

DISTRIBUTION
100K PROJECT MANAGERS MEETING MINUTES
May 13, 2010

DOE/RL

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EPA

Rod Lobos

B1-46

CHPRC

Reed Kaldor (original)

X4-01

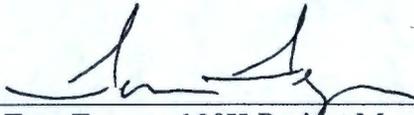
Administrative Record (2)H6-08

Correspondence Control

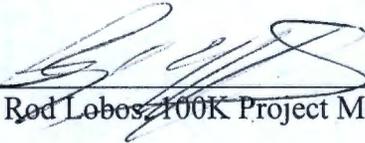
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M-016-140
M-016-53
M-016-143
M-015-116
M-093-22

Meeting Minutes Transmittal/Approval
100K Project Managers Meeting
May 13, 2010

APPROVAL: 
Tom Teynor, 100K Project Manager, DOE RL

Date: May 13, 2010

APPROVAL: 
Rod Lobos, 100K Project Manager, EPA

Date: May 13, 2010

HFFACO Action Plan Section 4.1 states that agreements and commitments resulting from the Project Managers meetings will be prepared and signed by all parties. Approval of these minutes documents approval of agreements and commitments documented in Attachments 2 and 3 to these minutes. Approvals does not apply to any other attachments. Any other attachments are provided for information purposes.

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Minutes of the 100K Project Managers meeting of May 13, 2010 are attached. Minutes are comprised of the following.

Attachment 1

Attendance Record

Attachment 2

Milestone Status Report with Agreements,
Commitments and Actions Identified

Attachment 3

Change Request Status with approved changes
signed off at meeting

100K Project Managers Meeting
May 13, 2010

Please print clearly and use black ink

Printed Name	Organization	Telephone
Roger Quintero	DOE-RL	373-0421
Tom Teyner	RL	376-6363
Jim Hawan	DOE-RL	373-9068
Ellen Sagan	DOE-RL ABC	376-3811
Reed Kaldor	CHPRC D+D	372-1992
MARK KEMNER	CHPRC	373-5353
Jon Blount	CHPRC	376 1798
Gary Franz	CHPRC	373-1095
Art Lee	CHPRC	372-1763
Kurt Kehler	CHPRC	438-3586
Lorna Dittmer	CHPRC	531-8877
Randy Havenor	CHPRC	551-9127
Dyan L Foss	PRC	438-2705
DOTIE NORMAN	CHPRC	205 8670
CHRIS BUZZETT	EPA	376-9529
Steve Balone	DOE-RL	376-0236
Rod Cobos	EPA	376-3749
John Winterhalter	CHPRC	373-2522
Dave Black	CHPRC	376-0740
David Watson	CHPRC	373-3250

ATTACHMENT 2

100K AREA PROJECT MANAGERS MEETING MILESTONE STATUS

May 13, 2010

M-016-140 Submit revised RD/RA Work Plans for 100 K Area RODs as primary document(s) per HFFACO11.6 with new proposed milestones including for the following:

- Complete removal of the K West Basin
- Complete removal of all sludge (includes container, settler tank sludge) from K West Basin except knock out pot contents
- Complete removal of knock out pot contents
- Complete treatment and packaging of first container of TRU sludge waste certifiable for disposal at WIPP
- Complete treatment and packaging of sludge for disposal at WIPP
- Begin 105-KW reactor interim safe storage
- Complete 105-KW reactor interim safe storage
- Initiate soil remediation under KW Basin
- Complete all interim response actions at the 100K Area.

Due 3/31/11, DOE Lead Roger Quintero

- The development of five RD/RA Work Plans has been identified to meet the requirements of this milestone. Three have been initiated to date: Removal of all Sludge and KOP contents from the K West Basin, Deactivation of the K West Basin, and Demolition/Removal of the K West Basin. The other two documents are being evaluated and will be initiated per the attached schedule to meet the milestone date of March 31, 2011.
- Completed the transfer of sludge from eight of the ten 105KW Basin settler tubes into Engineered Container (EC) 230. The sludge retrieval system is temporarily out of service. Fabrication of a new pump skid is in progress.
- Preliminary engineering, technology readiness and related testing for EC sludge removal is in progress to support completion of preliminary design in 2011.
- Contracts with technology vendors are being finalized to conduct proof of concept testing for EC sludge Phase 2 (treatment). Six sludge treatment technologies have been selected, four commercially-based and two concepts identified by the STP.
- Completed conceptual design for processing KOP material and started preliminary design and testing.
- Started planning for the pretreatment of KOP sludge involving size reduction and density separation (Fall 2010).
- Debris removal from the 105KW Basin continues with 610 debris units removed.
- Dose rate measurements on underwater debris in the KW Basin are being taken for disposition planning in addition to removing debris.

- Vacuuming basin floor and pit sludge is about to start in those areas not vacuumed as part of the previously completed TPA Milestone M-34-35b, and as necessary to support inspections for found fuel.
- Revision to the K Basin End Point Criteria document is being developed.

Schedule Status: On schedule to meet milestone.

Agreements, Commitments and Actions:

Action: RL to provide EPA a tour of the 105KW Basin at next opportunity. (Assigned at April 2010 PMM.)

Status: To be scheduled for the week of June 1 pending EPA schedule.

Action: RL to brief EPA on strategy for vacuuming sludge and for developing end point criteria revision. (Assigned at April 2010 PMM.)

Status: A white paper detailing the strategy is being drafted and will be presented to EPA by end of May 2010.

Action: RL to research CERCLA documentation for potential revision based on shifting D4 work from PBS RL-012 to PBS RL-041. (Assigned at May 2010 PMM.)

