



6.4 RCRA SUMMARY

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More than 60 treatment, storage, and disposal units are recognized under the RCRA permit for the Hanford Site. The units that required groundwater monitoring are grouped into 24 waste management areas. Locations of these sites were given in Figure 6.1.3. Table 6.4.1 provides a summary of groundwater monitoring activities and

results for these sites during 2002. Additional information, including complete listings of constituents measured in monitoring wells from October 2001 through September 2002, is available in PNNL-14187. Radionuclides are not regulated under RCRA, but are monitored under the *Atomic Energy Act of 1954*.

Table 6.4.1. Summary of Hanford Site RCRA Monitoring Results in 2002

<u>RCRA Unit</u>	<u>Monitoring Status</u>	<u>Highlights in 2002</u>
116-N-1 facility	Indicator evaluation	No contamination indicator parameter exceedance. Revised monitoring plan.
116-N-3 facility	Indicator evaluation	No contamination indicator parameter exceedance. Revised monitoring plan.
120-N-1 and 120-N-2 facilities	Indicator evaluation	No contamination indicator parameter exceedance. Revised monitoring plan.
116-H-6 basins	Corrective action	Corrective-action monitoring continued during operation of the 100-HR-3 chromium pump-and-treat system. Leakage from basins in past contaminated groundwater with chromium, nitrate, technetium-99, and uranium. CERCLA program directs corrective action.
216-A-29 ditch	Indicator evaluation	No contamination indicator parameter exceedance.
216-B-3 pond	Indicator evaluation	Revised monitoring plan to initiate 2-year demonstration of alternative statistical method.
216-B-63 trench	Indicator evaluation	No contamination indicator parameter exceedance. Revised monitoring plan.
216-S-10 pond and	Indicator evaluation	No contamination indicator parameter exceedance. One useable, shallow, down-gradient well, and one upgradient well.
216-U-12 crib	Assessment	Nitrate plume from various sources, including crib. Monitoring network contains just two useable downgradient wells and no upgradient wells.
316-5 process trenches	Corrective action	Trenches and other sources contaminated groundwater with cis-1,2-dichloroethene, trichloroethene, and uranium. Corrective action deferred to CERCLA; involves monitored natural attenuation of contaminants. Trichloroethene below 5 µg/L maximum contaminant level. Implementing 2-year demonstration of alternative statistical method.
LERF	Indicator evaluation	One useable downgradient well. In 2001, Washington State Department of Ecology directed DOE to suspend statistical evaluations.
LLWMA 1	Indicator evaluation	No contamination indicator parameter exceedance.
LLWMA 2	Indicator evaluation	No contamination indicator parameter exceedance. Additional dry well.
LLWMA 3	Indicator evaluation	No contamination indicator parameter exceedance. Wells going dry. Poor down-gradient coverage.
LLWMA 4	Indicator evaluation	No contamination indicator parameter exceedance. Wells going dry. Only two downgradient wells.
NRDWL	Indicator evaluation	No contamination indicator parameter exceedance.
PUREX cribs	Assessment	Nitrate plume from various sources, including PUREX cribs.

Table 6.4.1. (contd)

RCRA Unit	Monitoring Status	Highlights in 2002
SST WMA A-AX	Indicator evaluation	No contamination indicator parameter exceedance. Revised monitoring plan.
SST WMA B-BX-BY	Assessment	Tanks may have contributed to nitrate and nitrite plumes. Other major sources (e.g., BY cribs, 216-B-8 crib) produced most contamination.
SST WMA C	Indicator evaluation	Directions of groundwater flow re-interpreted. Revised monitoring plan. Ceased statistical evaluation until new background established.
SST WMA S-SX	Assessment	Sources within tank farms contaminated groundwater with chromium and nitrate. Revised monitoring plan. New assessment report.
SST WMA T	Assessment	Chromium and nitrate had source within tank farm. New assessment report.
SST WMA TX-TY	Assessment	Nearby pump-and-treat system affects groundwater flow, may have impact on distribution of contaminants. Technetium-99 may be drawn from beneath WMA into pump-and-treat. Plume containing chromium and nitrate originated within WMA. New assessment report.
SST WMA U	Assessment	Nitrate elevated.

CERCLA = *Comprehensive Environmental Response, Compensation, and Liability Act.*
 DOE = U.S. Department of Energy.
 LERF = Liquid Effluent Retention Facility.
 LLWMA = Low-Level Waste Management Area.
 NRDWL = Nonradioactive Dangerous Waste Landfill.
 PUREX = Plutonium-Uranium Extraction Plant.
 SST = Single-shell tank.
 WMA = Waste management area.