



PERRY NUCLEAR POWER PLANT
10 CENTER ROAD
PERRY, OHIO 44081
(216) 259-3737

Mail Address:
P.O. BOX 97
PERRY, OHIO 44081
September 13, 1990
PY-CEI/ACOE-0007L

Michael D. Lyster
Vice President - Nuclear

Commander, Buffalo District
U.S. Army Corp of Engineers
1776 Niagara Street
Buffalo, New York 14207-3199

Commander,

Enclosed is an Application for Department of the Army Permit to allow a temporary hose to be routed from the Lake Erie shoreline on the Perry Power Plant site to the offshore intake cribs. The hose will be in place from October 10 - 19, 1990, and will be used on October 17 to deliver a chemical (Betz biocide Clam-Trol CT-1) to plant water systems to treat for zebra mussels.

The chemical tanks and pumps will be located in a dike on shore. The hose will be weighted and routed along the lake bottom to the two intake cribs, located approximately 2630 feet offshore. The hose will branch to each intake crib and will be inserted approximately five feet into each structure. It will be secured to supports around the intake ports. The hose will be inspected by scuba divers prior to and periodically during the chemical injection.

The hose is standard EPDM tubing with 3/8 inch thick walls. It is rated for 150 psi; the operating pressure for this use will be approximately 50 psi. The four lengths of hose, each 700' long, will be joined with menders that will be clamped in place. The connections will be pressure tested before chemical is pumped through.

The chemical treatment program was approved by the Ohio Environmental Protection Agency on June 15, 1990. The first treatment was applied on July 25, 1990. At that time, a boat was used to carry the chemical tanks to the intake cribs. Due to the increased possibility of inclement weather in October, the use of a temporary hose instead of a boat will help ensure the safety of workers and decrease the likelihood of an offshore spill.

In addition to the application, drawings, maps, and a copy of the approval letter from the Ohio Environmental Protection Agency are enclosed. Please notify us of the results of your review of this application at your earliest possible convenience. Please call Louise Barton, (216) 259-3737 ext. 6723, if you have any questions or need any further information.

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PDR ADOCK 05000440
P PDC

Sincerely,

Michael D. Lyster

Enclosure

MDL:LKB:njc

cc: USNRC Document Control Center
NRR Project Manager
Sr. Resident Inspector
Operating Units
Cleveland Electric Illuminating
Toledo Edison

DRAWINGS TO FILES

C001
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APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

(33 CFR 325)

OMB APPROVAL NO. 0702-0036

Expires 30 June 1992

Public reporting burden for this collection of information is estimated to average 5 hours per response for the majority of cases, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Applications for larger or more complex projects, or those in ecologically sensitive areas, will take longer. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act and Section 103 of the Marine, Protection, Research and Sanctuaries Act. These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. APPLICATION NUMBER (To be assigned by Corps)</p> | <p>3. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT</p> <p>N/A</p> <p>Telephone no. during business hours</p> <p>AC () _____ (Residence) AC () _____ (Office)</p> |
| <p>2. NAME AND ADDRESS OF APPLICANT</p> <p>The Cleveland Electric Illuminating Co. Perry Nuclear Power Plant 10 Center Road Perry, Ohio 44081 Telephone no. during business hours</p> <p>AC () _____ N/A (Residence) AC (216) 259-3737 (Office)</p> | <p>Statement of Authorization: I hereby designate and authorize _____ to act in my behalf as my agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.</p> <p>SIGNATURE OF APPLICANT _____ DATE _____</p> |

4. DETAILED DESCRIPTION OF PROPOSED ACTIVITY

4a. ACTIVITY

To route a temporary hose from the Lake Erie shoreline on the Perry Power Plant site to the offshore intake cribs, approximately 2650'. The hose will be in place from October 10 to 19, 1990, and will be used October 17.

4b. PURPOSE

The hose will be used to deliver a chemical (Betz Biocide Clam-Trol CT-1) to the plant water intake to treat water systems for Zebra mussels.