M-016-53 Complete the interim response actions for the 100 K Area within the perimeter boundary and to the river for Phase 1 actions. **Due 12/31/2012, DOE Lead Ellen Dagan**

- Asbestos abatement activities continued in 115KE in preparation for demolition.
- Continued planning for demolition of the 116KE Stack.
- Isolation activities continued for demolition of the 117KE Exhaust Air Filter building.
- Asbestos abatement continued in the 1706KE and 1706KER substructures in preparation for demolition.
- Demolition continued on the floor of the 183.2KW Sedimentation Basin.
- Demolition continued on the 183.3KW Filter Basin.
- Excavation and loadout was performed for wastes sites 100-K-47, 100-K-56, 100-K-71 and 116-K-53, 100-K-68, sites near 183.1KW (four RTD and six CSNA), and 100-K-102. A total of 1,026 containers for 16,411 tons of waste were shipped to ERDF during April 2010.
- Continued work planning for scabbling and procurement action on 105KE Fuel Storage Basin wall and remaining floor. Waste loading and shipping has been moved to other sites pending scabbling.
- Continuing closure documentation on six sites.
- Continued effort on reclassifying and/or initiating prime contract action on multiple sites.
- Determined staged soil and debris does not require treatment for disposal at ERDF. Began shipping waste from staging piles in early May.
- 1607-K3 Septic Tank failed confirmatory sample (actually in ESD to ROD as RTD). Wastes will require treatment due to leachable lead inventories.

Schedule Status: On schedule to meet milestone.

Agreements, Commitments and Actions:

Action: RL and CHPRC to develop technical paper on leaving tunnel floors in place. (Assigned at April 2010 PMM.)

Status: Complete. Technical paper prepared and provided to EPA.

EPA agreed to the justification leaving the 183.7 KW tunnel floors in place.

Action: RL to set up meeting to discuss revegetation and waste site close out. (Assigned at April 2010 PMM.)

Status: Meeting yet to be scheduled.

Action: RL to set up workshop to address potential additional sampling needs for borings and wells inside the perimeter fence. This will support groundwater and soil remediation needs. Check applicability to other milestones. (Assigned at April 2010 PMM.)

Status: Complete. Meeting conducted on April 22, 2010.

M-016-143 Complete the interim response actions for the 100 K Area within the perimeter boundary and to the river for Phase 2 actions. **Due 12/31/2015, DOE Lead Ellen Dagan**

- Continued with demolition of 182K Emergency Water Pump House. – removed motors.
- Completed demolition on the 183.6KW Lime Feeder Building.
- Demolished the 183.5KW Lime Feeder Building.
- Completed excavation work on 100-K-4 fish ponds. The demolition and load out of debris at the 100-K-4 waste site is complete. A total of 209 ERDF containers (2990 tons) were removed from the waste site. Verification sample instructions are approved and sampling is scheduled.
- Continued effort on reclassifying and/or initiating prime contract action on multiple sites.

Schedule Status: On schedule to meet milestone.

Agreements, Commitments and Actions:

None.

M-015-116 DOE will submit to EPA a Treatability Test Plan for hexavalent chromium bioremediation of vadose zone contamination at 100K. **Due 08/30/2010, DOE Steve Balone**

- A treatability test plan is being written to meet the milestone. A presentation to DOE and EPA was made that summarizes the approach and technology. DOE and EPA are working to coordinate reviews with stakeholders to expedite the review process.

- Waste site remediation continues to be tracked to monitor progress on the schedule. Currently, there is no delay to the proposed start of the test from current D&D and remediation work.
- Coordination with required utilities (water, electricity, access) is ongoing, but due to the changing physical nature of the site, final plans are tentative.

Schedule Status: On schedule to meet milestone..

Agreements, Commitments and Actions:

None.

M-093-22 Complete 105KE Reactor interim safe storage in accordance with remedial design/remedial action work plan. **Due 07/31/2014, DOE Lead Ellen Dagan**

- RL approved the FHC.
- CHPRC completed work documents and Hazard Review Board.
- Started core boring.
- Continuing with hazardous material removal activities.
- Continuing with preliminary design.

Schedule Status: On Schedule.

Agreements, Commitments and Actions:

None.

