

**DISTRIBUTION  
PROJECT MANAGERS MEETING,  
200 AREA GROUNDWATER and SOURCE OPERABLE UNITS  
September 15, 2016**

DOE/RL

(No hard copy distribution)

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Emerald Laija

A3-46

Ecology

Nina Menard

H0-57

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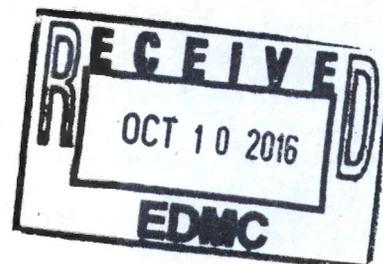
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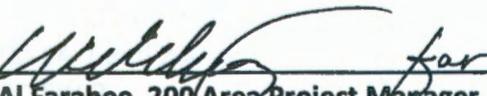
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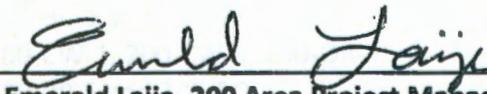


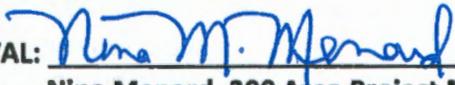
Meeting Minutes Transmittal/Approval  
Project Managers' Meeting  
200 Area Groundwater and Source Operable Units  
September 15, 2016

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APPROVAL:  DATE: 9/15/2016  
Michael Cline, 200 Area Unit Manager, DOE/RL

APPROVAL:  for DATE: 9/15/16  
Al Farabee, 200 Area Project Manager, DOE/RL

APPROVAL:  DATE: 9/15/16  
Emerald Laija, 200 Area Project Manager, EPA

APPROVAL:  DATE: 9/15/16  
Nina Menard, 200 Area Project Manager, Ecology

HFFACO Action Plan Section 4.1 requires signature of agreements and commitments made during the Project Manager Meeting. Approval of these minutes documents approval of agreements and commitments documented in Attachment 4 and 5 to these minutes. Approval does not apply to any other attachments, which are included in these minutes for informational purposes.

## 200 AREA PROJECT MANAGERS MEETING

September 15, 2016

### AGENDA

- TPA Management Assessment
- Central Plateau Annual Institutional Controls Assessment
- Operational Status and Milestones by OU
  - Deep Vadose Zone
  - 200-EA-1 and 200-IS-1
  - 200-SW-2
  - 200-SW-1
  - 200-BC-1 and 200-WA-1
  - 200-CW-1, 200-CW-3, 200-OA-1
  - 200-BP-5 and 200-PO-1
  - M-015 Milestone Series
  - 200-PW-1/3/6 and 200-CW-5
  - 200-PW-1 SVE
  - 200-UP-1
  - 200-ZP-1
  - 200 Area Groundwater
  - M-016 Milestone Series
  - M-024 Milestone Series
  - 200 Area RCRA TSD Closures
  - Canyon Facilities
- Approved TPA Change Notices
- Documents for the Administrative Record
- Action Items
- Next Meeting November 17, 2016

**Minutes of the 200 Area Project Managers Meeting of September 15, 2016 are attached.  
Minutes are comprised of the following:**

<b>Attachment 1</b>	<b>Attendance Record</b>
<b>Attachment 2</b>	<b>Agreements and Issues List</b>
<b>Attachment 3</b>	<b>Action Item List</b>
<b>Attachment 4</b>	<b>Operable Units and Facilities Status</b>
<b>Attachment 5</b>	<b>Documents for Submittal to the Administrative Record</b>
<b>Attachment 6</b>	<b>Groundwater Monitoring Status</b>
<b>Attachment 7</b>	<b>Central Plateau 2016 Annual Institutional Controls Assessment Presentation</b>

200 Area Project Managers' Status Meeting  
September 15, 2016

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Shaney Cimat	ODOE		(541) 963-0853
Jane V Borghese	CHPRC	PRC, TPA	509 <del>573</del> 3804
Dan Beers	WDOH	Regulator	509-943-659
Mark Byrnes	CHPRC	CAM	373-3996
Martin Doornbos	CHPRC	DIRECTOR	438-5516
John Temple	Ecology		373-2980
Stuart Luttrell	Ecology	Permit Acting PM	372-7883
FRED A RUCK	CHPRC	CEQA SME	376 9626
RD Hildebrand	DOE	SME	373-9626
KIM WELSCH	ECOLOGY	REGULATOR	372-7882
John Sands	DOE-RL	200-WA-1	372-2282
Benjamin Vannah	DOE-RL	TPA	376 9623
MOSTAFA KAMAL	DOE-RL	Closure Plaza	376-0289
Roberta Day	CHPRC	PRC	539.0232
LAURA CISACK	CHPRC	PRC	376-1595
Emily Laija	EPA		376-4419
Gretchen Hanson	CHPRC		539-9046
Michael Cline	DOE-RL	PM	376-6070
Wade Woolery	DOE-RL	PM	372-2889
Nina Menard	Ecology	PM	372-7941

