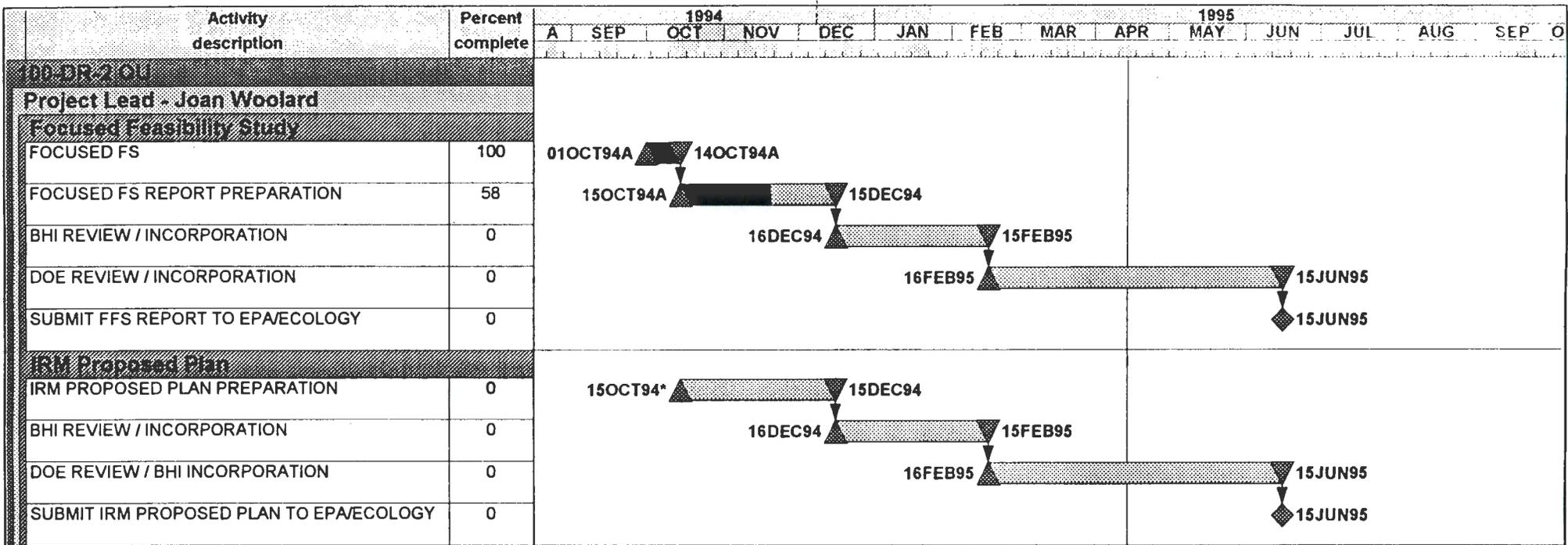
100-HR-1. Agreement was reached in late February among the Tri-Parties to use MTCA and the EPA's proposed 15 mrem/year radiation exposure limit as interim cleanup goals for use in finalizing the 100-HR-1 FFS and PP. These interim cleanup goals generally equate to a residential land use exposure scenario. Based on this direction, the 100-HR-1 PP was revised with input from DOE and the regulators, and then submitted as Rev. 0 to the regulators at the end of March. Plans call for revisions to the 100 Area Source FFS Report and its appendices (which, among other reports, includes the FFS report for 100-HR-1) to incorporate the new information during April.

100-HR-2. The 100-HR-2 LFI/QRA Report, DOE/RL-94-53, Draft A, remains in regulatory review. Comments are expected during April 1995.

The FFS and PP were submitted to the regulators at the end of January.

100-IU-4 and 100-IU-5. DOE approval of carryover funds was received in February to allow ERC staff to resume completion of PPs for independent units IU-4 (Sodium Dichromate Barrel Disposal Landfill) and IU-5 (White Bluffs Pickling Acid Cribs). These documents are being revised for submittal to DOE in April.

Remedial design activities were initiated in conjunction with the 100-BC and 100-DR Areas. The first 100-HR Area site being addressed is the 116-H-1 process effluent trench.