Note that the chemical treatment program has been approved by the Ohio Environmental Protection Agency. (See attached letter, dated 6/15/90)

4c. DISCHARGE OF DREDGED OR FILL MATERIAL

Not applicable

5 NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC., WHOSE PROPERTY ALSO ADJOINS THE WATERWAY

To the West: Neff Perkins Co., 3715 Paruly Road, Perry, Ohio 44081
 To the East: Mrs. Allen Daniels, P.O. Box 144, Gates Mills, Ohio 44040

6 WATERBODY AND LOCATION ON WATERBODY WHERE ACTIVITY EXISTS OR IS PROPOSED

Lake Erie on the Perry Power Plant site (see enclosed maps).

7 LOCATION ON LAND WHERE ACTIVITY EXISTS OR IS PROPOSED

ADDRESS

10 Center Road Perry
 STREET, ROAD, ROUTE OR OTHER DESCRIPTIVE LOCATION

Lake Ohio 44081
 COUNTY STATE ZIP CODE

North Perry Village
 LOCAL GOVERNING BODY WITH JURISDICTION OVERSITE

8 Is any portion of the activity for which authorization is sought now complete? YES NO
 If answer is "yes" give reasons, month and year if activity was completed. Indicate the existing work on the drawings.

9 List all approvals or certifications and denials received from other federal, interstate, state or local agencies for any structures, construction, discharges or other activities described in this application:

| ISSUING AGENCY | TYPE APPROVAL | IDENTIFICATION NO. | DATE OF APPLICATION | DATE OF APPROVAL | DATE OF DENIAL |
|----------------|--------------------------------------|--------------------|---------------------|------------------|----------------|
| Ohio EPA | Director's final findings and orders | N/A | 3/1/90 | 6/15/90 | N/A |

10 Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities or I am acting as the duly authorized agent of the applicant.

M. D. Hyster 9/13/90 N/A
 SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 3 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

YOU CAN SAVE TIME AND MINIMIZE DELAYS IN THE EVALUATION OF YOUR PERMIT APPLICATION BY TAKING A FEW MOMENTS TO PROVIDE THE FOLLOWING INFORMATION:

1. Please give us the name of any agent, consultant or contractor that is involved in the work you would like to have permitted:

Name: Jeff Wilson 40 Betz Industrial
Address: 2593 Weisford Bayne Rd Ste. 105
Sewickley PA 15143
Telephone: 412-934-3090

2. We also will need the names and addresses of landowners that own property adjacent to your planned worksite. There may be more than two adjacent property owners, and if there are, you should include their names and addresses on the back of this sheet:

Name: Heff Perkins Co
Address: 5715 Paimly Rd
Perry Ohio 44091
Telephone: _____

Name: Mrs Allen Daniels
Address: PO Box 144
Gates Mills Ohio 44040
Telephone: _____

3. The address of the postmaster that delivers the mail at your planned worksite is also needed:

Address: Perry Post Office
3754 Center Rd
Perry, Ohio 44081

4. Please provide the address of the Town or City Clerk where the proposed work is located:

Address: Village of North Perry Perry Township
4449 Lockwood Rd 2736 N. Kidge Rd suite 230
Perry, Ohio 44081 Painesville, Ohio 44077
Telephone: (216) 259-4994 (216) 352-6640

5. Please provide the address of the office responsible for the issuance of building permits and land use zoning decisions at your project site:

Address: Lake County Bld Dept Village of North Perry
27 Woodland Rd 2111 Townline Rd.
Painesville, Ohio 44077 Madison, Ohio 44057
Telephone: (216) 357-2636 (216) 259-2235

YOUR COOPERATION IN PROVIDING THIS INFORMATION IS APPRECIATED



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020 Fax (614) 644-2329

SHWY

JUN 18 1990

Richard F. Celeste
Governor

June 15, 1990

Re: Director's Final Findings and Orders
CEI - Perry Nuclear Power Plant

Mr. Joseph C. Szwejkowski
Centerior Energy
P.O. Box 94661
Cleveland, Ohio 44101-4661

Transmitted herewith is one copy of the Director's Final Findings and Orders in the referenced matter.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Law Division of the Office of the Attorney General within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Robert E. Phelps, P.E. Manager
Permit Administration Section
Division of Water Pollution Control

REP/mmt

Certified Mail

cc: Don Schregardus, Director's Office
Andrew Turner, DWPC
Heidi Sorin, DWPC
John Morrison, DWPC
Kelvin Rogers, DWPC-NEDO
A. Franks/C. Porter, PIC
Joseph Sommer, Director, ODNR
Bill Kurey, U.S. Fish & Wildlife
Jeff Wilson, Betz Laboratories
Journal Room
File