**200 Area Project Managers' Meeting  
Agreements and Issues List  
September 15, 2016**

**Agreement:** None

**Issue:** None

**Announcements:** None

**Delegations for September 15, 2016 PMM Meeting:**

EPA

DOE

200 Area Project Managers' Meeting  
September 15, 2016

CHPRC-1604151  
Attachment 3

OPEN ACTION ITEM TRACKING

Action #	Action/Subject	Assigned To	Owed To	Assigned Date	Original Due Date	Adjusted Due Date	Status
174	Ecology will respond with a path forward for BP-5 PC-1 SAP	Ecology/Nina Menard	RL	5/19/2016	6/10/2016	8/5/2016	Closed
178	Discuss with Ecology the status of the Action Memo Work Plan associated with Milestone M-016-250	Al Farabee	Ecology	7/21/2016	9/15/2016		Closed
179	Respond to Ecology justification to add 207A SRB to Appendix C	Ben Vannah/Mostafa Kamal	Ecology	7/21/2016	8/31/2016	10/31/2016	
180	DOE to status PW-1/3/6 progress in 6 months	Al Farabee	EPA	9/15/2016	Mar-17		

**200 AREA PROJECT MANAGERS' MEETING for July & August 2016**  
Milestones and Operation Status by OU  
September 15, 2016

**Deep Vadose Zone 200-DV-1** Ecology Lead (RL –Jim Hanson, CHPRC – Mark Byrnes)

- Delivered Rev. 0 RI/FS work plan to Ecology on July 28, 2016. Awaiting approval of Rev. 0 RI/FS work plan.
- Completed sonic drilling at all twenty two borehole locations on August 24, 2016, which were drilled from below the high radiological risk interval to total depth.
- Commenced decommissioning of 15 boreholes, which is anticipated to complete by September 30, 2016.
- Commenced sample analysis activities to evaluate monitored natural attenuation processes on August 3, 2016. Progress to date includes 45% complete with microbial testing, 25% complete with isotopic analysis, 60% complete with geochemical analysis and testing, and 40% complete with leaching tests.
- Commenced revising the Sampling and Analysis Plan for 200-DV-1 OU (DOE/RL-2011-104 Rev. 0) to include sampling methods and analysis for monitored natural attenuation.
- The hookup of the three perched water wells to the 200 West P&T transfer line is progressing and expected to be completed by the end of September.
- Commenced Hydraulic Test 3 monitoring recovery period (no pumping cycle for 60 days) on July 18, 2016.
- The perched water wells (299-E33-344, 299-E33-350, 299-E33-351) were scheduled for sampling in August. However, Hydraulic Test 3 monitoring is still ongoing and scheduled to complete mid-September.

FY 2016 200-DV-1 Drilling Status							
Primary Borehole ID#	Waste Site	Becker/ Geoprobe Push Depth (ft)	Estimated High RAD Interval (ft)	Current Sonic Rig Depth (ft)	Target Depth of Investigation (ft)	Total Number of Samples Collected	Total Number of Samples To Be Collected
C9550	BY Cribs	43.8	15-45	200.5	197	11	11
C9549	BY Cribs	45.4	20-45	200.5	197	10	11
C9552	BY Cribs	45	10-45	202.2	197	11	14
C8706	BY Cribs	45.3	14-45	202.3	197	11	11
C9491	216-B-37	51.2	14-52	227.7	222	8	8
C9487	216-B-7 A&B	33.4	19-33	235.5	237	10	10
C9490	219-B-9	34.2	14-34	252.6	250	9	9
C9489	219-B-9	34.2	12-35	253.1	250	9	9
C9492	216-T-5	40.5	NA	102.0	95	8	8
C9494	216-T-5	40.4	0-35	100.6	95	0	GPL only
C9495	216-T-14	35.8	0-35	106.0	105	0	GPL only
C9496	216-T-15	35.7	0-35	106.1	105	0	GPL only
C9505	216-T-15	43.5	10-34	106.4	105	6	6
C9510	216-T-25	39.0	14-40	122.4	115	8	9
C9511	216-T-23	43.9	14-40	117.2	115	8	9
C9506	216-T-18	33.5	12-34	100.5	100	8	8