Activity ID	Activity Name	Start	Finish	% Complete	R-RESP-GLB	2010			2011		
						Q2	Q3	Q4	Q1	Q2	Q3
M-16-140		22-Mar-10 A	14-Sep-11								
1a Complete Deactivation of the KW Basin											
RAWP0705	KW Basin Deact RAWP - Prepare & transmit decisional draft RD/RA work plan to RL	22-Mar-10 A	17-Aug-10	5%	CHP- Dittmer, LM						
RAWP0770	KW Basin Deact RAWP - Prepare conceptual design & requirements	08-Apr-10 A	27-May-10	20%	CHP- Koch, MR						
RAWP0775	KW Basin Deact RAWP - Develop FES for submittal with decisional draft	29-Apr-10 A	14-Jun-10	20%	CHP- Hissong, TL						
RAWP0780	KW Basin Deact RAWP - Develop & approve end point criteria	03-May-10	09-Jun-10	20%	CHP- Watson, DJ						
RAWP0710	KW Basin Deact RAWP - RL review of decisional draft RD/RA work plan	18-Aug-10	01-Sep-10	0%	CHP- Dittmer, LM						
RAWP0715	KW Basin Deact RAWP - CH disposition & incorporate comments	02-Sep-10	10-Sep-10	0%	CHP- Dittmer, LM						
RAWP0720	KW Basin Deact RAWP - Prepare & transmit Draft A RD/RA work plan to RL	13-Sep-10	12-Oct-10	0%	CHP- Dittmer, LM						
RAWP0730	KW Basin Deact RAWP - RL transmit Draft A RD/RA work plan to Regulators	13-Oct-10	16-Nov-10	0%	CHP- Dittmer, LM						
RAWP0735	KW Basin Deact RAWP - Regulator review of Draft A RD/RA work plan	17-Nov-10	12-Jan-11	0%	CHP- Dittmer, LM						
RAWP0740	KW Basin Deact RAWP - Prepare & transmit Rev 0 RD/RA work plan to RL	13-Jan-11	15-Feb-11	0%	CHP- Dittmer, LM						
RAWP0745	KW Basin Deact RAWP - RL transmit Rev 0 RD/RA work plan to Regulators for appro...	16-Feb-11	03-Mar-11	0%	CHP- Dittmer, LM						
RAWP0750	KW Basin Deact RAWP - Regulator final check & approval of Rev 0 RD/RA work plan	07-Mar-11	07-Apr-11	0%	CHP- Dittmer, LM						
RAWP0755	KW Basin Deact RAWP - CH disposition & incorporate comments & transmit to RL	08-Apr-11	14-Apr-11	0%	CHP- Dittmer, LM						
RAWP0760	KW Basin Deact RAWP - Issue approved Rev 0 RD/RA work plan	18-Apr-11	19-May-11	0%	CHP- Dittmer, LM						
RAWP0765	KW Basin Deact RAWP - Issued & Complete		19-May-11	0%	CHP- Dittmer, LM						
1b Complete Demolition and Removal of the KW Basin											
RAWP0105	KW Basin Demo RAWP - Prepare & transmit decisional draft RD/RA work plan to RL	22-Mar-10 A	14-Sep-10	2%	CHP- Dittmer, LM						
RAWP0170	KW Basin Demo RAWP - Prepare conceptual design & requirements	08-Apr-10 A	28-Jun-10	25%	CHP- Koch, MR						
RAWP0175	KW Basin Demo RAWP - Develop FES for submittal with decisional draft	06-May-10	12-Jul-10	20%	CHP- Hissong, TL						
RAWP0110	KW Basin Demo RAWP - RL review of decisional draft RD/RA work plan	15-Sep-10	29-Sep-10	0%	CHP- Dittmer, LM						
RAWP0115	KW Basin Demo RAWP - CH disposition & incorporate comments	30-Sep-10	07-Oct-10	0%	CHP- Dittmer, LM						
RAWP0120	KW Basin Demo RAWP - Prepare & transmit Draft A RD/RA work plan to RL	08-Oct-10	08-Nov-10	0%	CHP- Dittmer, LM						
RAWP0130	KW Basin Demo RAWP - RL transmit Draft A RD/RA work plan to Regulators	09-Nov-10	15-Dec-10	0%	CHP- Dittmer, LM						
RAWP0135	KW Basin Demo RAWP - Regulator review of Draft A RD/RA work plan	16-Dec-10	08-Feb-11	0%	CHP- Dittmer, LM						
RAWP0140	KW Basin Demo RAWP - Prepare & transmit Rev 0 RD/RA work plan to RL	09-Feb-11	15-Mar-11	0%	CHP- Dittmer, LM						
RAWP0145	KW Basin Demo RAWP - RL transmit Rev 0 RD/RA work plan to Regulators for appro...	16-Mar-11	30-Mar-11	0%	CHP- Dittmer, LM						
RAWP0150	KW Basin Demo RAWP - Regulator final check & approval of Rev 0 RD/RA work plan	31-Mar-11	04-May-11	0%	CHP- Dittmer, LM						
RAWP0155	KW Basin Demo RAWP - CH disposition & incorporate comments & transmit to RL	05-May-11	11-May-11	0%	CHP- Dittmer, LM						
RAWP0160	KW Basin Demo RAWP - Issue approved Rev 0 RD/RA work plan	12-May-11	16-Jun-11	0%	CHP- Dittmer, LM						
RAWP0165	KW Basin Demo RAWP - Issued & Complete		16-Jun-11	0%	CHP- Dittmer, LM						
2&3 Complete Removal of All Phase I Sludge Including KOP											
RAWP0205	STP Phase 1 RAWP - Prepare & transmit decisional draft RD/RA work plan to RL	22-Mar-10 A	19-Jul-10	25%	CHP- Johnson, SR						
RAWP0275	STP Phase 1 RAWP - Develop FES for submittal with decisional draft	22-Mar-10 A	17-May-10	70%	CHP- Johnson, SR						
RAWP0206	STP Phase 1 RAWP - Complete initial Decisional Draft	25-Mar-10 A	20-May-10	65%	CHP- Johnson, SR						
RAWP0207	STP Phase 1 RAWP - Technical Edit Review Decisional Draft RD/RA work plan.	21-May-10	01-Jun-10	0%	CHP- Johnson, SR						
RAWP0208	STP Phase 1 RAWP - Perform CHPRC Review of Decisional Draft RD/RA work plan.	02-Jun-10	16-Jun-10	0%	CHP- Johnson, SR						
RAWP0209	STP Phase 1 RAWP - Evaluate/Resolve CHPRC Comments on Decisional Draft RD/...	17-Jun-10	23-Jun-10	0%	CHP- Johnson, SR						
RAWP0211	STP Phase 1 RAWP - Incorporate comments into Decisional Draft RD/RA work plan.	24-Jun-10	08-Jul-10	0%	CHP- Johnson, SR						
RAWP0212	STP Phase 1 RAWP - Technical Edit review of Final Decisional Draft RD/RA work plan.	12-Jul-10	16-Jul-10	0%	CHP- Johnson, SR						
RAWP0213	STP Phase 1 RAWP - CHPRC provide Decisional Draft to RL for review RD/RA work ...	19-Jul-10	19-Jul-10	0%	CHP- Johnson, SR						
RAWP0210	STP Phase 1 RAWP - RL review of decisional draft RD/RA work plan	20-Jul-10	03-Aug-10	0%	CHP- Johnson, SR						
RAWP0215	STP Phase 1 RAWP - CH disposition & incorporate comments	04-Aug-10	11-Aug-10	0%	CHP- Johnson, SR						