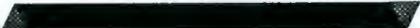
9513316-2195 #5/Page 7 of 12



Project Start	01OCT94		Early Bar
Project Finish	27DEC95		Progress Bar
Date Data	14APR95		
Plot Date	13APR95		

**Bechtel Hanford Inc.**  
**FY 1995 Unit Managers Meeting**  
**March 1995**

Date	Revision	Checked	Approved

Activity description	Percent complete	1994					1995								
		A	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
<b>100-HR-2 OU</b>															
<b>Project Lead Chuck Hedel</b>															
<b>Focused Feasibility Study</b>															
DOE REVIEW / BHI INCORPORATION	100	01OCT94A  31JAN95A													
M-15-18B SUBMIT FFS REPORT TO EPA/ECOLOGY	100	31JAN95A 													
<b>IRM Proposed Plan</b>															
DOE REVIEW / BHI INCORPORATION	100	01OCT94A  31JAN95A													
M-15-18C SUBMIT IRM PROPOSED PLAN TO EPA/ECOLOGY	100	31JAN95A 													

9513316-2196 #5/Page 8 of 12

A	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	O
1994 <span style="float: right;">1995</span>														

Project Start	01OCT94		Early Bar
Project Finish	31DEC95		Progress Bar
Date Date	14APR95		
Plot Date	13APR95		

**Bechtel Hanford Inc.**  
**FY 1995 Unit Managers Meeting**  
**March 1995**

Date	Revision	Checked	Approved

## K AREA

- The 100-KR Area Baseline Summary and 100-KR Baseline Estimate were completed in March. These documents outline the scope and budget requirements to close out remediation of the 100 KR Area by FY 2018.
- The 100-KR-1 Focused Feasibility Study was delivered to DOE on November 17, 1994, partially fulfilling the requirements of Milestone M-15-10C. Regulator comments on this FFS were received in late January. Further work on this FFS has been halted, pending resolution of the 100-HR-1 FFS.
- 100-KR-1 IRM Proposed Plan - Work on the PP has been resumed to meet the April 30, 1995 milestone.
- 100-KR-2 Planning - Public review of the 100-KR-2 Focus Package was completed on March 31, 1995. No significant comments were received.

A DQO session was held to discuss field activities in 100-KR-2. Non-intrusive field activities have been initiated.

## F AREA

- The 100-FR Area Baseline Summary and 100-FR Baseline Estimate were completed in March. These documents outline the scope and budget requirements to close out remediation of the 100 FR Area by FY 2018.
- 100-FR-1 IRM Proposed Plan - Work on the PP has been halted, pending ongoing discussions with DOE and the Regulators.
- 100-FR-1 FFS - The FFS has undergone ERC review and dispositions prepared, but not incorporated. Further work on the FFS has stopped, pending ongoing discussions with DOE and the Regulators.
- 100-FR-1 LFI/QRA - Regulator comments on the 100-FR-1 LFI/QRA were received in early March. Work is underway to resolve the comments.
- 100-FR-2 Work Plan - An DOE/Regulator site walkover for the 100-FR-2 Operable Unit was conducted on January 19, 1995. In subsequent meetings, it was agreed to follow the streamline process adopted for the 100-KR-2 Operable Unit. A Focus Package was completed and submitted for DOE/RL and Regulator review on March 14, 1995.

A DQO session was held to discuss field activities for 100-FR-2 sites and was completed. Non-intrusive field activities have been initiated.

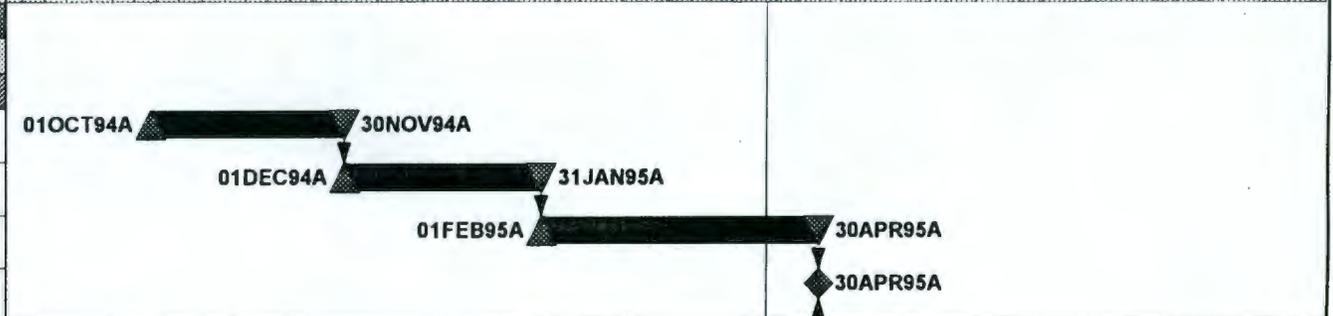
Activity description	Percent complete	1994				1995						
		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL

