

**WASHINGTON STATE
ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)**

**RESOLUTION NO. 300
ENERGY NORTHWEST
SANITARY WASTE TREATMENT FACILITY**

Nature of Action. Resolution No. 259, Amendment 1, permits the operation and sets monitoring requirements for operating a Sanitary Waste Treatment Facility (SWTF) at Energy Northwest's Columbia Generating Station (Columbia). This action closes Resolution No. 259, Amendment 1, and approves this resolution for the purpose of expanding the sources of sanitary waste that can be accepted by the SWTF and amending some of the monitoring and reporting requirements.

Background. The Energy Northwest Sanitary Waste Treatment Facility at the Columbia site was constructed in 1981. The SWTF serves the Columbia Generating Station and WNP-1/4 sites, and, in addition, accepts and treats sanitary waste from the U.S. Department of Energy (USDOE) Fast Flux Test Facility (FFTF) located nearby on the Hanford Site. The SWTF operations conform to requirements set by the State for this type of facility. Additional monitoring requirements are in place to assure that no radiological waste streams are entering the SWTF.

Energy Northwest's SWTF is designed for variable loads and can be operated as either a flow-through or a batch release with lagoons in a series or operating in a parallel configuration. The system is designed to process 170,000 gallons per day (gpd). The current typical daily volume is considerably less, averaging 30,000 gpd.

In June 2000, Energy Northwest requested approval to modify certain monitoring requirements set out in Resolution 259, Amendment 1. Specifically, a request was made to remove some non-radiological requirements that are not used to assess plant performance, nor add value to the monitoring program. Energy Northwest also requested that the sample location for pre-discharge (effluent) radiological monitoring be replaced with a sampler that would assess radionuclides in the influent stream.

In June 2001, Energy Northwest requested another change to Resolution 259, Amendment 1, that would permit Energy Northwest to receive and treat additional sanitary waste that is trucked from other USDOE projects operating on the Hanford site and from offsite locations. The state Department of Health and Department of Ecology reviewed this request and concur that the additional waste sources be permitted provided the plant does not exceed its capacity and that only sanitary waste be accepted.

In a letter dated September 6, 2001, The Department of Health specified that the waste from other USDOE Hanford areas and from private entities off the Hanford Site may not contain radionuclides above levels that would be found in the environment. Energy Northwest may not accept sanitary waste from any licensed user of radioactive materials.

The Department of Health (Department) further specified that any new sanitary waste stream considered for processing at the SWTF must be fully characterized for radionuclides prior to initial acceptance. Waste containing man-made radionuclides will not be accepted. A listing of sanitary waste generators, waste volumes received, and initial radionuclide characterization, will be available for review upon request.

During the Department of Health's review of Energy Northwest's proposal, it was discovered that the Nuclear Regulatory Commission (NRC) might have an issue with the tritium that is found in the sanitary waste coming from FFTF. The source the tritium is the potable water at FFTF that is drawn from the aquifer contaminated with tritium from past practices at the USDOE Hanford Site. The Department and the NRC agree that the NRC's concern with the tritium in the FFTF sewage is regulatory in nature, not one of a health hazard. The regulatory responsibility for this issue resides with the NRC and they will peruse this issue directly with Energy Northwest.

Within the State's regulatory arena, the SWTF is an acceptable disposal method for FFTF sanitary waste. The approval is documented in Amendment No.1 of EFSEC Resolution 259, dated November 14, 1994. The Department recognizes that tritium in the drinking water at FFTF will enter the SWTF. Drinking water at FFTF is monitored and the levels of tritium are below the standard listed in the Safe Drinking Water Act. The influent from FFTF is monitored before it joins the waste stream from Columbia Generating Station, prior to entering the SWTF. Monitoring data support that the tritium is at the same levels as the FFTF drinking water. The Department of Health, therefore finds no reason to reverse its decision to allow treatment of the FFTF sanitary waste in the SWTF.

In conclusion, the Department of Health and the Department of Ecology have reviewed the Energy Northwest requests and supplemental information on the operation and monitoring of the Sanitary Waste Treatment Facility and find that the proposed amendment meets State regulations and provides sufficient protections for public health and the environment. Accordingly, Council staff has recommended that this resolution, No. 300, and Attachment 1, supersede the requirements of Resolution No. 259, Amendment 1, and its Attachment No. 1. The following summarizes the changes resulting from the adoption of Resolution No. 300:

1. Energy Northwest will be allowed to accept and treat sanitary waste from new sources that include other USDOE projects operating on the Hanford site and from offsite locations. The approval is for sanitary waste only. No radiological waste or other non-sanitary waste streams are permitted to be accepted and processed at the facility.
2. Fecal coliform will not be tested for in the influent sample. This test is not used to assess treatment plant performance and adds no value to the monitoring program
3. Non-radiological parameters (pH, BOD, TSS, fecal coliform) will not be tested for in the annual USDOE 400 Area influent monitoring sample. These tests have been conducted for three years and sampling data show no unexpected conditions in the 400 Area portion of the influent.

4. The requirement for radiological monitoring of the pre-discharge effluent sample will be replaced by a new requirement for monitoring the influent waste. This change aids management of the SWTF by allowing discharges from the ponds to occur more timely without having to wait weeks for results of radiological sampling to be returned from the laboratory. Monitoring at the influent further provides better assessment of waste as it enters the SWTF.

Resolution. The Council hereby closes Resolution No. 259, Amendment 1, and authorizes the approval of Resolution No. 300, covering the operation and monitoring of Energy Northwest's Sanitary Waste Treatment Facility that serves the Columbia Generating Station and the WNP-1/4 sites, subject to the conditions specified in Resolution No. 300, Attachment 1.

Dated and effective this 10th day of September, 2001.

Washington State Energy Facility Site Evaluation Council

By: _____
Charles J. Carelli, Acting EFSEC Chair

Attest: _____
Allen J. Fiksdal, EFSEC Manager

Attachment 1. Sanitary Waste Treatment Facility Monitoring and Reporting Requirements
Figure 1. SWTF Flow Diagram/Monitoring Plan