Actual Work
 Critical Remaining Work
 Summary
 Remaining Work
 Milestone

Activity ID	Activity Name	Start	Finish	% Complete	R-RESP-GLB	2010					2011				
						Q2	Q3	Q4	Q1	Q2	Q3				
RAWP0220	STP Phase 1 RAWP - Prepare & transmit Draft A RD/RA work plan to RL	12-Aug-10	13-Sep-10	0%	CHP- Johnson, SR										
RAWP0221	STP Phase 1 RAWP - Incorporate comments into Draft A of RD/RA work plan	12-Aug-10	19-Aug-10	0%	CHP- Johnson, SR										
RAWP0222	STP Phase 1 RAWP - Technical Edit Review Draft A RD/RA work plan	23-Aug-10	27-Aug-10	0%	CHP- Johnson, SR										
RAWP0223	STP Phase 1 RAWP - Perform CHPRC Review of Draft A RD/RA work plan	30-Aug-10	02-Sep-10	0%	CHP- Johnson, SR										
RAWP0224	STP Phase 1 RAWP - CHPRC Transmit Draft A RD/RA work plan to DOE-RL	07-Sep-10	13-Sep-10	0%	CHP- Johnson, SR										
RAWP0230	STP Phase 1 RAWP - RL transmit Draft A RD/RA work plan to Regulators	14-Sep-10	18-Oct-10	0%	CHP- Johnson, SR										
RAWP0235	STP Phase 1 RAWP - Regulator review of Draft A RD/RA work plan	19-Oct-10	08-Dec-10	0%	CHP- Johnson, SR										
RAWP0240	STP Phase 1 RAWP - Prepare & transmit Rev 0 RD/RA work plan to RL	09-Dec-10	17-Jan-11	0%	CHP- Johnson, SR										
RAWP0245	STP Phase 1 RAWP - RL transmit Rev 0 RD/RA work plan to Regulators for approval	18-Jan-11	01-Feb-11	0%	CHP- Johnson, SR										
RAWP0250	STP Phase 1 RAWP - Regulator final check & approval of Rev 0 RD/RA work plan	02-Feb-11	09-Mar-11	0%	CHP- Johnson, SR										
RAWP0255	STP Phase 1 RAWP - CH disposition & incorporate comments & transmit to RL	10-Mar-11	16-Mar-11	0%	CHP- Johnson, SR										
RAWP0260	STP Phase 1 RAWP - Issue approved Rev 0 RD/RA work plan	17-Mar-11	20-Apr-11	0%	CHP- Johnson, SR										
RAWP0265	STP Phase 1 RAWP - Issued & Complete		20-Apr-11	0%	CHP- Johnson, SR										
4 Complete Treatment & Packaging of K Basin TRU sludge		22-Mar-10 A	02-Aug-11												
RAWP0405	STP Phase 2 RAWP - Prepare & transmit decisional draft RD/RA work plan to RL	22-Mar-10 A	28-Oct-10	1%	CHP- Johnson, SR										
RAWP0470	STP Phase 2 RAWP - Prepare conceptual design & requirements	22-Mar-10 A	09-Sep-10	1%	CHP- Johnson, SR										
RAWP0475	STP Phase 2 RAWP - Develop FES for submittal with decisional draft	22-Mar-10 A	23-Sep-10	1%	CHP- Johnson, SR										
RAWP0410	STP Phase 2 RAWP - RL review of decisional draft RD/RA work plan	01-Nov-10	15-Nov-10	0%	CHP- Dittmer, LM										
RAWP0415	STP Phase 2 RAWP - CH disposition & incorporate comments	16-Nov-10	22-Nov-10	0%	CHP- Dittmer, LM										
RAWP0420	STP Phase 2 RAWP - Prepare & transmit Draft A RD/RA work plan to RL	23-Nov-10	29-Dec-10	0%	CHP- Dittmer, LM										
RAWP0430	STP Phase 2 RAWP - RL transmit Draft A RD/RA work plan to Regulators	30-Dec-10	02-Feb-11	0%	CHP- Dittmer, LM										
RAWP0435	STP Phase 2 RAWP - Regulator review of Draft A RD/RA work plan	03-Feb-11	25-Mar-11	0%	CHP- Dittmer, LM										
RAWP0440	STP Phase 2 RAWP - Prepare & transmit Rev 0 RD/RA work plan to RL	28-Mar-11	28-Apr-11	0%	CHP- Dittmer, LM										
RAWP0445	STP Phase 2 RAWP - RL transmit Rev 0 RD/RA work plan to Regulators for approval	02-May-11	16-May-11	0%	CHP- Dittmer, LM										
RAWP0450	STP Phase 2 RAWP - Regulator final check & approval of Rev 0 RD/RA work plan	17-May-11	20-Jun-11	0%	CHP- Dittmer, LM										
RAWP0455	STP Phase 2 RAWP - CH disposition & incorporate comments & transmit to RL	21-Jun-11	28-Jun-11	0%	CHP- Dittmer, LM										
RAWP0460	STP Phase 2 RAWP - Issue approved Rev 0 RD/RA work plan	29-Jun-11	02-Aug-11	0%	CHP- Dittmer, LM										
RAWP0465	STP Phase 2 RAWP - Issued & Complete		02-Aug-11*	0%	CHP- Dittmer, LM										
5 RD/RAWP for 105KW ISS		22-Mar-10 A	14-Sep-11												
RAWP0505	RAWP RL-2005-26 - Prepare & transmit decisional draft RD/RA work plan to RL	22-Mar-10 A	14-Dec-10	1%	CHP- Dittmer, LM										
RAWP0570	RAWP RL-2005-26 - Prepare conceptual design & requirements	10-May-10	05-Nov-10	0%	CHP- Dittmer, LM										
RAWP0575	RAWP RL-2005-26 - Develop FES for submittal with decisional draft	10-May-10	19-Nov-10	0%	CHP- Dittmer, LM										
RAWP0580	RAWP RL-2005-26 - RL approval to proceed with Core Removal	10-May-10	19-Aug-10	0%	CHP- Dittmer, LM										
RAWP0585	RAWP RL-2005-26 - Develop EE/CA, public comment period, action memo	10-May-10	05-Nov-10	0%	CHP- Dittmer, LM										
RAWP0510	RAWP RL-2005-26 - RL review of decisional draft RD/RA work plan	15-Dec-10	03-Jan-11	0%	CHP- Dittmer, LM										
RAWP0515	RAWP RL-2005-26 - CH disposition & incorporate comments	04-Jan-11	11-Jan-11	0%	CHP- Dittmer, LM										
RAWP0520	RAWP RL-2005-26 - Prepare & transmit Draft A RD/RA work plan to RL	12-Jan-11	10-Feb-11	0%	CHP- Dittmer, LM										
RAWP0530	RAWP RL-2005-26 - RL transmit Draft A RD/RA work plan to Regulators	11-Feb-11	17-Mar-11	0%	CHP- Dittmer, LM										
RAWP0535	RAWP RL-2005-26 - Regulator review of Draft A RD/RA work plan	21-Mar-11	06-May-11	0%	CHP- Dittmer, LM										
RAWP0540	RAWP RL-2005-26 - Prepare & transmit Rev 0 RD/RA work plan to RL	09-May-11	13-Jun-11	0%	CHP- Dittmer, LM										
RAWP0545	RAWP RL-2005-26 - RL transmit Rev 0 RD/RA work plan to Regulators for approval	14-Jun-11	28-Jun-11	0%	CHP- Dittmer, LM										
RAWP0550	RAWP RL-2005-26 - Regulator final check & approval of Rev 0 RD/RA work plan	29-Jun-11	02-Aug-11	0%	CHP- Dittmer, LM										
RAWP0555	RAWP RL-2005-26 - CH disposition & incorporate comments & transmit to RL	03-Aug-11	10-Aug-11	0%	CHP- Dittmer, LM										
RAWP0560	RAWP RL-2005-26 - Issue approved Rev 0 RD/RA work plan	11-Aug-11	14-Sep-11	0%	CHP- Dittmer, LM										

