



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

January 24, 2001

Mr. Steven Wisness, Acting Director  
United States Department of Energy  
P.O. Box 550, MSIN: A5-58  
Richland, Washington 99352

RECEIVED  
FEB 14 2001

EDMC

Dear Mr. Wisness:

Re: Modified State Waste Discharge Permit 4502, Treated Effluent Disposal Facility

On November 28, 2000, the United States Department of Energy, Richland Operations Office (RL) submitted a request for minor modifications to the State Waste Discharge Permit ST-4502 (01-RCA-062). The Washington State Department of Ecology (Ecology) has reviewed the change request and is hereby issuing minor modifications in the form of three page changes (including the cover page) to Permit ST-4502, the Treated Effluent Disposal Facility (TEDF). **Please ensure that these changes are incorporated into the permit kept by the operators at the facility.**

The changes are deemed minor modifications to permit Sections S.2 and S.3. The modifications in Section S.2 include the deletion of the information under the Practical Quantitative Levels (PQL) column in the PQL and Analytical Methods table. These deletions occur for the parameters, Total Dissolved Solids, pH, Specific Conductivity, and Temperature. Additional information for these same four parameters was incorporated in the table under the Additional Clarification column for field reporting. A footnote was added at the bottom of the table. These modifications clarify the "Practical Quantification Levels and Analytical Methods" table content (ST 4502, page 9 of 20) and modify the reporting requirements. The change in Section S.3 is for duplicate copies of the Discharge Monitoring Reports (S3, Page 11 of 20, paragraph under A. Reporting) be submitted to Ecology, which make it consistent with the recent issuance of Permit ST 4500.

If there are any questions about these changes, please contact me at (509) 736-3045.

Sincerely,

*Kathleen Conaway*

Kathleen Conaway, Permit Manager  
Nuclear Waste Program

KAC:sdb  
Enclosure

cc w/enc.: Doug Sherwood, EPA  
Glenn Richardson, USDOE  
Alex Temouri, USDOE  
Cindy Girres, FH  
Roger Szelmecka, FH

Bill Burke, CTUIR  
Pat Sobotta, NPT  
Russell Jim, YN  
Mary Lou Blazek, OOE  
Administrative Record: Permit ST 4502





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Permit No. ST 4502

Issuance Date: April 18, 2000

Effective Date: May 18, 2000

Expiration Date: May 18, 2005

Modification Date: January 22, 2001

STATE WASTE DISCHARGE PERMIT NUMBER ST 4502

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
KENNEWICK, WA 99336-6018

In compliance with the provisions of the  
State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington, as amended  
authorizes

UNITED STATES DEPARTMENT OF ENERGY  
RICHLAND OPERATIONS OFFICE  
P.O. BOX 550  
RICHLAND, WASHINGTON 99352

to discharge wastewater in accordance with the special and general conditions which follow.

<u>Facility Location:</u> 200 East Area, 200 West Area, and adjacent portions of the 600 Area on the Hanford Site	<u>Discharge Location:</u> Two adjacent five acre disposal basins, known as the 200 Area Treated Effluent Disposal Facility (TEDF). (S5,6 T12N R27E).
<u>Industry Type:</u> Clean-up Site	Four corners of TEDF located at:
<u>SIC Code:</u> 9999	Longitude                      Latitude
	119° 28' 27.884294"      46° 33' 14.396998"
	119° 28' 6.767297"        46° 33' 14.248825"
	119° 28' 6.982550"        46° 33' 59.680524"
	119° 28' 28.097977"      46° 33' 59.828684"

  
Michael A. Wilson, Program Manager  
Nuclear Waste Program  
Washington State Department of Ecology

**PRACTICAL QUANTIFICATION LEVELS AND  
 ANALYTICAL METHODS**

<b>Parameter</b>	<b>PQL</b>	<b>Analytical Method</b>	<b>Additional Clarification</b>
Bis (2-ethylhexyl) phthalate	10 µg/l	SW-846 8270B	
Total Trihalomethanes	20 µg/l	SW-846 8260A	
Carbon Tetrachloride	5 µg/l	SW-846 8260A	
Chloroform	5 µg/l	SW-846 8260A	
Methylene Chloride	5 µg/l	SW-846 8260A	
Oil and Grease	10,000 µg/l	EPA 1664	
Tritium	2,000 pCi/l	Laboratory Specific	
Gross Alpha	3 pCi/l	Laboratory Specific	
Gross Beta	4 pCi/l	Laboratory Specific	
Arsenic (total)	15 µg/l	EPA-600 200.8	
Cadmium (total)	5 µg/l	EPA-600 200.8	
Chromium (total)	20 µg/l	EPA-600 200.8	
Iron (total)	100 µg/l	SW-846 6010A	
Lead (total)	10 µg/l	EPA-600 200.8	
Manganese (total)	50 µg/l	SW-846 6010A	
Mercury (total)	2 µg/l	EPA-600 200.8	
Chloride	1,000 µg/l	EPA-600 300	
Nitrate (as N)	100 µg/l	EPA-600 300	
Sulfate	10,000 µg/l	EPA-600 300	
Total Dissolved Solids		EPA-600 160.1	
pH, in pH units		9040A/150.1 (in laboratory)	Groundwater-calibrate and measure pH in field. Report to the nearest 0.1
Specific Conductivity, micromhos per centimeter		9050/120.1	Groundwater-calibrate and measure conductivity in field. Report all readings ≥ 10 µmhos/cm
Temperature, degrees Celsius		170.1	Groundwater- measure temperature in field. Report to nearest 0.1 °C
<b>Radioactive analysis does not require a check standard; however, the count time and sample volume must be capable of quantifying the specified activity level.</b>			
Note: µg/l means micrograms per liter (parts per billion). pCi/l means picoCurie per liter.			

### **S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology shall constitute a violation of the terms and conditions of this permit.

#### **A. Reporting**

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted quarterly. Quarterly is defined as one per calendar quarter: January-March, April-June, July-September, and October-December. Monitoring results obtained during the previous three (3) months shall be reported on the monthly forms as provided, or otherwise approved, by Ecology, and be received no later than the 45th day following the completed reporting period, unless otherwise specified in this permit. Duplicate copies of the Discharge Monitoring Reports (**one set of originals and one set of copies**), signed and certified, and all other reports (one set of originals) required by this permit shall be sent to the Department of Ecology, Nuclear Waste Program, Water Quality Permit Coordinator, 1315 W. 4<sup>th</sup> Avenue, Kennewick, Washington, 99336-6018.

Discharge Monitoring Report forms must be submitted quarterly whether or not the facility was discharging. If the average monthly flow was less than or equal to ten (10) gpm during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

#### **B. Records Retention**

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director of Ecology.

#### **C. Recording of Results**

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.