

RESOLUTION NO. 266

WHEREAS, Section I of Attachment I of the WNP-2 Site Certification Agreement (SCA) and, similarly Section I of Attachment II of the WNP-1/4 SCA state, "The Environmental Monitoring Program will be flexible and may be modified with concurrence of the Council as detailed information is acquired from the program."; and

WHEREAS, Section I of Attachment I of the WNP-1/4 SCA states, "The Environmental Monitoring Program is actually a part of a single comprehensive integrated program for monitoring preoperational, construction, and operational phases of all three nuclear power stations (WNP-2 and WNP-1 and 4) presently planned for the site."; and

WHEREAS, Council Resolutions Nos. 193, 194, 214 and 239 have previously revised the Environmental Monitoring programs for WNP-2 and WNP-1/4; and

WHEREAS, By letter dated August 14, 1992 the Washington Public Power Supply System (Supply System) did request the Council approve a revised Nonradiological Environmental Monitoring Program; and

WHEREAS, The Council has reviewed the proposed program modifications which will modify the water quality parameters monitored in the river, revise the chemical parameters monitored by the soil sampling program, and delete the terrestrial bioassay, vegetation chemistry, and shrub cover programs; and

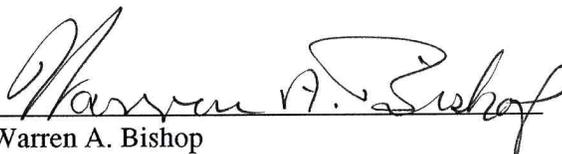
WHEREAS, The Council and the Departments of Ecology, Agriculture, Wildlife and Fisheries have reviewed the Supply System's request and find the attached program to be satisfactory for the purposes of environmental monitoring for the combined WNP-2 and WNP-1 and 4 sites; and

WHEREAS, Recommendations made by the reviewing agencies have been incorporated into the attached program.

NOW, THEREFORE, BE IT RESOLVED, That the Council hereby approves the attached WNP-2 and WNP-1/4 Nonradiological Environmental Monitoring Program.

Dated this 10th day of May, 1993

WASHINGTON STATE ENERGY FACILITY SITE
EVALUATION COUNCIL

By 
Warren A. Bishop
EFSEC Chair

Approved as to form:

By 
Jason Zeller
EFSEC Manager

NONRADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

I. GENERAL DESCRIPTION

The Environmental Monitoring Program has as its objective the determination of the significant effects of plant operation on the environment. The program provides an environmental measurement history for evaluation by the Supply System and the Council. The program may be modified with the concurrence of the Council as information acquired from the program indicates a need for change. Modifications will be based upon: (a) plant effects, or lack thereof, on the terrestrial and aquatic life; (b) changes in the types and abundance of flora and fauna in the area of potential influence; (c) siting and operation of other facilities in nearby areas; and (d) technological developments in environment monitoring techniques.

II. MONITORING PROGRAM

A. Water Quality

Monthly grab samples of Columbia River water and plant blowdown water are collected and analyzed. Monthly and quarterly water samples and semiannual sediment samples are also taken from the evaporation/percolation pond located approximately 1500 feet northeast of the plant. Specific sample frequencies and parameters to be analyzed are listed in Table 1 and river sample locations are identified in Figure 1.

B. Soil Chemistry

Soil samples are collected in the spring at each of fifteen stations. Soil chemistry parameters are pH, conductivity, carbonate, bicarbonate, sulfate, chloride, sodium, copper, and zinc. Sample locations are identified in Figure 2.

C. Herbaceous Cover and Phytomass

Herbaceous cover by individual species is estimated in the spring within the fifteen preestablished sites used in element II.B, above. Mean phytomass production is estimated at the same time.

D. Aerial Photography

Vertical aerial photographs are taken to document vegetation patterns in the area surrounding the cooling towers. Frequency is at least once every three years.

III. REPORT

An annual report summarizing the results of elements II.A, II.B, and II.C, above, will be submitted to the Council by May 1 of each year.

TABLE 1
WATER QUALITY MONITORING

Parameter	Sample Stations ^(a)		
	1,7,11,8	Blowdown	Pond
Temperature	X	X	
pH	X	X	X
Conductivity	X	X	X
Turbidity	X	X	
Dissolved Oxygen	X		
Total Alkalinity	X		
Total Hardness	X		
Total Phosphorous	X	X	
Inorganic Phosphate	X	X	
Sulfate	X	X	
Iron (total)	X	X	X
Copper (total)	X ^(a)	X	X ^(b)
Nickel (total)	X	X	X ^(b)
Zinc (total)	X	X	X ^(b)
Lead (total)	X	X	X ^(b)
Cadmium (total)	X	X	X ^(b)
Chromium (total)	X	X	X ^(b)
Total Dissolved Solids			X ^(c)
Oil & Grease		X	X
Organics (VOCs & Semi-VOCs)		X ^(c)	X ^(c)

Notes: (a) In-river samples are surface grab samples. Additional samples are taken from the middle and bottom of the water column at Station 11 for copper analysis. Samples are collected at Stations 7, 11, 8, and Blowdown only if the plant is operating. Blowdown samples may be taken from the circulating cooling water which is representative of the discharge water. The monthly schedule for river water sample collection may be interrupted by hazardous conditions.

(b) Semiannual pond sediment samples are analyzed for these metals.

(c) Quarterly pond water samples are analyzed for these parameters.