Actual Work
 Remaining Work
 Critical Remaining Work
 Summary
 Milestone

Activity ID	Activity Name	Start	Finish	% Complete	R-RESP-GLB	2010			2011			
						Q2	Q3	Q4	Q1	Q2	Q3	
RAWP0565	RAWP RL-2005-26 - Issued & Complete		14-Sep-11	0%	CHP- Dittmer, LM							◆
7 Complete all Interim Response Actions at the 100K Area - Infrastr...		22-Nov-10	06-May-11						▶			
RAWP0970	Complete Integrated Field Execution Schedule	22-Nov-10	23-Feb-11	0%	CHP- Dittmer, LM				▶			
RAWP0905	Prepare & Transmit Draft Integrated FES to RL	24-Feb-11	02-Mar-11	0%	CHP- Dittmer, LM							
RAWP0975	Submit TPA change package to RL	24-Feb-11	25-Mar-11	0%	CHP- Black, DG							
RAWP0910	RL review of draft FES	03-Mar-11	17-Mar-11	0%	CHP- Dittmer, LM							
RAWP0915	CH Disposition & Incorporate Comments	21-Mar-11	28-Mar-11	0%	CHP- Dittmer, LM							
RAWP0925	Transmit Integrated 100K Area FES to RL	29-Mar-11	06-Apr-11	0%	CHP- Dittmer, LM							
RAWP0930	RL Transmit Integrated 100K Area FES to Regulators	07-Apr-11	06-May-11	0%	CHP- Dittmer, LM							
TPA-M-16-1	TPA M-16-140 Submit Draft A RD/RA Work Plans for M-016-140 Milestone by Mar 31...		06-May-11*	0%	CHP- Dittmer, LM							◆

Actual Work
 Critical Remaining Work
 Summary
 Remaining Work
 Milestone

100-KW Bio-Infiltration Treatability Test Schedule

ID	Task Name	Start	Finish	Duration	Qtr 2, 2010				Qtr 3, 2010			Qtr 4, 2010			Qtr 1, 2011			Qtr 2, 2011			Qtr 3, 2011			Qtr 4, 2011			Qtr 1,		
					Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan		
1	D4 of Surface Features	Mon 3/1/10	Mon 3/29/10	21 days?																									
2	RTD of Existing Waste Sites	Tue 3/30/10	Mon 6/7/10	50 days?																									
3	Write Draft Treatability Test Plan	Mon 3/15/10	Fri 5/14/10	45 days																									
4	TTP FDC and Design	Mon 5/17/10	Fri 7/23/10	50 days																									
5	Draft TTP Internal Review	Mon 5/17/10	Fri 5/28/10	10 days?																									
6	Submit Draft TTP to RL	Mon 5/31/10	Wed 6/2/10	3 days																									
7	RL Review of Draft TTP	Thu 6/3/10	Wed 6/30/10	20 days																									
8	Revise TTP per RL Comments	Thu 7/1/10	Wed 7/14/10	10 days																									
9	RL approval of Draft TTP	Thu 7/15/10	Wed 7/21/10	5 days																									
10	Submit TTP to EPA	Thu 7/22/10	Wed 8/4/10	10 days																									
11	M-015-116 (Proposed 100-K TTP Milestone)	Mon 8/30/10	Mon 8/30/10	1 day?																									
12	EPA Review of TTP	Thu 8/5/10	Tue 9/14/10	29 days?																									
13	Conduct Workshop Review	Thu 8/19/10	Wed 8/25/10	5 days																									
14	Stake Holder Review	Thu 8/19/10	Wed 9/15/10	20 days																									
15	Revise TTP Per EPA Comments	Thu 9/16/10	Wed 10/13/10	20 days																									
16	Regulatory Approval of TTP	Thu 10/14/10	Mon 10/18/10	3 days																									
17	Procure TTP Equipment	Mon 7/26/10	Fri 9/17/10	40 days																									
18	Build/Construct TTP on Site	Mon 7/26/10	Fri 9/17/10	40 days																									
19	Drill/Install Lysimeters and Monitoring equipment	Tue 10/19/10	Fri 1/21/11	69 days																									
20	Operate Bioinfiltration System	Mon 1/24/11	Fri 7/8/11	120 days																									
21	Prepare Interim Report for FS Report	Mon 7/11/11	Fri 7/22/11	10 days																									
22	Issue Interim Report	Mon 7/25/11	Fri 7/29/11	5 days																									
23	Monitor Bioinfiltration Recovery	Mon 7/11/11	Mon 9/19/11	51 days?																									
24	Analyze data, write TTP Report	Tue 10/19/10	Mon 9/19/11	240 days?																									
25	Submit Draft TTP Report to RL	Tue 9/20/11	Thu 9/22/11	3 days																									
26	RL Review of Draft TTP Report	Fri 9/23/11	Fri 10/21/11	21 days?																									
27	Revise Draft TTP Report	Mon 10/24/11	Mon 11/21/11	21 days?																									
28	RL Approval of Draft TTP Report	Tue 11/22/11	Mon 11/28/11	5 days																									
29	Submit TTP Report to EPA	Tue 11/29/11	Mon 12/12/11	10 days																									
30	EPA Review of TTP Report	Tue 12/13/11	Thu 1/26/12	33 days?																									