FY 2016 200-DV-1 Drilling Status							
Primary Borehole ID#	Waste Site	Becker/ Geoprobe Push Depth (ft)	Estimated High RAD Interval (ft)	Current Sonic Rig Depth (ft)	Target Depth of Investigation (ft)	Total Number of Samples Collected	Total Number of Samples To Be Collected
C9512	216-S-9	32.6	30-46	142.0	134	9	9
C9514	216-S-21	44.0	15-40	121.0	121	9	9
C9488	216-B-8	43.6	25-42	226.0	224	8	8
C9499	216-T-6	43.4	15-43	107	105	8	8
C9554/ C9502	216-T-6	43.4	15-43	107.5	105	0	GPL only
C9507	216-T-19	48.1	20-52	243.4	230	12	12

**Regulatory Agency Comments:** N/A

**200-IS-1** Ecology Lead (RL- Doug Hildebrand, CHPRC – Bert Day)

- o Signed the dispute extension agreement on July 13, 2016, for change control form M-15-13-02 for an additional 31 days (September 1, 2016).
- o Signed the dispute extension agreement on August 18, 2016, for change control form M-15-13-02 for an end date of November 1, 2016.
- o Coordinated with Ecology on August 17, 2016, to initiate definition of the specific dispute areas using the issue resolution process being drafted via the process improvement initiative.
- o Provided Ecology with both electronic and paper copy of the 200-IS-1 OU Scoping Package (Rev. 1 SGW-59881) on August 11, 2016.

**M-015-112:** Submit Draft B, 200-IS-1 OU Pipeline System Waste Sites RFI/CMS/RI/FS WP to Ecology, including a schedule of completion dates for major tasks and deliverables, 2/28/2014.

- o Status: Dispute resolution. The parties are currently working on identifying the Work Plan scope (i.e., change package C-13-01), TSD identification, and associated revised delivery schedule. The dispute resolution is currently extended to November 1, 2016.

**Regulatory Agency Comments:** N/A

**200-EA-1** Ecology Lead (RL- Doug Hildebrand, CHPRC – Bert Day)

- o Continued scoping efforts and initiated development of contaminant distribution profiles.

**M-015-92A:** Submit a RFI/CMS & RI/FS work plan for the 200-EA-1 OU (200 East Inner Area) to Ecology, 9/30/17

- Status: On Schedule.

**Regulatory Agency Comments:** N/A

**200-SW-2** Ecology Lead (RL- Doug Hildebrand, CHPRC – Bert Day)

- o Completed revised green island legacy waste determination calculations the week of August 11, 2016.
- o Work Plan efforts
  - Received Ecology letter 16-NWP-116 on June 30, 2016, requiring two text modifications to the 200 SW-2 Work Plan or RL to initiate the dispute resolution process. Both issues are related to the

Principles and Parameters text which were previously agreed to at the Tri-Party manager level.  
The two stated issues:

- Exposure point calculation means and methods using EPA ProUCL software.
- Verbiage associated with the human direct contact conditional point of compliance.
- Initiated dispute resolution on these two issues on July 27, 2016 (16-AMRP-0226).
- Received Ecology letter on July 27, 2016, documenting agreement on revised ProUCL text associated (16-NWP-130).
- Received Ecology letter on August 15, 2016, documenting agreement on the revised the human direct contact alternative point of compliance associated text (16-NWP-141).
- Obtained EPA signature on the Sampling and Analysis Plan (Appendix A) on August 3, 2016.
- Obtained Ecology signature on the Work Plan on August 11, 2016, signifying agreement on the remaining dispute items.
- Completed Rev 1 page change quality checks on August 17, 2016; initiated final clearance/release and publication processes.

**Regulatory Agency Comments:** N/A

**200-SW-1** Ecology Lead (RL- Doug Hildebrand)

- EA released for public review August 29, 2011. The last of the public comments were received on November 17, 2011. Due to budgetary constraints and priorities, no further action is scheduled for FY2016.

