

**RCRA GROUNDWATER SAMPLE COLLECTION RECOVERY PLAN**  
Collection status updated on 2/2/2011

Submitted to  
Washington State Dept of Ecology Nuclear Waste Program  
December 10, 2010

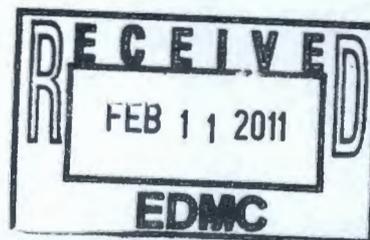
## Background

A Stop Work of all sampling activities within CHPRC's Soil and Groundwater Remediation Project was declared on 9/27/10 based on safety issues. A Condition review was performed and corrective actions were completed, allowing groundwater sampling to resume on 11/08/10. Wells have been and continue to be 'released' for sample collection based on Industrial Hygiene reviews. Some 200-West Area wells are still awaiting release.

Several wells monitoring Resource Conservation and Recovery Act (RCRA) Treatment, Storage, or Disposal (TSD) units or Waste Management Areas (WMA) were not sampled as scheduled for October and November, and/or are at risk for not sampling in December (Table below).

TSD or WMA	Number of wells	Frequency
October scheduled wells		
SST T Farm	15	Quarterly
SST TX/TY Farms	14	Quarterly
SST U Farm	7	Quarterly
LLWMA (2)	1	Semiannual
PUREX	1	Semiannual
A-29 Ditch	3	Semiannual
November scheduled wells		
TEDF	3	Quarterly
SST B-BX-BY	26	Quarterly
SST B-BX-BY	3	Semiannual
183-H Basins	4	Annual (Permit)
December scheduled wells		
300 Area Process Trenches	8	8 per yr – Permit
LLWMA (1)	19	Semiannual
SST A-AX Farms	9	Quarterly
SST C Farm	12	Quarterly
SST S-SX Farms	20	Quarterly
S-10 Pond and Ditch	3	Semiannual

CHPRC notified Tri-Party agencies of the Stop Work in the October 20, 2010 200 Areas Groundwater and Source OU Project Manager's Meeting; and provided a list of missed samples for the month of October to DOE and Ecology on November 3, 2010. Staff of CHPRC, Ecology, and DOE met on December 7 and 9, 2010 to discuss the status of RCRA sample collection and a recovery plan to minimize impacts to RCRA groundwater monitoring. It was agreed that CHPRC will develop and transmit this *RCRA Groundwater Sample Collection Recovery Plan*.



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## **Recovery Plan**

### **Sample Collection Priority**

This recovery plan prioritizes sample collection as provided below.

1. Collect all Permit-required samples:

- a. 183-H
- b. 300-APT
- c. TEDF

Basis: Enforceable Hanford Facility Dangerous Waste Permit or the Liquid Waste Disposal Permit.

2. Collect semiannual samples for sites in RCRA interim-status indicator evaluation:

- a. LLWMA2
- b. S-10 Pond and Ditch
- c. B-63 Trench
- d. A-29 Ditch
- e. PUREX Cribs
- f. Note: LLWMA1 wells will be deferred to January 2011 – these were sampled in January and June 2010.

Basis: Specific regulatory requirements for semiannual sampling and statistical evaluations of indicator parameter.

3. Collect subset of quarterly scheduled samples from the Single Shell Tank farm sites:

- a. No specific SST well sampling order is implied by the tables or the order of wells within the tables because wells cannot be sampled until after an IH review/release;
- b. Semiannual samples scheduled this quarter at SST WMAs will not be sampled;
- c. Specific wells are based on recommendations from the project scientists.

Basis: Key wells will be sampled from each SST WMA to provide data for quarterly groundwater assessment evaluation, as required. We will cancel other samples if they are not collected by the end of December. Documentation of missed/cancelled well samples will be provided in Quarterly and Annual reports.