Project: K West Bioinfiltration Schedul Date: Thu 5/13/10

Task Progress Milestone Summary External Tasks Deadline

Split Milestone Project Summary External Milestone



100-K West Bio-Infiltration Treatability Test Update

May 13, 2010

One Team. One Culture.

Section 1.0 Introduction

- **Site Setting and Background**

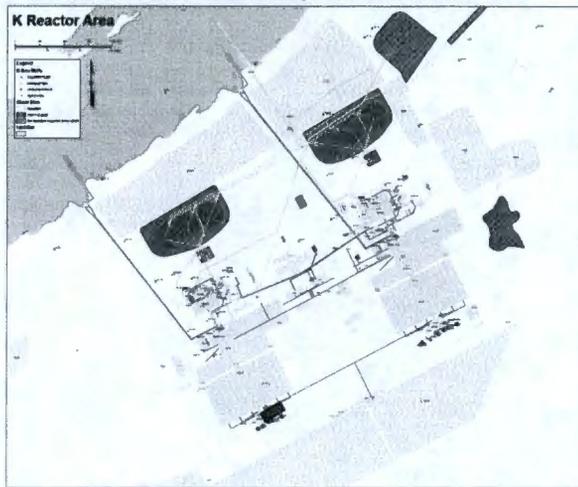
- Large volumes of highly concentrated (~ 70%) sodium dichromate solutions were routinely delivered by train to K West for use at the plant.
- The presence of yellow-stained soils around the former site of a 42,000 gallon sodium dichromate storage tank (site 120-KW-5 located adjacent to the 183-KW head house), suggest that potentially substantial spills and leaks occurred during transfer operations.

- **Site Characterization**

- Geologic Setting
- Hydrology
- Nature and Extent
 - Groundwater
 - Vadose Zone

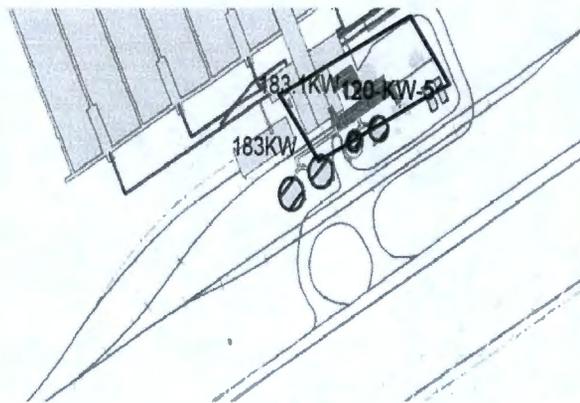


Location Map (K-W Bio-Infiltration Test Area)



Probable Test Area

(Final size & position of target area determined after surface excavation completed)



Former Sodium Dichromate Storage Tank Area Site 120-KW-5



- Tank held up to 42,000 gallons of 70 % Na Dichromate.
- Yellow-stained soils around the sodium dichromate storage tank area, suggest that numerous spills and leaks occurred during transfer operations from the railcars.
- Although this site is part of the on-going soils excavation, it may have been a source of deep vadose zone, and possibly continuing GW, Cr(VI) Contamination.



Section 2.0 Purpose and Objectives

- The purpose of the 100-KW bio-infiltration treatability test is to evaluate this technology as a potential component of a final remedy identified for Cr (VI) remediation in the 100 Area.
- In order to fulfill this purpose, the following primary treatability test objectives must be achieved:
 - Evaluate the performance and potential long-term effectiveness of in situ bio-infiltration as a remedial technology for Cr (VI) contamination in the vadose zone.
 - Obtain operations, cost, and design optimization data to support the evaluation of this technology and to support of any future full-scale implementation.



Section 3.0 Scientific Basis of Technology

- Summarize Geochemical and Microbiological Basis
 - Microbial processes and effects
 - Geochemical processes and effects

- Summarize 100-KW Vadose Zone
 - Half Life Calculations in Vadose Zone
 - Vadose Infiltration Modeling
 - ♦ Infiltration Rates
 - ♦ Treatment Pore Volume Estimates



Section 4.0 Summary of Relevant Investigations

- Summarize previous laboratory or treatability tests relevant to bio-infiltration approach.

