



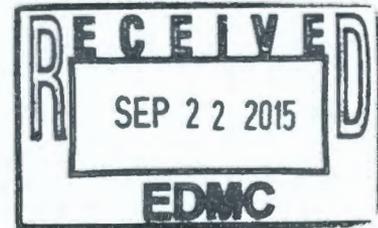
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15-AMRP-0323

SEP 17 2015

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## Addressees:

COMPLETION OF HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT  
 ORDER (TRI-PARTY AGREEMENT) MILESTONE M-024-66 AND TARGET  
 MILESTONE M-024-66-T01

- References:
- 1230545 1. Change Control Form, R. J. Corey, RL, "Groundwater Protection, Monitoring and Remediation Well Installation Priority List Update through CY 2018, including a New TPA Interim Milestone," Change Number M-24-15-01, dtd. April 22, 2015, signed July 27, 2015.
- 1215670 2. Change Control Form, K. M. Thompson, RL, "Groundwater Protection, Monitoring and Remediation Well Installation Priority List Update through CY 2015, including a New TPA Interim Milestone and TPA Target Date," Change Number M-24-12-01, dtd. July 16, 2012, signed July 25, 2012.

This letter documents completion of Tri-Party Agreement Milestone M-024-66, "Complete construction of all wells listed for Calendar Year 2015 and before, as identified in Change Package M-24-12-01," signed July 25, 2012, Reference (2).

The installation of a total of 30 wells was completed on June 15, 2015, six months in advance of the required December 31, 2015, completion date. The well list submitted in 2012 has been amended to correlate with well acceptance as identified in Tri-Party Agreement Change Number M-24-15-01. Attached is the listing of wells that have been completed and is consistent with the list included in Reference (1).

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This letter also documents the completion of Target Milestone M-024-66-T01, "Discussions of well commitments through Calendar Year 2018 as identified in Change Package M-24-15-01," signed July 27, 2015, Reference (1).

If you have any questions, please contact me, or your staff may contact, Mike Cline, of my staff, on (509) 376-6070.

Sincerely,



Ray J. Corey, Assistant Manager  
for the River and Plateau

AMRP:JPS

Attachment

cc w/attach:

G. Bohnee, NPT  
J. V. Borghese, CHPRC  
R. Buck, Wanapum  
D. P. Capelle, CHPRC  
D. Goswami, Ecology  
S. Hudson, HAB  
R. Jim, YN  
N. M. Menard, Ecology  
K. Niles, ODOE  
C. P. Noonan, MSA  
R. E. Piippo, MSA  
D. Rowland, YN  
R. Skeen, CTUIR  
E. R. Skinnerland, Ecology  
M. J. Turner, MSA  
**Administrative Record**  
Environmental Portal