### **Recovery Schedule**

The proposed recovery schedule for RCRA and Treated Effluent Disposal Facility sample collection for the October-December 2010 quarter is provided in tables on the following pages. The tables provide the wells scheduled for each month; wells planned to be sampled by the end of December are indicated with 'YES' in the last column. Blank spaces indicate they will not be sampled. Samples that have been collected as of December 6<sup>th</sup> are not shown in the tables.

The proposed schedule includes 21 scheduled October wells, 14 scheduled November wells, and 36 scheduled December wells, for a total of ~~71~~ 70 (corrected because one well is not required) well trips. We will notify Ecology if any of these samples cannot be collected by the end of December and will thus be subject to cancelling. The progress of sample collection will be reviewed weekly, and the status will be provided to DOE and Ecology weekly.

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<b>Table of October scheduled samples (two pages)</b>				<b>Status or Comment</b>
<b>Well Name</b>	<b>TSD or WMA</b>	<b>Frequency</b>	<b>Sample?</b>	
299-W10-1	SST(T)	Quarterly	YES	Done 12/17
299-W10-4	SST(T)	Quarterly		Done 12/16
299-W10-8	SST(T)	Quarterly		
299-W10-23	SST(T)	Quarterly		Done 12/15
299-W10-24	SST(T)	Quarterly		Done 12/16
299-W10-28	SST(T)	Quarterly	YES	Done 12/29
299-W11-12	SST(T)	Quarterly		Maintenance Hold
299-W11-39	SST(T)	Quarterly	YES	Done 12/15
299-W11-40	SST(T)	Quarterly		Done 12/15
299-W11-41	SST(T)	Quarterly	YES	Done 12/27
299-W11-42	SST(T)	Quarterly	YES	Done 12/15
299-W11-45	SST(T)	Quarterly	YES	Maintenance Hold
299-W11-46	SST(T)	Quarterly	YES	Done 12/27
299-W11-47	SST(T)	Quarterly		Done 12/30
299-W10-26	SST(TX/TY)	Quarterly		Done 12/29
299-W10-27	SST(TX/TY)	Quarterly	YES	Done 12/27
299-W14-6	SST(TX/TY)	Quarterly		
299-W14-11	SST(TX/TY)	Quarterly	YES	Done 12/21
299-W14-13	SST(TX/TY)	Quarterly		
299-W14-14	SST(TX/TY)	Quarterly		Done 12/29
299-W14-15	SST(TX/TY)	Quarterly	YES	Done 12/28
299-W14-16	SST(TX/TY)	Quarterly		Sampled in November
299-W14-17	SST(TX/TY)	Quarterly		
299-W14-18	SST(TX/TY)	Quarterly	YES	Done 12/28
299-W14-19	SST(TX/TY)	Quarterly		Done 12/29
299-W15-40	SST(TX/TY)	Quarterly	YES	Done 12/27
299-W15-41	SST(TX/TY)	Quarterly		Unsuccessful on 12/17
299-W15-44	SST(TX/TY)	Quarterly	YES	Done 12/27
299-W15-763	SST(TX/TY)	Quarterly		Done 12/17
299-W15-765	SST(TX/TY)	Quarterly	YES	Done 12/27
299-W18-30	SST(U)	Quarterly		Sampled in November
299-W18-40	SST(U)	Quarterly		Done 12/30
299-W19-12	SST(U)	Quarterly		Done 12/30
299-W19-41	SST(U)	Quarterly		Done 12/30
299-W19-42	SST(U)	Quarterly	YES	Done 12/28

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<b>Table of October scheduled samples (two pages)</b>				<b>Status or Comment</b>
<b>Well Name</b>	<b>TSD or WMA</b>	<b>Frequency</b>	<b>Sample?</b>	
299-W19-44	SST(U)	Quarterly		Done 12/30
299-W19-45	SST(U)	Quarterly	YES	Done 12/29
299-W19-47	SST(U)	Quarterly		Done 12/30
299-E27-10	LLWMA(2)	Semiannual	YES	Done 12/9
299-E25-31	PUREX	Semiannual	YES	Done 12/9
299-E25-26	A-29	Semiannual	YES	Maintenance hold
299-E25-32P	A-29	Semiannual	YES	Done 12/15
299-E25-48	A-29	Semiannual	YES	Done 12/16