- Summarize any previous field implementations

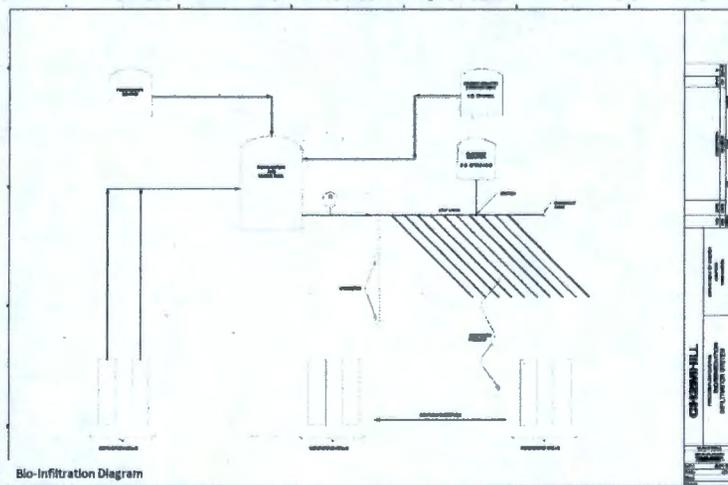


Section 5.0 Vadose Zone Bio-Infiltration System (Conceptual Design, Equipment and Materials)

- Treated effluent from K-West (and a back-up water line) to supply between 20 and 80 gpm to the drip system.
- A heavy duty tank to store the substrate (lactate).
- Pipelines from the effluent line to the substrate storage and addition system.
- A system to mix or inject the substrate into the treated effluent line prior to transfer to the drip lines.
- Control systems and flow totalizers to manage the water supply, carbon source addition rates, and infiltration rates.
- Drip lines with adjustable rate drip emitters that can be controlled as necessary by altering the pressure of the line.



Schematic Diagram of a Bio-Infiltration System



Bio-Infiltration Diagram



Example Deployment of a Large-Scale Drip System



Section 5.0 Vadose Zone Bio-Infiltration System (Cont'd) (Process Operations)

- Between 20 and 80 gpm of treated effluent from the K West treatment plant will be piped to a reagent mixing facility where it will be amended with lactate.
- The lactate-amended effluent will be piped to the drip system for bio-infiltration.
- Initially, the treatment solution will contain relatively high carbon content (e.g., 500 ppm) and will be infiltrated at a relatively low rate, to minimize flushing of Cr (VI), until reducing conditions are established in the upper vadose zone.
- Once reducing conditions are clearly established in the upper vadose zone, the infiltration rate will be increased to rapidly extend reducing conditions throughout the vadose zone.
- The later stages of the test will be conducted using moderate carbon concentrations (e.g., 200 ppm C) and lower infiltration rates to maintain the reducing the conditions throughout the vadose zone.



Section 6. Performance Objectives and Metrics (Selected Objectives)

- **Produce conditions that will rapidly reduce Cr (VI) to Cr (III)**
 - Measure vadose conditions during test
- **Establish long-term reductive capacity**
 - Analyze vadose soils pre- and post- test
 - Monitor lysimeters long-term
- **Minimize flushing of Cr(VI) and As to Groundwater**
- **Measure vadose water and substrate transport properties**



Section 7. Monitoring and Characterization Activities

- Three 20 foot and three 60 foot deep lysimeters will be installed in the target area to monitor the progress of the infiltration front through the vadose zone.
- Three monitoring wells will be installed and screened over the upper 10 foot of the saturated zone to monitor the arrival of the infiltration solution.
- Lysimeters and monitoring wells will be used to monitor chemical changes in the vadose zone and groundwater (e.g., concentrations of Cr(VI), sulfate, Fe, Mn, and As).
- A tracer compound will be added to the infiltration solution to aid in the calculation of the substrate biodegradation rate.



Section 7. Monitoring and Characterization Schedule

- **Pre-Test**
 - Baseline GW and Vadose Pore Water Monitoring and Core Sampling
- **Test Monitoring**
 - Twice Weekly to Monthly GW and Vadose Zone Pore Water Monitoring
- **Short-Term Post-Test Monitoring**
 - Monitor GW and Vadose Pore Water One Month after Test and Collect Post-Test Cores
- **Long-Term Post-Test Monitoring**
 - Quarterly Monitoring of GW and Vadose Zone for One to two Years



Monitoring Wells & Lysimeters (Analytes & Sampling Frequency)

One baseline event and twice a week during first and last month of test	TOC	Tracer	Cr (VI)	Total Cr	Fe (dlss)	Mn (dlss)	As (dlss)	SO ₄	Nitrate
	Three 20' Lysimeters	X	X	X	X	X	X	X	X
Three 60' Lysimeters	X	X	X	X	X	X	X	X	
Three Monitoring Wells	X	X	X	X	X	X	X	X	X
Monthly for remainder of test period.	TOC	Tracers	Cr(VI)	Total Cr	Fe (dlss)	Mn (dlss)	As (dlss)	SO ₄	Nitrate
	Three 20' Lysimeters	X	X	X	X	X	X	X	X
Three 60' Lysimeters	X	X	X	X	X	X	X	X	
Three Monitoring Wells	X	X	X	X	X	X	X	X	X
Monitor one month after test and then Quarterly for one year	TOC	Tracers	Cr (VI)	Total Cr	Fe (dlss)	Mn (dlss)	As (dlss)	SO ₄	Nitrate
	Three 20' Lysimeters	X	X	X	X	X	X	X	X
Three 60' Lysimeters	X	X	X	X	X	X	X	X	
Three Monitoring Wells	X	X	X	X	X	X	X	X	X



Analytical Requirements for Pre- & Post-Treatment Soil & Core Samples.