**100-KR-1 OU**

**Project Lead - Alan Krug**

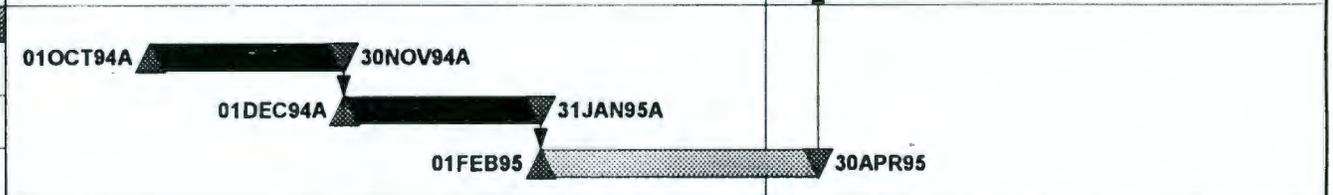
**Focused Feasibility Study**

FOCUSED FEASIBILITY STUDY REPORT PREPARATION	100
BHI REVIEW AND INCORPORATION	100
DOE REVIEW / BHI INCORPORATION	100
M-15-10C SUBMIT 100-KR-1 FFS & IRM PROPOSED PLAN	100



**IRM Proposed Plan**

PREPARE IRM PROPOSED PLAN	100
BHI REVIEW AND INCORPORATION	100
DOE REVIEW / BHI INCORPORATION	0

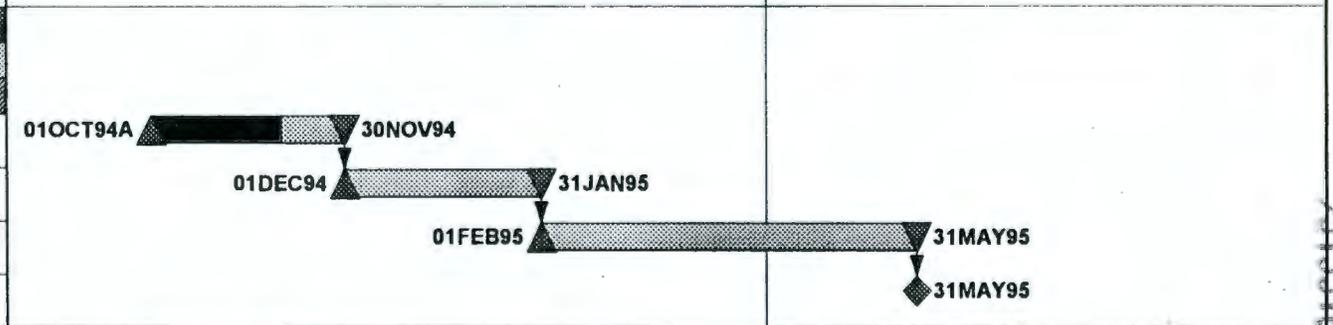


**100-FR-1 OU**

**Project Lead - Alan Krug**

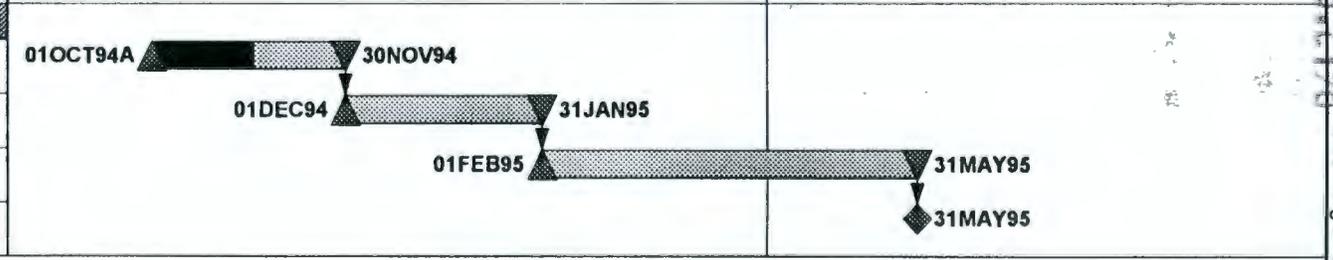
**Focused Feasibility Study**

BHI PREPARE FFS REPORT	68
BHI REVIEW / INCORPORATION	0
DOE REVIEW /BHI INCORPORATION	0
M-15-13C SUBMIT FFS REPORT TO EPA/ECOLOGY	0



**IRM Proposed Plan**

BHI PREPARE IRM PROPOSED PLAN	53
BHI REVIEW / INCORPORATION	0
DOE REVIEW / BHI INCORPORATION	0
M-15-13D SUBMIT IRM PROPOSED PLAN TO EPA/ECO	0



1994				1995								
SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

Project Start	01OCT94		Legend
Project Finish	27DEC94		
Date Data	14APR95		
Plot Date	13APR95		

Bechtel Hanford Inc.  
FY 1995 Unit Managers Meeting  
March 1995

Sheet 1 of 1		Date	Revision	Checked	Approved

9513316-2198 #5/Page 10 of 12

## Ground Water

100-BC-5, 100-FR-3, 100-HR-3 AND 100-KR4 OU's

100-BC-5, HR-3 &amp; KR-4

The Focused Feasibility Studies (FFS) and IRM Proposed Plans are on hold per the DOE and regulator request to enable these entities to focus on the source area FFSs and Proposed Plans.

100-HR-3

Sampling of interstitial water from riverbed sediment has been completed at 17 transect locations (2 sites per transect) along the 100-H Area. The samples are being analyzed for chromium, a contaminant of concern in the 100 Areas, to determine the exposure levels in riverbed gravels that are used by chinook salmon for spawning.

100-FR-3

Soil gas equipment has been used during multiple trips to the field in an attempt to locate TCE upgradient of the OU. Low levels of TCE have been found but work to date has not been able to discern the source. Cold and/or unstable weather has shut down further efforts at this time (cannot obtain reliable data). A data quality objectives review was conducted to help focus the TCE investigation process.

