

WASHINGTON STATE  
ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)

RESOLUTION NO. 307  
ENERGY NORTHWEST  
DISPOSAL OF WATER STORED IN WNP-1 AND WNP-4 SERVICE WATER PONDS

**Nature of Action.** EFSEC Resolution No. 306 permitted the managing of wastewater produced from a one-time condenser scale removal process at Energy Northwest's Columbia Generating Station in a manner that met both Washington State water quality standards and NPDES Permit No. WA-002525-1. This action closes Resolution No. 306 and approves this resolution for the purpose of authorizing Energy Northwest's plan for disposal of the wastewater from the condenser cleaning process that is stored in the WNP-1 and WNP-4 service water ponds.

**Background.** As authorized by the Council's approval of Resolution 306 on April 14, 2003, the Columbia Generating Station steam condenser was chemically cleaned in late April and early May 2003. Because the cleaning resulted in copper concentrations in excess of the NPDES permit limit, the circulating cooling water was pumped to the unused service water ponds at WNP-1 and WNP-4 using temporary pipe. The result of this activity is approximately 13 million gallons in the WNP-4 pond and 6 million gallons in the WNP-1 pond. During the cleaning effort, copper was considered to be controlling for environmental concerns.

One of the conditions of Resolution No. 306 was that, prior to discharge of the wastewater stored in the WNP-1 and WNP-4 service water ponds, Energy Northwest would submit a plan for management of the wastewater to the Council for review and approval of discharge. Energy Northwest submitted its plan for disposal of the water to EFSEC by letter dated June 10, 2003.

When Energy Northwest started planning for the condenser cleaning project, it was anticipated that copper concentrations could reach as high as 20 mg/l, making water disposal problematic without additional treatment. By closely monitoring pH and calcium concentrations throughout the cleaning process, Energy Northwest was able to limit corrosion such that the bulk average copper concentration in the stored water is 0.34 mg/l (0.31 mg/l in WNP-4 pond and 0.40 mg/l in WNP-1 pond). Due to the relatively low copper concentration, Energy Northwest is requesting approval to dispose of this water directly to the soil either by spray irrigation on previously disturbed ground in the vicinity of the ponds or by piping it to a former borrow pit in the east central area of the site.

Working with the Department of Ecology and pursuant to the provisions of RCW 90.48 and WAC 173-216, Energy Northwest has submitted an application to the Department of Ecology for a state waste discharge permit for a one-time/limited duration (Hanford-specific) discharge to ground of water stored in the WNP-1 and 4 service water ponds. Although the application is currently under review, the Department of Ecology has informed the EFSEC staff that it intends to approve Energy Northwest's application.

**Conclusion.** In conclusion, WAC 463-36-050 explains that the Council's consideration of public health, safety and welfare includes environmental concerns as follows:

In reviewing whether a proposed amendment is consistent with the public health, safety, and welfare, the council shall consider the short-term and long-term environmental impacts of the proposal.

The Department of Ecology has reviewed the results of the condenser scale removal process conducted by Energy Northwest pursuant to Resolution No. 306; the Energy Northwest State Waste Discharge Permit Application for One Time/Limited Duration Discharge to Ground (Hanford Specific); the Energy Northwest WNP-1/4 Spray Pond Water Disposal Sampling and Analysis Plan; and the Energy Northwest Plan for Disposal of Water Stored in WNP-1/4 Spray Ponds (Plan), and finds that the Plan and supplemental information pertaining to disposal of the wastewater in the WNP-1 and WNP-4 service water ponds meets state regulations and provides sufficient protection for public health, safety, and welfare, and the environment.

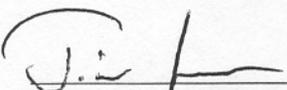
The following summarizes the additional requirements for the adoption of Resolution 307:

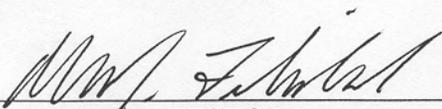
1. Energy Northwest will be allowed to dispose of the wastewater currently stored in the WNP-1 and WNP-4 service water ponds directly to the soil either by spray irrigation on previously disturbed ground in the vicinity of the ponds or by piping it to a former borrow pit in the east central area of the site. Application of the water to the soil is estimated at a pumping rate of between 200-500 gpm. The rate will be varied to avoid soil erosion. Sampling of the pond water and soil will be done in accordance with the referenced Sampling and Analysis Plan.
2. This resolution is contingent on Department of Ecology approval <sup>1</sup> of Energy Northwest's application for a state waste discharge permit, and the requirements contained therein, for a one-time/limited duration (Hanford-specific) discharge to ground of the wastewater stored in the WNP-1 and WNP-4 service water ponds. Pursuant to the time frames specified in the application, the duration of the one-time discharge is requested to be from September 9, 2003 to November 9, 2003; with the understanding that an extension may be requested through the Department of Ecology/EFSEC, if additional time is required to complete the discharge.

**Resolution.** The Council hereby closes Resolution No. 306 and authorizes the approval of Resolution No. 307 covering the disposal of wastewater that resulted from the steam condenser scale removal process for Columbia Generating Station as described in the attached documents and above conditions.

Dated and Effective this 8<sup>th</sup> day of September, 2003

Washington Sate Energy Facility Site Evaluation Council

By:   
Jim Luce, EFSEC Chair

Attest:   
Allen J. Fiksdal, EFSEC Manager

## Attachments

Columbia Generating Station Plan for Disposal Water Stored in WNP-1/4 Spray Ponds, dated June 10, 2003;

Energy Northwest State Waste Discharge Permit Application for One Time/Limited Duration Discharges to Ground (Hanford Specific), dated September 2, 2003;

Energy Northwest Sampling and Analysis Plan, dated August 27, 2003; and

Ecology Approval of Waste Discharge Permit Application, temporary Permit, dated September 8, 2003.

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On September 8, 2003, Ecology issued a "...Temporary Permit. That permit will become effective once the permit application fee has been paid, and Ecology issues a letter acknowledging the fee receipt. A beginning permit effective date will be provided at that time. The Temporary Permit will remain valid for up to 60 days."