

WASHINGTON STATE  
ENERGY FACILITY SITE EVALUATION COUNCIL

RESOLUTION NO. 259

AMENDMENT NO. 1

WHEREAS, Council Resolution No. 174 dated April 28, 1980, approved a Sanitary Waste Disposal System for the WNP-2, and 4 projects; and

WHEREAS, By letter dated September 26, 1990, the Supply System requested Council acknowledgment of their plans to enter into an agreement with the U.S. Department of Energy (USDOE) to accept sanitary wastes from the Fast Flux Test Facility (USDOE Area 400) in the Sanitary Waste Treatment Facility that serves the WNP-2, 1 and 4 projects; and

WHEREAS, By Resolution No. 259, dated November 12, 1991, the Council approved the treatment of sanitary wastes from the USDOE 400 Area in the Supply System's Sanitary Waste Treatment Facility and specified discharge standards and monitoring requirements; and

WHEREAS, By letters dated July 9, 1993 and February 28, 1994, the Supply System requested modification of the monitoring requirements and discharge limitations specified in Resolution No. 259 based on operational experience and sampling data; and

WHEREAS, The Sanitary Waste Treatment System is not considered a radioactive effluent stream; and

WHEREAS, The Council has reviewed the proposed changes with the state Department's of Health and Ecology and finds that the modifications are appropriate and continue to provide protection of human health and the environment.

NOW, THEREFORE, BE IT RESOLVED, That the Energy Facility Site Evaluation Council hereby approves the operation of the Sanitary Waste Treatment Facility (System) for the treatment of waste from the Supply System and USDOE 400 Area projects subject to the attached conditions.

Dated this 14th day of November, 1994.

Washington State Energy Facility Site Evaluation Council

By: Frederick S. Adair  
Frederick S. Adair, EFSEC Chair

Attest

By: Jason J. Zeller  
Jason J. Zeller, EFSEC Manager

Attachment: Supply System Sanitary Waste Treatment Facility Monitoring Requirements.

## SUPPLY SYSTEM SANITARY WASTE TREATMENT FACILITY MONITORING REQUIREMENTS

The Supply System will operate its Sanitary Waste Treatment Facility subject to the following conditions:

1. Routine Influent Sampling

Number of Samples: One

Sampling Location: Headworks

Analysis Parameters:

Continuous

Flow (Accumulated volume)

Monthly

Biological Oxygen Demand (BOD)

Fecal Coliform

pH

Dissolved Oxygen (DO)

Total Suspended Solids (TSS)

Tritium

Gamma Scan (Report all isotopes observed above  
environmental detection levels.)

2. Effluent Sampling

Number of Samples: Two prior to discharge; must meet limits before discharge

Sampling Location: Stabilization Pond(s) planned for discharge

Analysis Parameters and Discharge Limits:

|                        |                                |
|------------------------|--------------------------------|
| BOD                    | 45 mg/l                        |
| BOD Removal Efficiency | 65%                            |
| TSS                    | 45 mg/l                        |
| TSS Removal Efficiency | (Report calculated efficiency) |
| Fecal Coliform         | 200 organisms/100ml            |
| pH                     | 6.0 - 9.0                      |
| Nitrate                | 10 mg/l                        |
| Tritium                | 20,000 pCi/l                   |
| Gross Alpha            | 15 pCi/l                       |

## COUNCIL RESOLUTION NO. 259

WHEREAS, Council Resolution No. 174 dated April 28, 1980, approved a Sanitary Waste Disposal System for the WNP-2, 1 and 4 projects; and

WHEREAS, On May 1, 1987 the Council gave conditional approval to the Supply System to discontinue groundwater monitoring of the Sanitary Waste Treatment System for WNP-2, 1 and 4 until such time that construction should resume at WNP-1 or use of the system were to increase; and

WHEREAS, By letter dated September 26, 1990, the Supply System requested Council acknowledgement of their plans to enter into an agreement with the U.S. Department of Energy (USDOE) to accept sanitary wastes from the Fast Flux Test Facility (USDOE Area 400) in the Sanitary Waste Treatment Facility that serves the WNP-2, 1 and 4 projects; and

WHEREAS, The Council notified the Supply System by letter dated June 5, 1991, that based upon comments received from the Department of Ecology, additional information on the facility's discharge would have to be provided to demonstrate that state technical requirements for waste facilities would be met; and