Plans for a supplementary LFI (TCE issue), including DQO, were presented to EPA and Ecology on March 23. A followup meeting for regulator comment resolution and approval of the Description of Work for field activities will be held in early April, with field activities scheduled to resume in April.

100-BC-5, HR-3, KR-4 and FR-3

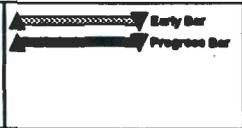
The groundwater baseline summary and baseline estimate were completed for the 100-BC-5, 100-KR-4, 100-HR-3 and 100-FR-3 operable units and incorporated into the reactor area reports.

Activity description	Percent complete	1994					1995									
		A	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	O
<b>00-BG-5 GROUNDWATER OIL</b>																
<b>Project Lead - Richard Biggerstaff</b>																
<b>Focused Feasibility Study</b>																
DOE REVIEW / BHI INCORPORATION	100			01OCT94A												
M-15-09C SUBMIT FFS REPORT TO EPA/ECOLGY	100															
<b>IRM Proposed Plan</b>																
DOE REVIEW / BHI INCORPORATION	100			01OCT94A												
M-15-09D SUBMIT IRM PROPOSED PLAN TO EPA/ECO	100															
<b>00-KP-5 GROUNDWATER OIL</b>																
<b>Project Lead - Richard Biggerstaff</b>																
<b>Focused Feasibility Study</b>																
DOE REVIEW / BHI INCORPORATE	100			01OCT94A												
M-15-11C SUBMIT FFS REPORT TO EPA/ECO	100															
DOE REVIEW / BHI INCORPORATION	100			01OCT94A												
M-15-11D SUBMIT IRM PROPOSED PLAN TO EPA/ECO	100															
<b>00-FE-3 GROUNDWATER OIL</b>																
<b>Project Lead - Richard Biggerstaff</b>																
<b>Focused Feasibility Study</b>																
DOE REVIEW / BHI INCORPORATION	100			01OCT94A												
M-15-13G SUBMIT FFS REPORT TO EPA/ECOLGY	100															
<b>IRM Proposed Plan</b>																
DOE REVIEW / BHI INCORPORATION	100			01OCT94A												
M-15-13H SUBMIT IRM PROPOSED PLAN TO EPA/ECOLGY	100															