Date Issued June 15, 1990

Date Effective June 15, 1990

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the matter of: : Director's Final Findings
Cooling Water Additive Request : and Orders

Pursuant to Ohio Revised Code Section 6111.03(H), the Director of the Ohio Environmental Protection Agency (Ohio EPA) hereby makes the following Findings and issues the following Orders:

FINDINGS

1. Centerior Energy, owns and operates the CEI - Perry Nuclear Power Plant, hereinafter referred to as "CEI - Perry Plant", located at 10 Center Road, North Perry, Ohio.
2. The CEI - Perry Plant discharges pollutants to Lake Erie.
3. CEI - Perry Plant currently holds an effective NPDES permit (No. 3IB00016#CD, OH0063461) for the aforementioned discharge.
4. Part II, Other Requirements B., of the aforementioned NPDES permit requires that, "In the event that the permittee's operation shall require the use of cooling water treatment additive, written permission must be obtained from the Ohio Environmental Protection Agency. The permittee shall demonstrate that the use of the additive in the concentrations expected will not be harmful or inimical to aquatic life as determined by acute static bioassays".
5. On March 1, 1990, CEI - Perry Plant applied to the Ohio EPA to receive written permission for the use of Clam Trol CT-1 cooling water treatment additive for the control of zebra mussels.
6. The use of this cooling water additive requires the addition of bentonite clay in the effluent to detoxify the active chemical before it is discharged to Lake Erie.
7. The proposed discharge concentration of active Clam Trol CT-1 contained in the final effluent entering Lake Erie is 0.0 mg/l.
8. The Director believes the issuance of these Orders is furthering the intent of the general assembly, that the Environmental Protection Agency will prevent and abate pollution of the environment for the health, safety, welfare, and property of the people of the state.
9. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with these Orders and to evidence relating to conditions calculated to result from compliance with these Orders, and its relation to the benefits to the people of the State to be derived from such compliance in accomplishing the purposes of Chapter 6111 of the Revised Code.

0001Z

I certify that this is a true and correct copy of the original document as filed in the records of the Ohio Environmental Protection Agency.

By: Carolyn Macodiano Date 6/15/90

OHIO E.P.A.
JUN 15 90

ENTERED DIRECTOR'S JOURNAL

ORDERS

1. The use of the Clam Trol CT-1 cooling water additive at the CEI - Perry Plant for the control of zebra mussels is subject to compliance with all applicable laws, rules, regulations, standards and the conditions contained herein.
2. A detailed spill prevention plan must be submitted to Ohio EPA, prior to the implementation of the proposed treatment applications. The spill prevention plan shall document all precautionary procedures that will be followed to minimize the possibility of an accidental discharge or spill of the Clam Trol CT-1. In addition, the spill prevention plan shall document steps that would be taken in the event that an accidental release of the Clam Trol CT-1 into the environment would occur. Any back-up or auxiliary methods to feed the bentonite clay should also be described in case of mechanical failure during the treatment application.
3. A report containing the monitoring and toxicity data obtained during the treatment applications must be submitted to the Ohio EPA for review. This report shall include the following and must be submitted no later than one (1) month after each Clam Trol CT-1 application.
 - a. During each Clam Trol CT-1 treatment application, a grab sample of the effluent shall be taken at a minimum of every two (2) hours. The grab sample should be taken at a point located downstream of the detoxification site. These grab samples will be used for analysis to measure the concentration of active Clam Trol CT-1 that is being discharge into Lake Erie.
 - b. A composite sample of the effluent shall be collected throughout each Clam Trol CT-1 application at a point located along the discharge pipe downstream of the detoxification site and used to conduct acute toxicity tests. A 48-hour static acute toxicity test using Ceriodaphnia dubia or Daphnia magna and a 96-hour static acute fathead minnow (Pimephales promelas) toxicity test shall be conducted each time Clam Trol CT-1 is applied. These toxicity tests shall be definitive acute tests using only 100% effluent (i.e. no dilutions). A receiving water control shall be collected as a grab sample near the intake structure immediately prior to the Clam Trol CT-1 application. A second control shall also be obtained as a grab sample immediately prior to the Clam Trol CT-1 application at a point along the discharge pipe. The toxicity tests shall be run on these samples at full strength (i.e. no dilutions are necessary). The results of these tests will be judged on a pass/fail basis. A test shall be considered a failure if mortality, or a combination of mortality plus other adverse effects, is shown to be at a statistically significant level. All toxicity tests shall be conducted using the procedures specified in the Ohio EPA Quality Assurance Manual (or current revisions) and/or standard operating procedures promulgated by the U.S. EPA.