**Regulatory Agency Comments:** N/A

**200-BC-1 and 200-WA-1** EPA Lead (RL- John Sands, CHPRC – Patrick Baynes)

- A hard copy of the Draft Rev. 0 RI/FS work plan was delivered to EPA on August 11, 2016. A follow up meeting with EPA was held August 30, 2016. EPA has additional comments and has committed to provide them by September 8, 2016.

**Regulatory Agency Comments:** DOE is setting up a management level follow up meeting regarding cumulative risk in the document

**200-CW-1, 200-CW-3, 200-OA-1** EPA Lead (RL –Ben Vannah, CHPRC – Bert Day)

- Nothing to report.

**Regulatory Agency Comments:** N/A

**200-BP-5 and 200-PO-1** Ecology Lead (RL – James Hanson, CHPRC – Curt Wittreich)

- Held a comment resolution meeting with Ecology on August 10, 2016, to review and address Ecology's comments on the Draft A 200-BP-5 Treatability Test Report. Comments are being incorporated.
- Continued groundwater extraction at the B Complex continued under the treatability test to further assess contaminant removal.
- Completed the installation of an extension to the 200-BP-5 cross-site pipeline from the current extraction well 299-E33-268 to well 299-E33-360 located on the north side of B-Farm.
- Provided the Decisional Draft 200-BP-5 Action Memorandum (AM) to Ecology on July 28, 2016, for informal review. A comment review and resolution meeting with Ecology was held on August 15, 2016. The Draft A AM is expected to be transmitted to Ecology before the end of September, 2016.

- The Draft A 200-BP-5 RI Report and Draft A 200-PO-1 RI Report Addendum were transmitted to Ecology on August 11, 2015 for review. This review has been held up due to Ecology's concerns over the groundwater model proposed in the RI reports. This issue has been elevated to senior management to resolve.
- Ecology transmitted revised comments for the Draft A 200-BP-5 groundwater monitoring SAP on August 4, 2016. Comments dispositions are being prepared.

**Regulatory Agency Comments:** N/A

**200-PW-1/3/6 and CW-5** EPA Lead (RL- Robert Long, CHPRC – Patrick Baynes)

- Nothing to report.

**Regulatory Agency Comments:** action: DOE to status in 6 months

**200-PW-1 Soil Vapor Extraction Operations** EPA Lead (RL – John Sands, CHPRC – Mark Byrnes)

- The Rev. 0 Draft 200-PW-1 SVE Response Action Report was signed by EPA on August 11, 2016 and released August 17, 2016.

**Regulatory Agency Comments:** N/A

**200-UP-1** EPA Lead (RL – Kate Amrhein, CHPRC – Curtis Wittreich, PNNL-D. Wellman [I-129])

- Completed two (299-W19-116, 299-W21-3) of seven remedy performance monitoring wells. Three more are in process (299 W19-115, 699-36-63B, and 299-W22-114). Completed one (699-30-57) and drilled two more (699-31-68, 699-29-66) southeast chromium plume characterization wells

**M-016-193:** Complete the remedial design investigation of the SE chromium plume, including the installation of new wells and evaluation of the GW monitoring data and install monitoring wells needed for remedy performance monitoring as defined in the UP-1 RD/RA WP, 9/30/2017.

- Status: On Schedule. Extension being requested. The rationale for extending M-016-193 to September 30, 2018, was discussed with EPA on June 15, 2016. Additional time is required to allow the aquifer to recover from reducing conditions caused by well drilling for the southeast chromium plume. Reducing conditions can result in lowered chromium concentrations in groundwater sample results. A year of aquifer recovery with quarterly groundwater samples was recommended to track the recovery and ensure that chromium concentrations are representative of aquifer conditions to adequately support the SE chromium plume remedial design investigation.

**Regulatory Agency Comments:** N/A

**200-ZP-1** EPA Lead (RL – James Hanson, CHPRC – Mark Byrnes)

- Nothing to report.

**Regulatory Agency Comments:** N/A

**M-024 Well Installation** Ecology Lead (RL-Ben Vannah, CHPRC-Dave Capelle)

- Nothing to report.

**M-024-67-T01:** Conclude Discussion of Well Commitments, 8/1/2016

- Status: Completed on July 19, 2016. The Parties have successfully concluded discussions, and by approval of change request M-24-16-01, established the interim TPA milestone M-024-70 for completion of CY 2019 well installation.