## RCRA GROUNDWATER SAMPLE COLLECTION RECOVERY PLAN

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Table of November scheduled samples (one page)				Status or Comment
Well Name	TSD or WMA	Frequency	Sample?	
699-40-36	TEDF	Quarterly	YES	Done 12/13
699-41-35	TEDF	Quarterly	YES	Done 12/13
699-42-37	TEDF	Quarterly	YES	Done 12/16
299-E28-8	SST B-BX-BY	Quarterly		Done 12/20
299-E33-7	SST B-BX-BY	Quarterly		Unsuccessful on 12/21
299-E33-9	SST B-BX-BY	Quarterly		
299-E33-15	SST B-BX-BY	Semiannual		
299-E33-16	SST B-BX-BY	Quarterly		
299-E33-18	SST B-BX-BY	Quarterly	YES	Done 12/17
299-E33-26	SST B-BX-BY	Quarterly		
299-E33-31	SST B-BX-BY	Quarterly	YES	Done 12/27
299-E33-32	SST B-BX-BY	Quarterly		Done 12/29
299-E33-38	SST B-BX-BY	Quarterly		Done 12/21
299-E33-39	SST B-BX-BY	Quarterly		Done 12/19
299-E33-41	SST B-BX-BY	Quarterly	YES	Done 12/19
299-E33-42	SST B-BX-BY	Quarterly		Done 12/19
299-E33-43	SST B-BX-BY	Quarterly		Done 12/19
299-E33-44	SST B-BX-BY	Quarterly	YES	Done 12/19
299-E33-47	SST B-BX-BY	Quarterly		Done 12/21
299-E33-48	SST B-BX-BY	Quarterly		Done 12/19
299-E33-49	SST B-BX-BY	Quarterly		Done 12/19
299-E33-205	SST B-BX-BY	Semiannual		
299-E33-334	SST B-BX-BY	Quarterly		Done 12/19
299-E33-335	SST B-BX-BY	Quarterly		Done 12/29
299-E33-337	SST B-BX-BY	Quarterly		Done 12/19
299-E33-338	SST B-BX-BY	Quarterly		
299-E33-339	SST B-BX-BY	Quarterly	YES	Done 12/15
299-E33-340	SST B-BX-BY	Quarterly		Done 12/28
299-E33-341	SST B-BX-BY	Quarterly		Done 12/21
299-E33-342	SST B-BX-BY	Quarterly		Done 12/21
299-E33-343	SST B-BX-BY	Quarterly	YES	Done 12/19
299-E33-344	SST B-BX-BY	Semiannual		Done 12/19
299-E33-345	SST B-BX-BY	Quarterly	YES	Done 12/19
199-H4-3	183-H Basins	Annual - Permit requirement	YES	Done 12/16
199-H4-8	183-H Basins	Annual - Permit requirement	YES	Done 12/16
199-H4-12A	183-H Basins	Annual - Permit requirement	YES	Done 12/29
199-H4-12C	183-H Basins	Annual - Permit requirement	YES	Done 12/16