WHEREAS, By letters dated August 26, 1991 and October 31, 1991, and on site visits of October 11 and 25, 1991, the Supply System provided responses to the information being requested by the Council and Ecology; and

WHEREAS, By letter dated October 15, 1991, the Department of Ecology advised the Council that it appeared that the Supply System's sanitary waste system was capable of processing the waste from USDOE's 400 Area and recommended that the Supply System be allowed to accept the 400 Area waste subject to meeting specific discharge standards and monitoring requirements; and

WHEREAS, The Council has reviewed the proposed addition of USDOE 400 Area wastes to the Supply System's Sanitary Waste Treatment Facility and finds that the facility can treat such wastes and meet state discharge standards;

NOW, THEREFORE BE IT RESOLVED, That the Energy Facility Site Evaluation Council hereby approves the introduction of USDOE 400 Area wastes to the Supply System's Sanitary Waste Treatment Facility, subject to the following conditions:

1. The Supply System will implement the sampling plan outlined in Attachment 1. Compliance with these discharge monitoring requirements will provide waste characterization data; allow the calculation of treatment efficiencies; and provide historical data upon which to base future decisions regarding this facility.



2. The Supply System will take samples from the stabilization pond prior to any discharge to the soil and must meet the following standards before discharge is allowed:

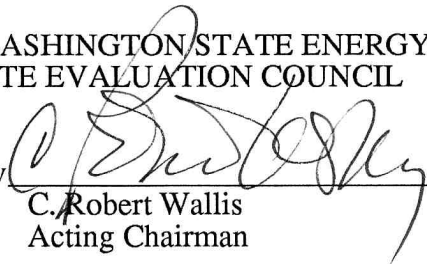
|                                |   |
|--------------------------------|---|
| Biological Oxygen Demand (BOD) | 45 mg/l   |
| Total Suspended Solids (TSS)   | 45 mg/l   |
| Fecal Coliform                 | 200 organisms/100 ml  |
| pH                             | 6.5 - 8.5   |
| Total Dissolved Solids (TDS)   | 500 mg/l  |
| Radiation                      |   |
| Gross Alpha                    | 15pCi/l   |
| Gross Beta                     | 50pCi/l   |
| Gamma scan                     | Report all isotopes detected; must meet requirements of WAC 246-290 (previously WAC 248-54) |
| Nitrate (as N)                 | 10mg/l  |
| Flow (Dose rate to perc beds)  | 0.2 mgd/acre  |
| BOD Removal Efficiency         | 85% (Based upon prior influent analysis)  |
| TSS Removal Efficiency         | 85% (Based upon prior influent analysis)  |

- Frequency - Two samples from each stabilization pond from which waste is to be discharged.
3. The monitoring results for points C and D (see Attachment 1) shall be reported to the Council for any month a discharge to the percolation beds occurs. The annual sample (point A) results shall be reported when available (this is to be an unannounced sample to be conducted by the Supply System). The results for point B shall be reported quarterly.
4. The monitoring requirements will be reevaluated after one year.

Dated this 12th day of November 1991.

WASHINGTON STATE ENERGY FACILITY  
SITE EVALUATION COUNCIL

By

  
C. Robert Wallis  
Acting Chairman

Approved as to form:

By

  
Jason Zeller  
EFSEC Manager

Attachment

# WNP-2 SANITARY WASTE TREATMENT FACILITY MONITORING REQUIREMENTS

| SEWAGE FLOW DIAGRAM |  | MONITORING POINT | FREQUENCY                | CONSTITUENTS  |
|---------------------|--|------------------|--------------------------|---|
|                     |  | A                | Annual                   | PRIORITY POLLUTANTS<br>Rad (alpha, beta, gamma)<br>BOD, TSS, pH, Fecal Coliform |
|                     |  |                  | Continuous               | FLOW  |
|                     |  |                  | Monthly                  | Rad (gamma)<br>BOD<br>Fecal Coliform  |
|                     |  | B                | Weekly                   | pH<br>DO<br>TSS   |
|                     |  |                  | Continuous               | FLOW  |
|                     |  | C                | Prior To Discharge<br>2X | BOD, TSS, TDS, Fecal Coliform<br>Rad (alpha, beta, gamma)<br>pH, Nitrate (as N) |
|                     |  | D                | During Discharge         | FLOW<br>(Volume)  |