

Change Number

M-15-96-08

Federal Facility Agreement and Consent Order

Change Control Form

Do not use blue ink. Type or print using black ink.

10/3/96

Originator

D. E. Olson

Phone

876-336

Class of Change

I - Signatories

II - Executive Manager

III - Project Manager

Change Title

Modifications to the Groundwater Sampling and Analysis Schedules for the 100-NR-2 Operable Unit Groundwater Sampling Project and 100-N Area RCRA Monitoring Program

Description/Justification of Change

Modifications to the previous groundwater sampling and analysis schedule for the 100-NR-2 Operable Unit (100 NPL Agreement/Change Control #33, September 1992) are being made:

- Sampling frequency for most wells is reduced from semiannual to annual. Annual sampling will be conducted to coincide with seasonal low river conditions that typically occur during the period September through November.
- Sampling locations are selected on the basis of proximity to the Columbia River, historical trends in each well, and contaminant plume locations.
- Modified data verification and validation steps are adopted that improve cost-effectiveness without compromising data quality. Data evaluation activities are expanded to enhance the quality of information derived from sampling and analysis activities.

Minor modifications to the list of specific wells used and constituents analyzed may be necessary to meet changing field conditions. However, these changes will be made after discussion with Ecology.

Modifications to the 100-N RCRA groundwater monitoring program are being made as described in the revised 100-N Area RCRA Groundwater Monitoring Plan (WHC-SD-EN-AP-038, Rev. 2), and also discussed in BHI-00725. Modifications are summarized below:

- Sampling locations are modified to adapt to changing flow conditions because of the operation on the N-Springs ERA Pump and Treat System.
- The requirements of 40 CFR 265 continue to be achieved with the reduced analyte list described by this change.

Data collected for the RCRA and CERCLA programs are stored in HEIS database. The RCRA program sends a quarterly letter to Ecology reporting that data validation is complete and that the data are in HEIS.

The attached table "Analytes and Sampling Frequency for RCRA and CERCLA Groundwater Monitoring Program" Sheets 1 and 2, summarizes the changes to the sampling programs.

Impact of Change

The changes in sampling result in a more integrated and cost-effective program. Approximate cost savings for the CERCLA and RCRA program is \$120,000 annually. The impact of this change includes increased efficiency in obtaining data that can be applied to data quality objectives for multiple programs (e.g., CERCLA remediation activities, RCRA groundwater monitoring and DOE Order 5400 surveillance). Sample collection efforts are integrated to the fullest extent possible under a consolidated schedule.

Affected Documents

1) DOE-RL, 1996, "RCRA Facility Investigation/Corrective Measures Study Work Plan for the 100-NR-2 Operable Unit, Hanford Site, Richland, WA; DOE/RL-91-96, Rev. 0. 2) 100 NPL Agreement/ Change Control Form #33, "100-NR-2 Operable Unit Groundwater Monitoring Network," September 1992. 3) Hartman, M.J., 1993, "Groundwater Monitoring Plan for the 1301-N and 1325-N Facilities", WHC-SD-EN-AP-038, Rev. 1., Westinghouse Hanford Company, Richland, WA. 4) Hartman, M.J., 1993, "Groundwater Quality Assessment Plan for the 1324-N/NA Site", WHC-SD-EN-AP-005, Rev. 1, Westinghouse Hanford Company, Richland, WA.

Approvals

David E. Olson For Paul Pck  
DOE

10/7/96  
Date

Approved \_\_\_ Disapproved

N/A  
EPA

Date

\_\_\_ Approved \_\_\_ Disapproved

Phillip P. [Signature]  
Ecology

10/10/96  
Date

Approved \_\_\_ Disapproved



**Analytes and Sampling Frequency for RCRA and CERCLA Groundwater Monitoring Programs**  
**(Sheet 1 of 2)**

Well No.	Frequency	Conductivity	pH	Temperature	Turbidity	Alkalinity	Anions	ICP-M (F)	Oil/Grease	TPH	TOC	TOX	Alpha	Beta	Gamma Scan	Strontium-90	Tritium
199-N-2	A	NR	NR	NR	NR	RC	NR	NR						NR		NR	NR
	S	RC	RC		RC						RC	RC					
199-N-3	A					RC	RC	RC									
	S	RC	RC	NR	RC		NR	NR			RC	RC		NR		NR	NR
199-N-14	SA	NR	NR	NR	NR		NR	NR						NR		NR	NR
199-N-16	A	NR	NR	NR	NR		NR	NR	NR	NR				NR		NR	
199-N-17	A	NR	NR	NR	NR				NR	NR							
199-N-18	A	NR	NR	NR	NR				NR	NR							
199-N-21	A	NR	NR	NR	NR		NR	NR									
199-N-27	A	NR	NR	NR	NR		NR	NR					NR		NR		NR
199-N-28	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					
199-N-32	S	RC	RC	NR	RC	RC	RC				RC	RC		NR	NR	NR	NR
199-N-34	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					
199-N-41	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					
199-N-50	A	NR	NR	NR	NR								NR				NR
199-N-51	A	NR	NR	NR	NR								NR				NR
199-N-54	S	NR	NR	NR	NR		NR	NR	NR	NR				NR	NR	NR	
199-N-57	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					
199-N-59	A					RC	RC	RC					RC				
	S	RC	RC		RC						RC	RC					
199-N-64	A	NR	NR	NR	NR		NR	NR					NR		NR	NR	
199-N-67	S	NR	NR	NR	NR		NR	NR					NR	NR		NR	
199-N-70	A	NR	NR	NR	NR		NR	NR					NR	NR	NR	NR	NR
199-N-71	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					
199-N-72	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					
199-N-73	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					

**Analytes and Sampling Frequency for RCRA and CERCLA Groundwater Monitoring Programs  
(Sheet 2 of 2)**

Well No.	Frequency	Conductivity	pH	Temperature	Turbidity	Alkalinity	Anions	ICP-M (F)	Oil/Grease	TPH	TOC	TOX	Alpha	Beta	Gamma Scan	Strontium-90	Tritium
199-N-74	A	NR	NR	NR	NR	RC	RC	RC					NR	NR	NR		
	S	RC	RC		RC						RC	RC					
199-N-75	S	NR	NR	NR	NR		NR	NR						NR		NR	NR
199-N-76	S	NR	NR	NR	NR		NR	NR						NR	NR	NR	NR
199-N-77	A					RC	RC	RC					RC				
	S	RC	RC		RC						RC	RC					
199-N-80	A	NR	NR	NR	NR		NR	NR					NR	NR	NR	NR	NR
199-N-81	A	NR	NR	NR	NR	RC	RC	RC						NR		NR	NR
	S	RC	RC		RC						RC	RC					
199-N-92A	A	NR	NR	NR	NR		NR	NR						NR		NR	NR
199-N-96A	A	NR	NR	NR	NR		NR	NR						NR		NR	NR
199-N-99A	A	NR	NR	NR	NR		NR	NR						NR		NR	NR
199-N-105A	A					RC	RC	RC									
	S	RC	RC		RC						RC	RC					

A = Annually, S = Semi Annually, F = Filtered

RC = RCRA, NR = NR-2

Field parameters: Conductivity, pH, Temperature and Turbidity