SEP 24 1994 #5/Page 12 of 12

1994												1995				
A	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	O		

Project Start 01OCT94  
 Project Finish 27DEC95  
 Data Date 14APR95  
 Plot Date 13APR95



USPM

Bechtel Hanford Inc.  
 FY 1995 Unit Managers Meeting  
 March 1995

Sheet 1 of 1

Date	Revision	Checked	Approved

Change Number  C-95-01	<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 03/30/95
Originator Julie Erickson		Phone 376-3603
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Project Manager <input type="checkbox"/> III - Unit Manager		
Change Title Redesignation of 100-HR-1 and 100-DR-1 Operable Units (OUs) from RCRA Units to CERCLA Past Practice Units.		
Description/Justification of Change This redesignation of 100-HR-1 and 100-DR-1 OUs from Resource Conservation and Recovery Act Past Practices (RPP) Units to a Comprehensive Environmental Response, Compensation, and Liability Act Past Practice (CPP) Units will facilitate disposal of waste in the Environmental Restoration Disposal Facility (ERDF) in conjunction with the accelerated cleanup adjacent to the Columbia River.  In addition, the documentation to date supports this decision. The milestone M-15-05C, M-15-15D, M-15-07C and M-15-17D identified in the Tri-Party Agreement, Fourth Amendment, January 1994, calls for the CPP documentation on these previously identified RPP units. This change will establish consistency with the regulatory documentation specified in Appendix D of the Tri-Party Agreement. The Tri-Party Agreement Action Plan discusses designation of the operable units. Redesignation of units requires a Federal Facility Agreement and Consent Order Change Control Form.		
Impact of Change Reclassifying the 100-HR-1 OU and the 100-DR-1 OUs as CPP allows for disposition of waste into the ERDF. The 100-HR-1 Operable Unit and the 100-DR-1 OU are currently designated in Appendix C of the Action Plan as RCRA units. Any RCRA hazardous waste generated during the course of a RCRA corrective action at an RPP OU must be disposed of in a RCRA permitted unit. The ERDF will be designed, constructed, and operated to comply with the substantive requirements of the resource Conservation and recovery Act (RCRA). However, the ERDF has only been authorized for the receipt of CERCLA on-site wastes and obtaining a RCRA TSD permit for ERDF is neither required or planned. The lead regulatory responsibility will remain with the Washington State Department of Ecology for these operable units.		
Affected Documents  Hanford Federal Facility Agreement and Consent Order Action Plan, Appendix C		
Approvals		
_____ DOE	Date _____      ___ Approved      ___ Disapproved	
_____ EPA	Date _____      ___ Approved      ___ Disapproved	
_____ Ecology	Date _____      ___ Approved      ___ Disapproved	

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	_____ 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	Submit 100-BC reactor area PP. The PP will address all the waste sites addressed in the 100-BC reactor area FFS.	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	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.	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	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.	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

Attachment A  
Federal Facility Agreement and  
Consent Order Change Control Form  
Change Number M-15-02B

## 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.

Attachment A  
Federal Facility Agreement and  
Consent Order Change Control Form  
Change Number M-15-02B

- (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.

Attachment A  
 Federal Facility Agreement and  
 Consent Order Change Control Form  
 Change Number M-15-02B

- 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.