**Regulatory Agency Comments:** N/A

**200 Area RCRA TSD Closures** Ecology Lead (RL – Mostafa Kamal, CHPRC – Bert Day)

- 216-A-29 ditch (D-2-3), 216-A-36B crib (D-2-4), 216-B-63 trench (D-2-6), 216-A-37-1 crib (D-2-10)
  - Awaiting Ecology Closure Plan comments regarding the path forward (15-NWP-040 dated February 19, 2015); DOE transmitted revised Closure Plans to Ecology on June 23, 2014 (14-AMRP-0210).
  - DOE proposes to resubmit updated closure plan based on recently developed closure performance standards.
  - Supports M-037-10 interim milestone to complete unit-specific closure requirements according to the closure plans, due 9/30/2020.
- 216-B-3 pond and 216-S-10 pond and ditch (D-2-5 and D-2-7, respectively)
  - Awaiting Ecology Closure Plan comments path forward; DOE transmitted responses on December 3, 2013 (14-AMRP-0045) to notice of deficiencies provided via 13-NWP-076 (dated July 12, 2013).
  - DOE proposes to resubmit updated closure plans based on recently developed closure performance standards.
  - Supports M-037-11 interim milestone to complete unit-specific closure requirements by 9/30/2024.
- 207-A south retention basin (S-2-7)
  - Supporting 207-A discussions with Ecology regarding inclusion of TSD within HFFACO Appendix C for coordination.

**Regulatory Agency Comments:** Ecology supports DOE's proposal to collaborate on revising the closure plans for the above units except for 207-A.

**U Plant Canyon** EPA Lead (RL – Wade Woolery, CHPRC – TBD)

- Nothing to report.

**Regulatory Agency Comments:** N/A

**Canyon Facilities** EPA/Ecology Lead (RL – Ray Corey, CHPRC –Jennie Stults)

- Nothing to report.

**M-085-80A:** Submit a DQO report to assess the structural integrity of the PUREX storage tunnels 1 and 2, 9/30/2017

- Status: On Schedule.

**Regulatory Agency Comments:** N/A

**Waste Site Removal** Ecology Lead (RL- Al Farabee, CHPRC - D.Corriel)

- o Nothing to report.

**M-016-250:** Submit to Ecology for approval a three year rolling prioritized schedule consistent with site-wide clean-up priorities to implement waste site removal actions per Action Memoranda (DOE/RL-2009-37, DOE/RL-2009-48 and DOE/RL-2009-86), 3/31/2016 and annually thereafter.

- o Status: On Schedule.

**Regulatory Agency Comments:** N/A

Central Plateau Milestones due post 9/30/2017

MS#	Title	Due Date
M-015-00	Complete RI/FS for non-tank and non-canyon OUs	6/30/2026
M-015-21A	Submit BP-5/PO-1 FS/PP	6/30/2018
M-015-93C	Initiate characterization field work for the 200-SW-2 OU	9/30/2018
M-015-91B	Submit FS/PP for 200-BC-1/200-WA-1 OUs	7/31/2021
M-015-92B	Submit RFI/CMS, RI/FS, and Proposed CA Decision proposed plan for 200-EA-1	11/30/2022
M-015-93B	Submit RFI/CMS & RI/FS Study Report and proposed CAD/PP for 200-SW-2 OU	1/31/2023
M-015-92C	Submit RFI/CMS & RI/FS Study report and proposed CAD/PP for the 200-IS-1 OU to Ecology	3/31/2023
M-015-38B	Submit FS/PP for 200-CW-1, 200-CW-3 and 200-OA-1 OUs	7/31/2023
M-015-110B	Submit CMS & FS and Proposed CAD/PP for 200-DV-1 OU	9/30/2023
M-024-68	Comp Const of All Wells Listed for CY17 and Before Identified in Att 1 of TPA Chg Pkg M-024-14-01	12/31/2017
M-024-58K	Initiate Discussions of Well Commitments	6/1/2018
M-024-69-T01	Conclude discussions of well commitments initiated under M-024-58	8/1/2018
M-024-69	Complete construction of all wells listed for CY18 and before as listed in M-24-15-01	12/31/2018
M-016-00	Complete remedial actions for non-tank and non-canyon OUs	9/30/2042
M-016-86	Complete remedial actions for 618-11 Burial Ground	9/30/2021
M-016-200A	Complete U Plant canyon demolition	9/30/2024
M-016-200B	Complete U Plant barrier construction	9/30/2027
M-085-82	Submit proposals for expedited response actions for one or more of the Tier 1 or Tier 2 facilities in the PUREX geographic area	12/31/2017

