

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9907160102 DOC. DATE: 99/07/09 NOTARIZED: NO DOCKET #
FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana M 05000315
AUTH. NAME AUTHOR AFFILIATION
CARLSON, J.P. Indiana Michigan Power Co.
RECIP. NAME RECIPIENT AFFILIATION

MORLEY, F. Michigan, State of

SUBJECT: NPDES noncompliance notification: on 990707, sample taken showed residual Clam-Trol CT-2 value of 0.17 ppm. Caused by interruption of clay feed to Unit 1 discharge vault. Valve was cleared & clay feed was re-established.

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Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Plant
Bridgman, MI 49106
616 465 5901



Mr. Fred Morley, District Supervisor
Surface Water Quality Division
Michigan Department of Environmental Quality
1342 SR M89 West Suite B
Plainwell MI 49080

July 9, 1999

Dear Mr. Morley:

Re: Cook Nuclear Plant
NPDES Permit MI0005827

This notification is provided as required by Part I Section A.1**
Effluent limit, and Part II Section A.5, Noncompliance
Notification of NPDES Permit MI0005827.

During the biocide treatment performed at the Donald C. Cook
Nuclear Plant on Wednesday, July 7th, two short interruptions in
detoxification agent bentonite clay occurred. These
interruptions led to NPDES permit exceedences in Outfall 001.

On 7/7/99, Outfall 001 (Circulating Water Discharge) sample taken
at 2100 hrs. showed a residual Clam-Trol CT-2 value of 0.17 ppm.
The discharge exceedence was the result in an interruption of the
clay feed to the Unit 1 Discharge Vault. A valve placed at the
end of the line going down the Unit 1 Discharge Vault became
blocked with clay and restricted the flow of clay slurry to the
vault. The valve was cleared and clay feed was re-established.
Another sample was pulled at 2207 hrs. and showed less than the
detectable concentration of 0.05 ppm Clam-Trol CT-2.

Clam-Trol CT-2 feed had been completed at 2252 hrs. on 7/7/99.
Clay feed was continued for purposes of detoxifying the Clam-Trol
CT-2 residual that was left in the system until it passed through
plant equipment between 0145-0200 hrs. on 7/8/99. On 7/8/99,
Outfall 001 (Circulating Water Discharge) samples taken at 0130
and 0200 hrs. showed 0.08 ppm and 0.06 ppm Clam-Trol CT-2
respectively. The cause of the 0130 hrs. exceedence was due to
the air operated clay pump freezing just before the sample was
taken at 0130 hrs. The cause of the 0200 hrs. exceedence was
due to the clay truck running out of clay slurry at 0145-0200
hrs. Outfall 001 was again sampled at 0300 hrs. and showed less
than the detectable concentration of 0.05 ppm Clam-Trol CT-2.

The impact of the CT-2 discharge on Lake Michigan fish at Unit 1
discharge should be zero because of the following:

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PDR ADOCK 05000315
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180058

Mr. Fred Morley
July 9, 1999
NPDES Notification of CT-2 exceedence at 001.

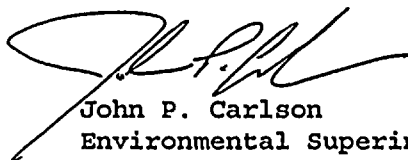
1. Bio-assay data for the CT-2 product for NOEL (No Observable Effect Limit) is 2.0 ppm as CT-2 for Trout as tested in a 96 hour flow through bio-assay test. The maximum exposure to the fish would have been 0.17 ppm for a maximum of 1 hour at 2100 hours on 7/7/99 and 0.08 ppm for a maximum of 2 hours at 0100 hours on 7/8/99.
2. The Unit 1 discharge stream was 1/10 of the total treatment flow of 150,000 gallons per minute for the combined Unit 1 and 2 discharge. The majority of discharge was directed to Unit 2's Outfall 002 where the circulating water pump discharge was directed. This does not take into account the further dilution available at the discharge mixing zone at the end of the pipe, which would further reduce CT-2 concentration.

To prevent future exceedences, we will implement the following actions for all subsequent CT-2 applications that require detoxification by clay addition.

1. The inventory of clay will be maintained to allow for an added two hours of detoxification after a calculated zero CT-2 level is reached. Actual feed of clay will be done for 1 hour after actual test sample of zero for service water is recorded
2. Visual/instrument verification of the clay feed point discharge will be continuous to ensure clay feed to the Unit discharge vault. Also, clay feed slurry back-up pumps will be installed as spares for immediate availability should the main pump fail.

Should you have any questions please contact me at (616)465-5901 ext. 1153.

Sincerely



John P. Carlson
Environmental Superintendent

C: Nuclear Regulatory Commission

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Mr. Fred Morley

July 9, 1999

NPDES Notification of CT-2 exceedence at 001.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this and all attached documents, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



T. P. Noonan
Plant Manager