

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



VIRGINIA POWER

February 8, 1995

R. Bradley Chewning, Director
Valley Regional Office
Department of Environmental Quality
P. O. Box 268
Bridgewater, VA 22812

RE: NORTH ANNA POWER STATION - VDES PERMIT NO. VA0052451
SEWAGE TREATMENT PLANT UPSET REPORT, FEBRUARY 1, 1995

Dear Mr. Chewning:

We have had a series of problems at our sewage treatment plant at North Anna Power Station and the January DMRs will report several exceedances in BOD. Mr. Daniel James, Water Quality Department, discussed the situation with Dr. Janardan Pandey by telephone on February 1, 1995. We believe the incident which is described in this letter is properly characterized as a sewage treatment plant upset.

In consideration of the efforts by DEQ to achieve resolution of problems through mutual cooperation, I would hope you accept our corrective efforts as a positive approach and that you see fit to avoid issuance of a Notice of Violation. In order to demonstrate initial corrective action was successful, we decided to take samples over five consecutive days and incurred five BOD exceedances of our permit limit. We believe that our problem resolution was sound and proper at the time and that the station should not be penalized for results which can only be determined after the action taken.

On November 1, 1994 we started up the package plant at 005 due to a temporary increase in loading on the plant. The first samples at 005 were in specification, but high, until mid-January. An improperly diluted sample taken on January 12, 1995 yielded a >38.9 mg/l result. The plant was reseeded on January 19. Shortly thereafter, an electrical outage elsewhere on the site resulted in an outage of the STP fans for approximately 12-14 hours. It was decided that a series of samples were necessary to bring the monthly average within limits and assure that the reseeded was effective. Samples were taken on January 27, 28, 29, 30, 31. On February 1 we received results of 138 mg/l BOD for the first sample. The second sample yielded a BOD value of 114.5 mg/l.

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Recognizing that more serious problems existed, we brought in two consultants, Encil Webster of Vaden Co. and Craig Szymke of Calgon, to help evaluate the STP and determine the cause(s) of the treatment problems. The indications are that, after the interruption of aeration, the proportion of nitrifying bacteria in the microorganism population of the plant was too high and suppressed recovery of the beneficial microorganisms. The reseeded corrective action could not overcome the nitrifying bacteria population. The imbalance in the microorganism populations persisted and the recommended remedial action was to pump down the plant, with appropriate disposal via a septage contractor, and to reseed with active sludge from a properly functioning STP. This action was undertaken on February 2.

Additional remedial actions to provide a solution of STP performance difficulties, in the short term, will include contracting with Environmental Systems Services to have a consultant overseeing sewage treatment plant operations for at least two days per week. On the longer term, to alleviate the potential for future problems with the station's satellite package STPs, we are evaluating plans to reroute all of their influents to the main station STP. We believe that a major reason for the sensitivity of the package units to what should be minor disturbances is the small, weak influent the plants now receive due to the size and nature of the buildings being served by them.

The results of the other samples taken January 29, 30, and 31 were 140.75, 102.25, and 119.25 mg/l respectively, and will be included in the data reported on the Discharge Monitoring Report submitted for the month. During the problems with the operation of the STP station personnel have observed the vicinity of the effluent discharge pipe and have not detected any evidence of environmental problems from the discharges nor was there any indication of abnormal discharges at the discharge point. The discharge rate of Outfall 005 during this period has been relatively small and which would be quickly assimilated by the receiving waters at the subsurface outfall pipe. The 005 discharge is to a portion of Lake Anna near the station's intake structure and no entry into that section of the lake is permitted. No detrimental environmental damage nor human health impact would be expected from this discharge.

We believe that this incident is properly characterized as a sewage treatment plant upset. The appropriate actions have been taken in reaction to the problems experienced due to events beyond our immediate control, the DEQ was notified in accordance with the requirements of the permit and, although the numerical limitations of the permit have been exceeded, the nature and quantity of the

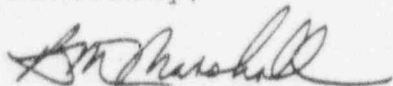
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resultant discharges would not be likely to cause any jeopardy to human health or the environment.

Since we are fully cognizant of the status and significance of the exceedances of the permit limitations, and there is no regulatory requirement that a Notice of Violation be generated in reaction to this event, we urge that you not respond to these temporary difficulties with the issuance of an NOV. Virginia Power makes every effort to maintain and operate its facilities well within the spirit, as well as the letter, of the law and regulations and we would appreciate the opportunity to work with the DEQ staff in the spirit of cooperative efforts to solve any problems that may arise.

We will keep your staff informed about the results of our efforts to remedy the performance problems with this facility, and about our future progress toward the final, long term solution. Meanwhile, should you desire additional information or have any questions about this matter, please contact me at (804)273-2990 or Daniel James at (804)273-2996.

Sincerely,



B. M. Marshall, P.E.
Manager
Water Quality

cc:

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U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., NW
Suite 2900
Atlanta, GA 30323
Re: North Anna Units 1 & 2
Docket Nos. 50-338/50-339
License Nos. NPF-4/NPF-7

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555
Re: North Anna Units 1 & 2
Docket Nos. 50-338/50-339
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Mr. R. D. McWhorter
NRC Senior Resident Inspector
North Anna Power Station