MS#	Title	Due Date
M-085-74	Submit proposals for expedited response actions for one or more of the Tier 1 and Tier 2 facilities in the B Plant geographic area	6/30/2018
M-085-70	Submit RI/FS Work Plan for 200-CB-1	9/30/2019
M-085-72	Submit RAWP to implement the approved Action Memorandum for 224-B	9/30/2020
M-085-80	Submit RI/FS Work Plan for 200-CP-1	9/30/2020
M-085-100	Submit a RAWP to implement the approved Action Memorandum for 224-T	9/30/2020
M-085-90	Submit RI/FS Work Plan for 200-CR-1	9/30/2021
M-085-76	Initiate response actions for the B Plant geographic area	9/30/2025
M-085-84	Initiate response actions for the PUREX geographic work	9/30/2025
M-085-01	Submit change package to establish a date for major milestone M-085-00	6/30/2026
M-037-10	Complete Unit-Specific closure requirements for six TSD units	9/30/2020
M-037-13	Complete unit-specific closure requirements for 241-CX Tank System	9/30/2022
M-037-11	Complete unit-specific closure requirements for 216-B-3 Main Pond System and 216-S-10 Pond and Ditch	9/30/2024

**Documents for Submittal to the Administrative Record**

<b>Associated OU or TSD</b>	<b>Number (Published Year)</b>	<b>Title</b>	<b>Referencing Document/Driver</b>
SWL	FH-0502966, 2005	PHMC Section C.4.2 – Submittal of Solid Waste Landfill Annual Monitoring Report	DOE/RL-2015-33 R0 SWL SAP
A-AX	SGW-57811, Rev. 0	Description of Work for the Installation of Five Groundwater Monitoring Wells to Support M-24 TPA Work in FY 2014	needed for the description of work doc for 299-E25-237
200-PO-1	SGW-58434, Rev. 0	Description of Work for the Installation of Four Monitoring Wells at the Solid Waste Landfill and Non-Radioactive Waste Disposal Landfill, FY2015	DOE/RL-2009-75 R1 NRWDL SAP
A-AX	RPP-ENV-37956, R2, 2014	Hanford 241-A and 241-AX Tank Farms Leak Inventory Assessment Report, Rev. 2	For new A-AX SAP
200-BP-5	ECF-200BP5-16-0026, R1	Description of Calculations for the 216-A-29 Ditch Completed During Calendar Year 2015	DOE/RL-2016-09
SWL	05-AMRC-0130	Hanford Site Solid Waste Landfill Annual Monitoring Report” Third Quarter Calendar Year 2003 through Second Quarter Calendar Year 2004 (July 2003 through June 2004) (letter to J. Price, Washington State Department of Ecology from L. Erickson)	DOE/RL-2015-33 R0 SWL SAP
LLBG WMA-1	DOE/RL-2009-75, R1	Interim Status GW Monitoring Plan for the LLBG WMA-1	cleared August 2016
200 W P&T, LLBG Trenches 31 and 34	SGW-59564, R0	Engineering Evaluation of the 200 West Pump and Treat Influence on Groundwater Monitoring for the Low-Level Burial Ground Trenches 31 and 34	cleared August 2016
NRDWL	DOE/RL-2015-32, R0	Groundwater Monitoring Plan for the Nonradioactive Dangerous Waste Landfill	cleared August 2016

## **Project Managers Meeting – September 2016 (*August Data*)**

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Hanford's overall Site groundwater monitoring program managed by CHPRC (River Corridor and Central Plateau) coordinates collection of groundwater samples from wells and aquifer tubes, as well as surface water samples from springs. Sample trips are scheduled by target month and prioritized based on project needs. Target sample dates (months) are chosen to minimize the number of sample trips by temporally aligning requests from multiple activities for a single location into a single trip where practical.

### **Sample Trip Status by Month Scheduled**

For Fiscal Year 2016, Hanford's overall Site groundwater monitoring program has 2,846 sample trips scheduled for collection. DOE has successfully completed 2,519 of 2,588 trips scheduled for October 2015 through August 2016. During August 2016, 181 Fiscal Year 2016 sample trips were successfully collected of which 26 were scheduled for January through July, 104 were scheduled for August, and 51 were scheduled for September.

The specific wells, aquifer tubes, and springs sampled in the central plateau during August 2016 are listed in Table 1.