Analytical Method	Analyte	Interim Soil Remedial Action Goal Values ^a		RDL Requirement	Accuracy (% Recovery)	Precision (% RPD)
		Direct Exposure	Groundwater/River Protection ^b			
EPA Method 8010 (trace)	Arsenic	20 mg/kg	20 mg/kg	10 mg/kg	70-130	±30
	Total chromium	120,000 mg/kg	18.5 mg/kg	1 mg/kg	70-130	±30
	Manganese	11,200 mg/kg	512 mg/kg	5 mg/kg	70-130	±30
EPA Method 7196	Hexavalent chromium	2.1 mg/kg	2 mg/kg	0.5 mg/kg	70-130	±30
SW-846(a) (Dry Combustion with pre-treatment to remove inorganic C (carbonates))	Total Organic Carbon	NA	NA	TBD	70-130	±30
TBD	Acid Volatile Sulfides and Simultaneous Extracted Metals (As, Hg, Cr) (AVS - SEM)	NA	NA	TBD	70-130	±30
TCLP	Arsenic	NA	NA	0.5 mg/L	70-130	±30
EPA Method 1311/ 8010 ^c	Total chromium	NA	NA	0.5 mg/L	70-130	±30
SPLP	Arsenic	NA	NA	0.5 mg/L	70-130	±30
EPA Method 1312	Total chromium	NA	NA	0.5 mg/L	70-130	±30

^a Interim soil RAG values are specified in DOE/RL-96-17, Remedial Design Report/Remedial Action Work Plan for the 100 Area (DOE-RL 2006).
^b The more restrictive of the groundwater protection or Columbia River protection value is provided.
^c TCLP may be performed on samples selected by the project after a review of the preliminary sample results. SPLP may be performed in lieu of TCLP or in conjunction with TCLP. SPLP is intended to model an acid rain leaching environment rather than model conditions that might be encountered in a hazardous waste landfill, as is done by TCLP.

EPA = U.S. Environmental Protection Agency
 NA = not applicable
 RDL = required detection limit
 RPD = relative percent difference
 TCLP = toxicity characteristic leaching procedure
 SPLP = synthetic precipitation leaching procedure
 U.S. DEPARTMENT OF

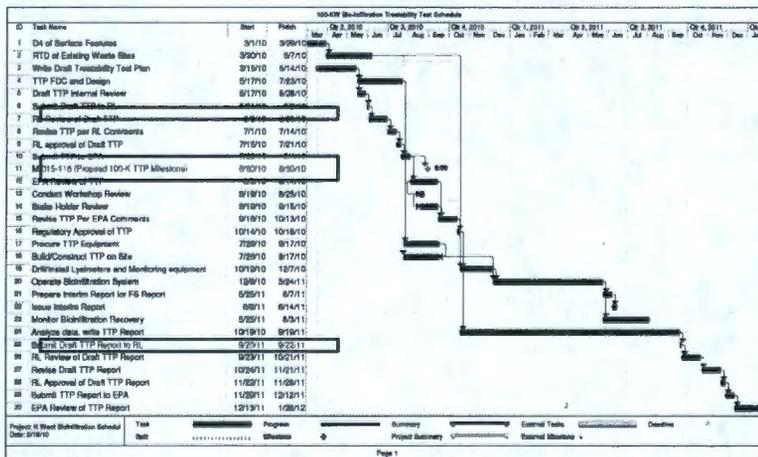


ENERGY



CH2MHILL
 Plateau Remediation Company

Schedule



U.S. DEPARTMENT OF ENERGY



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CH2M 1000 05.10

QUESTIONS?



ATTACHMENT 3

100K AREA PROJECT MANAGERS' MEETING CHANGE NOTICE STATUS

May13, 2010

TPA-CN-331 – Provides an update to DOE/RL-99-89, Rev. 1, *Remedial Design Report and Remedial Action Work Plan for the K Basins Interim Remedial Action* to describe how the design of the new 105KW Basin HVAC upgrades satisfies the ALARA provisions of 10 CFR 835 and ARAR in the CERCLA ROD.

Status: Change notice approved by RL and EPA.

Discussion Points and Agreements:

EPA reviewing change notice.

Action: RL and EPA to coordinate comment resolution. (Assigned at April 2010 PMM.)

Status: Comments resolved and change notice approved by RL and provided to EPA for approval. Complete. Change notice approved by EPA.

TPA-CN-341 - Modifies discussion of staging piles in DOE/RL-2005-26, Rev. 1, *Removal Action Work Plan for 105-KE/105-KW Reactor Facilities and Ancillary Facilities*, to allow for storage, recycling and/or reuse on the Hanford Site.

Status: Change notice approved by RL and EPA.

Discussion Points and Agreements:

EPA reviewing change notice.

Action: RL and EPA to coordinate comment resolution. (Assigned at April 2010 PMM.)

Status: Comments resolved and change notice approved by RL and provided to EPA for approval. Complete. Change notice approved by EPA.

TPA-CN-318 - Modifies description of the ambient air monitoring locations in DOE/RL-2005-26, Rev. 1, *Removal Action Work Plan for 105-KE/105-KW Reactor Facilities and Ancillary Facilities*. The justification and impacts regarding the requested change are detailed in the letter, R. J. Corey (DOE-RL) to P. J. Martell (WDOH), 10-EMD-0017, dated December 16, 2009, including the enclosure "Ambient Air Monitor Relocation Request for the 100 K Area Near-Facility Monitoring Network," DOE/RL-2009-108, Rev. 0.

Status: Change notice has been prepared and is being reviewed.

Discussion Points and Agreements:

None.

TPA-CN-319 - Modifies description of the ambient air monitoring locations in SGW-40896, Rev. 0, *Air Monitoring Plan for the Waste Sites Near 105-KE Basin in the 100-K Area*. The justification and impacts regarding the requested change are detailed in the letter, R. J. Corey (DOE-RL) to P. J. Martell (WDOH), 10-EMD-0017, dated December 16, 2009, including the enclosure "Ambient Air Monitor Relocation Request for the 100 K Area Near-Facility Monitoring Network," DOE/RL-2009-108, Rev. 0.

Status: Change notice has been prepared and is being reviewed.

Discussion Points and Agreements:

None.

NOTE: NOC Application/Permit Revision (adapted for use to revise this special NOC application which came under CERCLA post-permit), for revision of DOE/RL-97-28, Rev. 2, Approval # AIR 09-302, addresses changes to Section 9.0 of the application and deletes Figure 9-2 from the same.