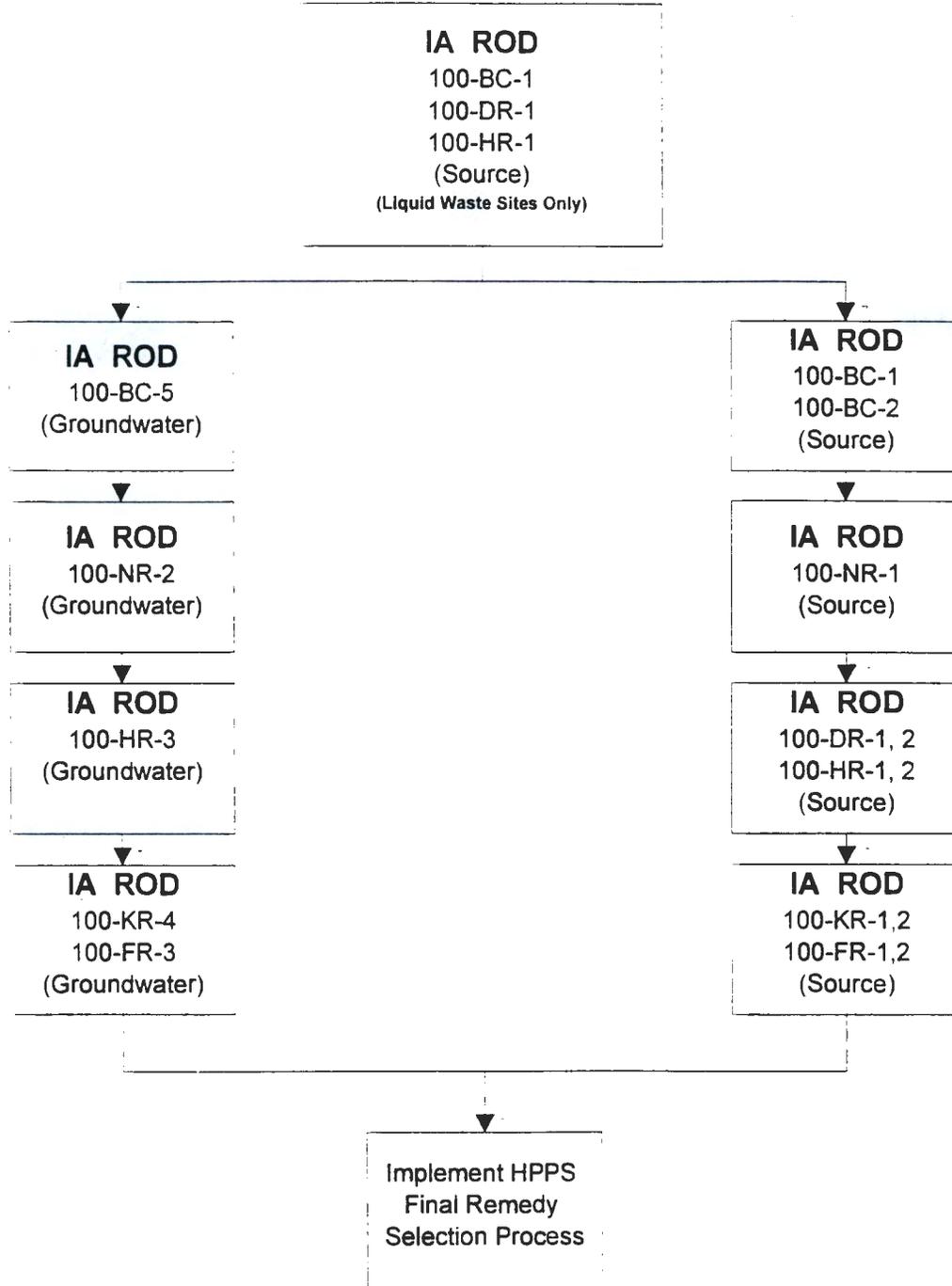
- Source unit Proposed Plans for each Reactor Area would be prepared using principles similar to the "presumptive remedy" approach developed by EPA (i.e., alternatives would be recommended based on the decisions made in the interim action RODs for 100-BC). Because the FFS "process document" and 100-BC 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.

Attachment A  
 Federal Facility Agreement and  
 Consent Order Change Control Form  
 Change Number M-15-02B

## 100 AREA REMEDIAL ACTION ROD STRATEGY



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

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**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units**  
**April 20, 1995**

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