



Nebraska Public Power District

GENERAL OFFICE
P.O. BOX 499, COLUMBUS, NEBRASKA 68601-0499
TELEPHONE (402) 564-8561

January 22, 1985

Mr. Craig Osborn
Nebraska Department of Environmental Control
Permits and Enforcement Section
P. O. Box 94877
Lincoln, Nebraska 68509-4877

Dear Mr. Osborn:

On January 17, 1985, your department was notified by telephone that two non-compliances had occurred at the Cooper Nuclear Station's 005 discharge.

The 005 discharge was sampled on November 20, 1984. Analysis showed B.O.D. and total suspended solid concentrations to be 22 mg/l and 13.2 mg/l, respectively, and were below the specified limits for concentration (mg/l) and total daily quantity (kg/day). However, it was discovered that the 2 samples had been collected as a grab sample instead of a 24-hour composite as required by the NPDES permit.

To correct this mistake 24-hour composite samples were collected on December 19, 1984, at the 005 discharge for B.O.D. and total suspended solids. Due to problems in shipment, Professional Service Industries, Inc. of Omaha, Nebraska, failed to receive the B.O.D. sample from Greyhound Bus Line within the required holding time. As a result, no analysis for B.O.D. was conducted during the quarter as required by the NPDES permit. Analysis for total suspended solids showed a concentration of 30.0 mg/l which is at the specified limit of 30 mg/l. However, the calculated total daily quantity of 1.17 kg/day based on an average daily flow of 0.0131 MGD is in excess of the specified limit of 1.14 kg/day.

The higher than normal concentration of total suspended solid in the 005 discharge effluent was the result of several problems occurring within the sewage treatment system. Station personnel indicated that at the time of sample collection only one of the two treatment tanks at the sewage treatment plant was working properly. The reason for the loss of activity in one of the tanks was unknown. Daily flow rates to the treatment plant have increased as a result of the increase in number of people on site due to the refueling and pipe replacement outage presently in effect. This outage is scheduled to continue until mid-May. In addition to the increased flow rate, the addition of a sewage collection sump on the system results in surges at the sewage treatment plant. These surges result in lifting of the sludge bed which overflows the weir resulting in the discharge of excessive total suspended solids and the reduction in the amount of active sludge remaining in the tanks.

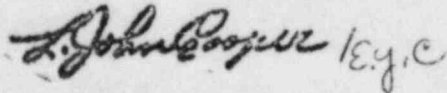
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A coordinated effort is being made to keep the sewage treatment system within limits and improve the operation to maintain a stable condition. The Chemistry Department will conduct a training program for the operations personnel. Chemistry and operational surveillance has also been increased until the problems are resolved. Station personnel are investigating the feasibility of installing a smaller pump or a timer for the sewage sump pump. This would result in more frequent, but smaller, volumes of sewage discharge to the treatment plant. The situation in which the concentration is below the specified limitation while the total daily quantity exceeds the specified limitation has been reported to your Department before. In all cases the total daily flow has been below the sewage treatment system's designed capacity of 0.014 MGD. This indicates that the limitations for total daily quantities based on 0.010 MGD may not be representative of the designed operation of the sewage treatment system.

If you have any questions concerning this matter, please contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "L. John Cooper", followed by the initials "L.J.C." in a cursive script.

L. John Cooper
Environmental Manager

LJC/cl

cc: R. D. Martin
D. B. Vassalo ✓
P. V. Thomason
J. M. Meacham
R. L. Beilke
File CB175

PERMITEE NAME:

Nebraska Public Power District
Cooper Nuclear Station
NE Quarter, NW Quarter, Section 32
Township 5N, Range 16E, Nemaha County
Pipe 005

NEBRASKA DEPARTMENT OF ENVIRONMENTAL CONTROL
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NON COMPLIANCE REPORT


THIS REPORT MUST BE FILED WHEN THE LABORATORY TEST RESULTS FROM ANY EFFLUENT SAMPLE EXCEEDS THE LIMITS IN YOUR NPDES DISCHARGE PERMIT.

NE 0001244

PERMIT NUMBER

Date
Sample
Taken

8 4

YEAR

1 12

MONTH

1 9


DAY

INSTRUCTIONS FOR COMPLETION ARE ON BACK.

PARAMETER		QUANTITY (KG/DAY)				CONCENTRATION (MG/L)				FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	UNITS		AVERAGE	MAXIMUM	UNITS		
Biochemical Oxygen Demand ¹	REPORTED									0/31	
	PERMIT CONDITION					X				X	24 hour comp.
Total Suspended Solids ²	REPORTED		1.17		1					1/31	24 hour comp.
	PERMIT CONDITION		1.14	1.71	kg/day	X				X	24 hour comp.
	REPORTED										
	PERMIT CONDITION					X				X	
	REPORTED										
	PERMIT CONDITION					X				X	
FLOW	REPORTED		0.1031		MGD				MGD		
						X				X	

Description and cause of Non Compliance. ¹The vendor, Professional Service Industries, Inc. of Omaha, failed to receive B.O.D. sample from Greyhound Bus Line within the required holding time. No analysis performed.

²Loss of activity in treatment tank, increased flows and flow surges to treatment plant.

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF OFFICER		DATE			I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION CONTAINED IN THIS REPORT AND THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE, AND ACCURATE.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
LAST	FIRST	MI	TITLE	YEAR	MONTH	DAY			
Cooper	L.	J.	Environmental Manager	8	15	01	2	11	

084-61-001