### **Awaiting Sample Trips**

Of the sample trips scheduled for August 2016 and prior, there are 76 that are awaiting collection. Of these, 3 were sampled but had data errors which have been corrected, 1 will be decommissioned, 8 require maintenance, 4 have access restrictions (tank farm and WTP related), 2 are pump-and-treat wells that are not running, 1 has been canceled, 4 are being reviewed for cancellation, 5 were unsuccessful, 15 are associated with a special study and have an adjusted schedule, and 33 are awaiting collection at the month end.

Table 2 presents the sample trips for only the central plateau that were not successfully completed in August. Sample trips in Table 2 are grouped by fiscal month scheduled and groundwater interest area. This table clearly shows that the number of awaiting well trips decreases with time from the schedule date. Reasons for sample trips to be awaiting include but are not limited to issues such as well maintenance, weather conditions, access restrictions, and resource limitations.

### **Upcoming Sample Trips**

Sample trips for the central plateau only, scheduled for collection in September 2016 (and not collected before the target sample month) are listed in Table 3.

### **WMA C Tank Farm**

One WMA C Tank Farm samples for the third quarter of FY-2016 remains to be collected and is scheduled to be decommissioned. WMA C Tank Farm monitoring wells are listed in Table 4.

### **Data Access**

The sampling results are available in HEIS and can be accessed from the Environmental Dashboard Application which can be accessed from the HLAN at <https://ehs.chprc.rl.gov/eda/> or from the internet at <https://ehs.hanford.gov/eda/>.

**Table 1 Wells, Aquifer Tubes, and springs in the Central Plateau Successfully Sampled In August 2016**

200-BP	200-PO	200-UP	200-ZP
11-D	299-E17-3	299-W14-71	299-W10-26
12-D		299-W15-37	299-W10-27
199-K-183		299-W19-101	299-W11-33Q
199-K-31		299-W19-107	299-W11-40
299-E26-15		299-W19-34B	299-W11-41
299-E28-13		299-W19-36	299-W11-42
299-E28-31		299-W19-39	299-W11-47
299-E33-16		299-W19-43	299-W14-13
299-E33-20		299-W19-46	299-W14-15
299-E33-31		299-W19-48	299-W14-18
299-E33-32		299-W19-49	299-W14-72
299-E33-334			
299-E33-335			
299-E33-337			
299-E33-338			
299-E33-339			
299-E33-345			
299-E33-36			
299-E33-38			
299-E33-40			
299-E33-41			
299-E33-42			
299-E33-43			
299-E33-44			
299-E33-47			
299-E33-48			
299-E33-49			

**Table 2 Fiscal Year 2015 and 2016 Sample Trips in the Central Plateau awaiting at the end of August 2016**

Qtr Sched	GWIA	SAMP_SITE TYPE	SITE_NAME	SCHEDULE DATE	Frequency	Months Remain	Status	Comment
FY 2016 Q2	200-BP	WELL	299-E33-12	3/1/2016	Annual	6		Maintenance Required, Unsuccessful 3-4-2016
	200-PO	WELL	699-34-42	1/1/2016	Annual	4		Review for Cancellation, Unsuccessful 1-25-2016
		WELL	699-S24-19P	3/1/2016	Annual	6		Access Restricted
	200-UP	WELL	299-W18-15	2/1/2016	Annual	5		Maintenance Required
FY 2016 Q3	200-BP	WELL	299-E27-26	6/1/2016	Quarterly	0	Late	Review for Cancellation
		WELL	299-E27-4	6/1/2016	Quarterly	0	Late	To be Decommissioned
		WELL	299-E28-32	6/1/2016	Annual	9		
		WELL	299-E33-205	4/1/2016	Biannual	1		Access Restricted
		WELL	699-50-59	4/1/2016	Annual	7		Maintenance Required, Unsuccessful 4/25/2016
		WELL	699-53-55C	4/1/2016	Annual	7		Maintenance Required
		WELL	699-65-72	4/1/2016	Annual	7		Maintenance Required
	200-PO	WELL	299-E13-16	4/1/2016	Annual	7		
		WELL	299-E13-7	4/1/2016	Annual	7		
		WELL	299-E25-18	4/1/2016	Annual	7		Maintenance Required, Unsuccessful 4-1-2016
		WELL	299-E25-25	6/1/2016	Other	8		Access Restricted, Special Study
		WELL	299-E25-39	6/1/2016	Other	8		Access Restricted, Special Study
		WELL	699-28-40P	5/1/2016	Annual	8		
	200-UP	WELL	299-W22-114	6/1/2016	Annual	9		
		WELL	299-W22-123	6/1/2016	Annual	9		
		WELL	699-32-70B	4/1/2016	Annual	7		Unsuccessful 5-22-2016
	200-ZP	WELL	299-W14-73	4/1/2016	Annual	7		P&T well not running
		WELL	299-W14-74	4/1/2016	Annual	7		P&T well not running
		WELL	299-W17-1	4/1/2016	Quarterly	0		Review for Cancellation, Sampled 7-12-2016
	FY 2016 Q4	200-BP	WELL	299-E28-15	7/1/2016	Annual	10	
WELL			299-E33-10	8/1/2016	Annual	11		
WELL			299-E33-15	8/1/2016	Annual	11		Unsuccessful 8-3-2016
WELL			299-E33-21	8/1/2016	Annual	11		Unsuccessful 8-5-2016
WELL			299-E33-344	8/1/2016	Quarterly	2		
WELL			299-E33-350	8/1/2016	Annual	11		
WELL			299-E33-351	8/1/2016	Annual	11		
200-PO		WELL	699-33-56	7/3/2016	Biannual	4		
200-UP		WELL	299-W18-21	7/1/2016	Biannual	4		
		WELL	299-W19-115	8/1/2016	Annual	11		
		WELL	299-W19-116	8/1/2016	Annual	11		
		WELL	299-W19-4	8/1/2016	Annual	11		Unsuccessful 8-2-2016
		WELL	699-17-70	7/1/2016	Annual	10		