OHIO E.P.A.

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I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Carolyn Meadows Date _____

ORDERS (Cont.)

4. By January 1, 1991, the following chronic toxicity tests must be completed and the data submitted to the Ohio EPA in order to maintain approval for the use of the Clam Trol CT-1 beyond this year. This data will be used to develop a chronic criterion for the Clam Trol CT-1 in order to further evaluate any long-term effects. A twenty-one (21) day flow-through chronic toxicity test with Daphnia magna and a twenty-eight (28) day flow-through chronic toxicity test with fathead minnows (Pimephales promelas) shall be completed using the Clam Trol CT-1. The tests shall be performed using American Society for Testing and Materials (ASTM) procedures for conducting toxicity tests in a flow-through system. Results to be reported for these chronic tests include the lowest observed effect concentration (LOEC) and the no observed effect concentration (NOEC). Also, acute endpoints (median lethal concentrations (LC50) and/or median effective concentrations (EC50)) shall be recorded.
5. Annual reports must be submitted by January 1, of each year to the Ohio EPA, as to the progress being made in the areas of research specified in 5.a. - e. below. The annual reports should contain the results of all monitoring and toxicity testing done during the application of Clam Trol CT-1 and the results obtained during the specified research program. The reports should also contain any anticipated research in the future, any problems encountered, and any additional information that may be useful in evaluating the products performance. If Ohio EPA determines that the above specified data is not being generated, these findings and reports approving the use of Clam Trol CT-1 at the CEI - Perry Plant will be revoked. CEI - Perry Plant shall continue research to determine:
 - a. if the Clam Trol CT-1, the detoxification material or a combination of the two have the potential to cause chronic effects in the receiving water at representative concentrations.
 - b. the degradation and fate of the Clam Trol CT-1, the detoxification material and a combination of the two in the receiving water.
 - c. if the Clam Trol CT-1 and the detoxification material combination is settling and accumulating in the receiving water or if it is being sufficiently dispersed.
 - d. the optimal concentrations of Clam Trol CT-1 that are needed to control adult and juvenile zebra mussels. Clam Trol CT-1 concentrations can, in all likelihood, be reduced in subsequent treatments to control juvenile mussels following the initial treatment to kill the established adult population.
 - e. other viable alternative zebra mussel control methods that may be employed at the plant. These alternative methods should consider the most cost effective (both financial and environmental) long-term control of zebra mussels.

OHIO E.P.A.

JUN 15 90

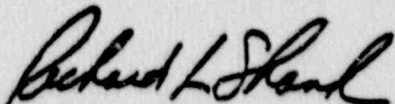
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I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Carolyn McQuinn Date 6/15/90

ORDERS (Cont.)

6. If construction is necessary to install chemical feed equipment, a complete Permit-to-Install (PTI) application must be submitted to the Ohio EPA District Office that serves your facility. The PTI must be approved prior to construction of any equipment.
7. All reports required by these findings and orders shall be submitted to the Ohio EPA, Division of Water Pollution Control, Enforcement and Compliance Section, P.O. Box 1049, 1800 Watermark Drive, Columbus, Ohio 43266-0149.
8. The cooling water additive treatment program for zebra mussel control may only be applied in accordance with the proposal approved by the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved proposal without the express, written approval of the Agency. Any deviation from the proposal or the above conditions may lead to denial or revocation of these findings and orders or other sanctions and penalties provided under Ohio law. Approval of this proposal does not constitute an assurance that the cooling water additive treatment program will operate in compliance with all Ohio laws and regulations. Additionally, the terms and conditions of this approval do not relieve a permitted facility from complying with all monitoring requirements and effluent limitations that have been established in their NPDES permit.



Richard L. Shank, Ph.D.
Director

June 15, 1990

Date

OHIO E.P.A.

JUN 15 90

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency. ENTERED DIRECTOR'S JOURNAL

By: Carolyn Nicodemus Date 6/15/90

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