#	Well ID	OU / Other	Comments	Temporary Name	Program/Facility Name/ Locations	Justification/Purpose	Planned Campaign	TPA Calendar Year
1	C8240	RCRA	299-W22-95	RCRA - FY 2013	200-UP-1 SST S-SX, RCRA	Downgradient existing RCRA monitoring well 299-W22-26 is dry (FY 2013). It is located on the east side of the 216-S-9 Crib downgradient from the S Tank Farm. This monitoring point is being relocated to the north side of the 216-S-9 Crib in anticipation that the groundwater flow direction will change from east to east-northeast in response to the 200-ZP-1 P&T activities.	Accepted 11/5/2013	
2	C8203	RCRA	299-W22-94	RCRA - FY 2013	200-UP-1 SST S-SX RCRA	Existing RCRA monitoring well 299-W22-48 dry. This well is on the south boundary of the plume from the S Tank Farm and has low concentrations of technetium-99, nitrate, and chromium.	Accepted 11/5/2013	CY 2015 M-24
3	C8778	100-BC-5	199-B4-18	100-BC-5	100-BC-5 Partner with 199-B4-7	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 1/27/2014	CY 2015 M-24
4	C8779	100-BC-5	199-B5-9	100-BC-5	100-BC-5 Northeast of 100-C-7:1 (near site)	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 1/27/2014	CY 2015 M-24
5	C8783	100-BC-5	199-B5-13	100-BC-5	100-BC-5 Partner with 199-B5-1	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 1/27/2014	CY 2015 M-24
6	C8784	100-BC-5	199-B5-14	100-BC-5	100-BC-5 West of central	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 1/27/2014	CY 2015 M-24
7	C8776	100-BC-5	199-B4-16	100-BC-5	100-BC-5 East of central	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 2/19/2014	CY 2015 M-24
8	C8780	100-BC-5	199-B5-10	100-BC-5	100-BC-5 Northeast of 100-C-7:1 (near site)	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 2/19/2014	CY 2015 M-24
9	C8781	100-BC-5	199-B5-11	100-BC-5	100-BC-5 Northeast of 100-C-7 (mid-distance)	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 2/19/2014	CY 2015 M-24
10	C8782	100-BC-5	199-B5-12	100-BC-5	100-BC-5 Northeast of 100-C-7 (mid-distance)	Addition to well monitoring network as specified in revised 100-BC-1, 100-BC-2 and 100-BC-5 RI/FS Work Plan / SAP	Accepted 2/19/2014	CY 2015 M-24
11	C8772	200-PO-1	699-24-36	200-PO-1	200-PO-1 RCRA	NRDWL/SWL upgradient monitoring wells	Accepted 3/20/2014	CY 2015 M-24
12	C8200	200-PO-1	699-25-34E	200-PO-1	200-PO-1 RCRA	NRDWL/SWL monitoring well	Accepted 3/20/2014	CY 2015 M-24
13	C8774	200-PO-1	699-26-38	200-PO-1	200-PO-1 RCRA	NRDWL/SWL monitoring well	Accepted 3/20/2014	CY 2015 M-24
14	C8289	100-KR-4	199-K-202	100-KR-4	100-KR-4	There are no remaining monitoring wells within the extreme concentration Sr-90 plume downgradient of the former 105-KE fuel storage basin. Transport estimates indicate that a plume with maximum concentration >13,000 pCi/L Sr-90 is present in that area. Well 199-K-141 has exhibited rapidly-increasing Sr-90 concentration since starting extraction at that location. Sr-90 has migrated to the River and concentrations have approached the MCL in one aquifer tube near this plume. This plume is unmonitored and migration of Sr-90 poses a risk to continued successful operation of the 100-KX P&T system	Accepted 4/7/2014	CY 2015 M-24

#	Well ID	OU / Other	Comments	Temporary Name	Program/Facility Name/ Locations	Justification/Purpose	Planned Campaign	TPA Calendar Year
15	C8916	200-BP-5	699-46-91	Modutank #1	200-BP-5 RCRA	Upgradient Modutank monitoring well. Based on DOE/RL-2009-39, if the modular storage unit will be used after 8/5/2014 or if there is evidence of leakage from the modular storage units to the environment, RL will implement groundwater monitoring. WAC 173-303-645 states the department will specify in the facility permit the points of compliance. Based on 40 CFR 265.91 it is assumed one upgradient and three downgradient wells will be required if modutanks continue to operate beyond 8/5/2014.	Accepted 5/6/2014	CY 2015 M-24
16	C8938	300-FF-5	399-1-68	300-FF-5	300-FF-5 CERCLA	Wells will monitor the groundwater within the PRZ.	Accepted 2/5/2015	CY 2015 M-24
17	C8936	300-FF-5	399-1-67	300-FF-5	300-FF-5 CERCLA	Wells will monitor the groundwater within the PRZ.	Accepted 2/5/2015	CY 2015 M-24
18	C8925	200-UP-1	299-W18-260	200-UP-1	200-UP-1 WMA U RCRA	Existing RCRA monitoring well 299-W18-30 was declared sample dry 5/21/13. It is the northernmost well in the monitoring network. This will become an important monitoring location in the future because the groundwater flow direction at WMA U is expected to change from east to northeast in response to the 200-ZP-1 P&T activities. Well 299-W18-30 is listed for semi-annual sampling in the monitoring plan, DOE/RL-2009-74, Rev. 1.	Accepted 2/5/2015	CY 2015 M-24
19	C8922	200-PO-1	299-E25-237	200-PO-1	200-PO-1 RCRA	Replace decommissioned RCRA well 299-E25-236. Characterize nature of perch horizon, which is associated with accelerated casing corrosion at three nearby wells.	Accepted 2/5/2015	CY 2015 M-24
20	C8923	200-BP-5	299-E33-360	200-BP-5	200-BP-5 RCRA	Replacement well for non-WAC compliant well 299-E33-18, decommissioned FY 2013 Permit conditions for WMA B/BX/BY. Completed as an 8 inch well. North of the 241-B tank farm (WMA B)	Accepted 2/5/2015	CY 2015 M-24
21	C8924	200-BP-5	299-E33-361	200-BP-5	200-BP-5 RCRA/CERCLA	SW Downgradient well for WMA B/BX/BY Near field well southeast of WMA B/BX/BY between well 299-E33-37 and the 207-B Retention Basin at top of aquifer. Completed as a 8 inch well. Located south east of WMA B.	Accepted 2/5/2015	CY 2015 M-24
22	C8943	200-UP-1	299-W22-113	200-UP-1	200-UP-1 WMA S-SX RCRA	Located east of the WMA S-SX. Drilled to replace existing monitoring wells that have gone dry or are nearly dry due to the declining water table Replacement for existing RCRA monitoring well 299-W22-49	Accepted 2/5/2015	CY 2015 M-24
23	C8290	100-KR-4	199-K-203	100-KR-4	100-KR-4 CERCLA	Approximately 70 m North toward river of former well 199-K-29. There are no remaining monitoring wells within the extreme concentration C-14 plume downgradient of the former 116-KE-1 Gas Dryer Condensate Crib. Well 199-K-141 has exhibited increasing C-14 concentration since starting extraction at that location. Potential interception of the plume by extraction wells poses a risk to continued successful operation of the 100-KX P&T system.	Accepted 3/24/2015	CY 2015 M-24