Qtr Sched	GWIA	SAMP_SITE TYPE	SITE_NAME	SCHEDULE DATE	Frequency	Months Remain	Status	Comment
		WELL	699-19-88	7/1/2016	Quarterly	1		
	200-ZP	WELL	699-48-77D	7/1/2016	Quarterly	1		Maintenance Required, Unsuccessful 7-27-2016
		WELL	699-49-100C	7/1/2016	Quarterly	1		

**Table 3 Groundwater Sampling Locations in the Central Plateau Scheduled to be sampled in September 2016**

200-BP	200-PO	200-UP	200-ZP
299-E27-12	299-E24-20	299-W19-116	299-W10-14
299-E27-13	299-E24-22	299-W22-115	299-W10-29
299-E27-14	299-E24-33	299-W22-116	299-W10-30
299-E27-15	299-E25-2	299-W22-47	299-W10-31
299-E27-155	299-E25-237	299-W22-93	299-W9-2
299-E27-21	299-E25-40	299-W23-19	
299-E27-22	299-E25-41	699-25-70	
299-E27-23	299-E25-93	699-35-66A	
299-E27-24	299-E25-94	699-36-66B	
299-E27-25	699-30-57	699-36-70A	
299-E27-26		699-37-66	
299-E27-4			
299-E27-7			
C6236			
C6236			
C6237			
C6237			
C6238			
C6238			

**Table 4. WMA C Quarterly Monitoring Wells**

SITE_NAME
299-E27-12
299-E27-13
299-E27-14
299-E27-15
299-E27-155
299-E27-21
299-E27-22
299-E27-23
299-E27-24
299-E27-25
299-E27-4
299-E27-7

# CENTRAL PLATEAU 2016 ANNUAL INSTITUTIONAL CONTROLS ASSESSMENT



200 Project Managers Meeting

September 15, 2016



**ch2m:**



## Central Plateau Records of Decision

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- 200-ZP-1 Groundwater Operable Unit ROD
- 200-UP-1 Groundwater Operable Unit Interim ROD
- 221-U Facility (Canyon Disposition Initiative)
- 200-CW-5 and 200-PW-1/3/6 Source Operable Unit ROD
- Environmental Restoration Disposal Facility
- 100/200 Areas Remaining Sites (200 North Area)

## Institutional Controls Associated with Records of Decision

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- Entry Restrictions
- Warning Notices
- Groundwater-Use Management
- Land-Use Management
- Miscellaneous Provisions

## Institutional Controls Assessment Results

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- Institutional controls were in place through out FY 2016 for the Central Plateau operable units.
- There were no failures of institutional controls during the fiscal year.
- These controls are planned to be continued through FY 2017 on the Central Plateau.

## Institutional Controls Associated with Records of Decision

### Beloit and 23<sup>rd</sup> Street



## Institutional Controls Associated with Records of Decision

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Camden and 23rd Street



## Institutional Controls Associated with Records of Decision

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East of 200 West P&T



## Institutional Controls Associated with Records of Decision

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### Southwest of 221-U Plant



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