

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9206150391 DOC. DATE: 92/06/11 NOTARIZED: NO DOCKET #  
 FACIL: 50-269 Oconee Nuclear Station, Unit 1, Duke Power Co. 05000269  
 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co. 05000270  
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287  
 50-369 William B. McGuire Nuclear Station, Unit 1, Duke Power Co. 05000369  
 50-370 William B. McGuire Nuclear Station, Unit 2, Duke Power Co. 05000370  
 50-413 Catawba Nuclear Station, Unit 1, Duke Power Co. 05000413  
 50-414 Catawba Nuclear Station, Unit 2, Duke Power Co. 05000414

AUTH. NAME AUTHOR AFFILIATION  
 ATHERTON, N.G. Duke Power Co.  
 RECIP. NAME RECIPIENT AFFILIATION  
 GLEASON, R. North Carolina, State of

SUBJECT: NPDES noncompliance notification: Outfall 001 at technical training ctr exceeded permitted weekly average limits for suspended residues for Apr & May 1992. Caused by algae colonies. Lagoon will be partially shaded by end of Jul.

DISTRIBUTION CODE: C001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4  
 TITLE: Licensing Submittal: Environmental Rept Amdt & Related Correspondence

NOTES: LPDR 2cys AMDTS to FSAR. ASLB lcy. 05000413  
 LPDR 2cys AMDTS to FSAR. ASLB lcy. 05000414

RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
PD2-3 LA	3 3	PD2-3 PD	1 1
WIENS, L	1 1	REED, T	1 1
MARTIN, R	1 1		
INTERNAL: ACRS	6 6	NRR/DET/ESGB 8D	1 1
OC/LEMB	1 0	OGC/HDS2	1 0
REG FILE 01	1 1	RGN2 DRSS/RPB	1 1
EXTERNAL: EG&G SIMPSON, F	2 2	NRC PDR	1 1
NSIC	1 1		
NOTES:	3 3		

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 25 ENCL 23

Duke Power Company  
Wachovia Center  
P.O. Box 1007  
Charlotte, N.C. 28201-1007



**DUKE POWER**

June 11, 1992

Mr. Rex Gleason  
Regional Manager  
Water Quality Section  
Department of Environment, Health and Natural  
Resources  
919 North Main Street  
Mooresville, N. C. 28115

Subject: Technical Training Center (NC0026255)  
Exceedance of Total Suspended Residue  
Weekly and Monthly Average Limits  
File: MC 702.26  
Certified: P067 125 890

Dear Sir:

Pursuant to Part II Section D(6)(d) of the Duke Power Training and Technology Center's (TTC) NPDES permit (NC0026255), this is a follow-up written report to the North Carolina Department of Environment, Health and Natural Resources (NCDEHNR) of recent noncompliances associated with the TTC's sanitary treatment system. The initial telephone notification was made to Mr. Mike Parker of the Mooresville Regional office on May 28, 1992, by Mr. John Estridge of Duke Power Company.

**EVENTS**

In a letter dated March 17, 1992, to the Mooresville Regional office, events associated with an algae problem of the TTC sanitary treatment system have been described. That letter provides additional information relating to the events described below.

The Technical Training Center's outfall 001 (Domestic and Filter Backwash) exceeded the permitted weekly average limits of 45 mg/L for Total Suspended Residue (TSR) for the 2nd, 3rd, and 5th weeks of April and for the 1st and 3rd weeks of May. Additionally, the permitted monthly average limit of 30 mg/L for TSR was exceeded for the month of April and for the month of May. The values observed during these exceedances are shown in Table 1 which is attached.

9206150391 920611  
PDR ADDCK 05000269  
S PDR

COO 1/

## CORRECTIVE ACTIONS

Periodic characterization of the TSR by Chlorophyll "A" tests confirm that the residue consists almost entirely of colonial green and blue-green algae. These algae colonies are fine enough to pass through the sand filter without being retained. The sand in the sand filter had been replaced in March.

Additionally, even though the maximum allowable dose rate of the approved algaecide called Cutrine-Plus is being added, it has not been consistently effective in reducing the TSR values below the weekly average limit. This situation has been discussed with a representative of the manufacturer of Cutrine-Plus. Since some forms of algae secrete a gelatinous coat around themselves which can reduce the effectiveness of copper as an algaecide, a non-toxic surfactant called "Cide-Kick" has been recommended by the manufacturer. We are in the process of getting State approval to use this product. In the interim, the aeration of the lagoon has been increased to see if the additional mixing enhances the effectiveness of the algaecide.

Since March, sanitary treatment system consultants were contracted to review the TTC's system problems and offer proposals for their resolution. The consultants recommended partially shading the lagoon. A vendor has been contacted to install the shading and it will be in place prior to the end of July, 1992.

As a long term solution to this and related problems, Duke Power submitted on May 11, 1992 a permit application for treatment of the wastewater from the McGuire Nuclear Station and the TTC by the McDowell Creek Wastewater Treatment Facility. This facility is operated by the Charlotte Mecklenburg Utility Department (CMUD). The time period beginning with the review of the permit to the actual installation of the connection may require 1 and 1/2 to 2 years. CMUD is presently reviewing our application to determine if they can accept these waste streams.

Should you have any questions, please contact Norma Atherton at (704) 382-2116.

Sincerely,

*Norma G. Atherton*

Norma G. Atherton, Production Specialist III  
Generation Services Department  
Environmental Division

NGA/jfw

cc: NCDEHNR - Raleigh

Table I

<u>Week</u>	<u>TSR Values</u>
4/01/92 - 4/03/92	43 mg/L
4/06/92 - 4/10/92	70 mg/L *
4/13/92 - 4/17/92	80 mg/L *
4/20/92 - 4/24/92	76 mg/L *
4/27/92 - 4/31/92	79 mg/L *
April Monthly Average	68 mg/L @
5/04/92 - 5/08/92	46 mg/L *
5/11/92 - 5/15/92	40 mg/L
5/18/92 - 5/22/92	48 mg/L *
5/25/92 - 5/29/92	25 mg/L
May Monthly Average	40 mg/L

\* Indicates a value exceeding weekly average limit of 45 mg/L

@ Indicates a value exceeding monthly average limit of 30 mg/L

bc: G. S. Rice  
B. K. Sipe  
J. R. Garrison  
A. M. Grooms  
D. L. Cline  
T. S. Carpenter  
D. W. Phillips  
G. W. Sain  
J. R. Hendricks  
J. S. Carter  
Central Records  
NRC Document Control Desk