#	Well ID	OU / Other	Comments	Temporary Name	Program/Facility Name/ Locations	Justification/Purpose	Planned Campaign	TPA Calendar Year
24	C8291	100-KR-4	199-K-204	100-KR-4	100-KR-4 CERCLA	There are no monitoring wells in this area that transport estimates indicate contains the highest estimated C-14 concentration plume at 100-K. Migration of C-14 toward the river and potential interception of the plume by extraction wells poses a risk to continued successful operation of the 100-KW P&T system.	Accepted 3/24/2015	CY 2015 M-24
25	C8294	100-KR-4	199-K-207	100-KR-4	100-KR-4 CERCLA	High residual vadose zone contamination by tritium was observed at the completion of soil RTD at the burial ground in the vicinity. No monitoring wells currently provide observation of potential ongoing contributions to groundwater contamination. Groundwater monitoring and vadose zone release detection.	Accepted 3/24/2015	CY 2015 M-24
26	C8296	100-KR-4	199-K-209	100-KR-4	100-KR-4 CERCLA	Unmonitored area between inland monitoring wells that exhibit hexavalent chromium Midway between existing wells 199-K-194 and 699-77-54	Accepted 3/24/2015	CY 2015 M-24
27	C8202	200-UP-1	299-W22-93	200-UP-1	200-UP-1 WMA S-SX RCRA	Existing RCRA monitoring well 299-W22-44 became sample dry during 2013. It is within the plume from the S Tank Farm and is the nearest downgradient well from the source (tank S-104). It is also adjacent to extraction well 299-W22-90, so 299-W22-44 (or its replacement) will also be used as a remedy performance well. The replacement well, 299-W22-93, is already staked in the field. Well 299-W22-44 is listed for quarterly sampling in DOE/RL-2009-73. A SAP has been prepared that specifies the samples to be collected during drilling (DOE/RL-2010-130). Currently sampling nearby extraction well 299-W22-90.	Accepted 5/21/2015	CY 2015 M-24
28	C9431	200-UP-1	299-W22-116	200-UP-1	200-UP-1 WMA S-SX RCRA AEA	Replacement for existing RCRA monitoring well 299-W22-50 became sample dry during 2014. Nearby extraction well 299-W22-91 is being sampled.	Accepted 5/21/2015	CY 2015 M-24
29	C9432	200-UP-1	299-W23-236	200-UP-1	200-UP-1 WMA-S-SX RCRA CERCLA AEA	Replacement for 299-W23-15. As of 4/2014 this well has 5.5 ft of water remaining. It is expected to become dry in FY2016 or FY2017. This well is part of the RCRA monitoring network at WMA S-SX and is listed for annual sampling in the assessment plan (DOE/RL-2009-73). It is also sampled annually for the 200-UP-1 OU. This well is located south of the SX Tank Farm (i.e., cross-gradient). Although it shows no contamination, it is suspected that samples from this well are not representative of the aquifer. The chromium, nitrate, technetium-99 and tritium plumes are interpreted as being present at this location.	Accepted 5/21/2015	CY 2015 M-24
30	C8793	100-HR-3	699-97-60	100-HR-3	100-HR-3 CERCLA	Delineation of Cr(VI) plume within the RUM - in the HORN by 199-D3-5 - DH-08, downgradient 699-97-48C The area of contamination in the RUM is defined by a single point and concentrations have recently risen to over 52 ppb. The concern is that this migrating across the Horn. Need to understand the extent before we can understand the potential risk.	Accepted 6/15/2015	CY 2015 M-24