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<b>Well Name</b>	<b>TSD or WMA</b>	<b>Frequency</b>	<b>Sample?</b>	
399-1-10A	300-Area Process Trenches	8 per year - Permit	YES	Done 12/14
399-1-10B	300-Area Process Trenches	8 per year - Permit	YES	Done 12/14
399-1-16A	300-Area Process Trenches	8 per year - Permit	YES	Done 12/15
399-1-16B	300-Area Process Trenches	8 per year - Permit	YES	Done 12/14
399-1-17A	300-Area Process Trenches	8 per year - Permit	YES	Done 12/15
399-1-17B	300-Area Process Trenches	8 per year - Permit	YES	Done 12/21
399-1-18A	300-Area Process Trenches	8 per year - Permit	YES	Done 12/14
399-1-18B	300-Area Process Trenches	8 per year - Permit	YES	Done 12/21
299-E28-26	LLWMA(1)	Semiannual - January 2011		Done 12/29
299-E28-27	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E28-28	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-2	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-3	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-4	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-5	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-6	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-7	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-8	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-9	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E32-10	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-28	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-29	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-30	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-34	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-35	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-265	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E33-266	LLWMA(1)	Semiannual - January 2011		Moved to Jan
299-E24-20	SST A-AX	Quarterly		Done 12/20
299-E24-22	SST A-AX	Quarterly		Done 12/20
299-E24-33	SST A-AX	Quarterly		
299-E25-2	SST A-AX	Quarterly		
299-E25-40	SST A-AX	Quarterly	YES	Done 12/16
299-E25-41	SST A-AX	Quarterly	YES	Done 12/16
299-E25-93	SST A-AX	Quarterly	YES	Done 12/21
299-E25-94	SST A-AX	Quarterly	YES	Done 12/17
299-E25-236	SST A-AX	Quarterly	YES	Done 12/27
299-E27-4	SST C	Quarterly	YES	Done 12/16
299-E27-7	SST C	Quarterly	YES	Done 12/17

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299-E27-12	SST C	Quarterly	YES	Done 12/15
299-E27-13	SST C	Quarterly	YES	Done 12/16
299-E27-14	SST C	Quarterly	YES	Done 12/15
299-E27-15	SST C	Quarterly	YES	Done 12/16
299-E27-21	SST C	Quarterly	YES	Done 12/27
299-E27-22	SST C	Quarterly	YES	Done 12/16
299-E27-23	SST C	Quarterly	YES	Done 12/16
299-E27-24	SST C	Quarterly	YES	Done 12/17
299-E27-25	SST C	Quarterly	YES	Done 12/17
299-E27-155	SST C	Quarterly	YES	Done 12/16
299-W22-26	SST S-SX	Quarterly	YES	Done 12/19
299-W22-44	SST S-SX	Quarterly	YES	Done 12/21
299-W22-45	SST S-SX	Quarterly		Done 12/28
299-W22-47	SST S-SX	Quarterly	YES	Done 12/21
299-W22-48	SST S-SX	Quarterly	YES	Done 12/19
299-W22-49	SST S-SX	Quarterly		Done 12/28
299-W22-50	SST S-SX	Quarterly		Done 12/30
299-W22-69	SST S-SX	Quarterly		Done 12/28
299-W22-72	SST S-SX	Quarterly		Done 12/19
299-W22-80	SST S-SX	Quarterly		Done 12/30
299-W22-81	SST S-SX	Quarterly		Done 12/30
299-W22-82	SST S-SX	Quarterly		Done 12/30
299-W22-83	SST S-SX	Quarterly	YES	Done 12/21
299-W22-84	SST S-SX	Quarterly		
299-W22-85	SST S-SX	Quarterly		Done 12/30
299-W22-86	SST S-SX	Quarterly	YES	Done 12/27
299-W22-87	SST S-SX	Quarterly		
299-W22-89	SST S-SX	Quarterly	YES	Done 12/21
299-W23-15	SST S-SX	Quarterly		Done 12/19
299-W23-19	SST S-SX	Quarterly	YES	Done 12/28
299-W23-20	SST S-SX	Quarterly		
299-W23-21	SST S-SX	Quarterly		Done 12/28
299-W26-13	S-10 Pond and Ditch	Semiannual	YES	Done 12/21
299-W26-14	S-10 Pond and Ditch	Semiannual	YES	Done 12/21
299-W27-2	S-10 Pond and Ditch	<del>Semiannual</del> Annual	NO	Not required