



PERRY NUCLEAR POWER PLANT

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

Mail Address:
P.O. BOX 97
PERRY, OHIO 44081

Donald C. Shelton
SENIOR VICE PRESIDENT
NUCLEAR

September 12, 1995
PY-CEI/OEPA-0229L

Attention: Mr. Mark Mann
Environmental Specialist
Ohio Environmental Protection Agency, Division of Surface Water
P.O. Box 163669
Columbus, Ohio 43216-3669

Perry Nuclear Power Plant
NPDES Permit No. 3IB0016DD
Cooling Water Additive for Nonroutine Heat Exchanger Cleaning

Gentlemen:

The Perry Nuclear Power Plant has enlisted Betz Industrial to repeat a chemical cleaning of the main condenser in the circulating water system as necessary to control scale. Betz Deposi-trol 860D, Foamtrol, and sulfuric acid will be used as the cooling water treatment additives. They will be applied for a maximum of 72 hours per cleaning effort.

The original application for approval to use this methodology was approved per Directors Final Findings and Orders dated May 11, 1995. This application is being made to increase the volume of the Betz Deposi-trol only. Foamtrol and acid volumes will not be changed.

Attachment 1 contains the information required in accordance with the Ohio EPA procedures.

If you have questions or require additional information, please contact Donna Tizzano at (216) 280-5514.

Very truly yours,

DGT:sc

Attachment

cc: NRC Document Control Desk (Docket Number 50-440)
NRC Project Manager
NRC Resident Inspectors Office
NRC Region III
B. Hall OEPA - Northeast District Office

Operating Companies
Cleveland Electric Illuminating
Toledo Edison

9509150111 950912
PDR ADOCK 05000440
P PDR

COOL

PRODUCT INFORMATION FOR THE OHIO EPA

1. Name of the additive to be used and general product information.
Additive Name - Betz DEPOSI-TROL-860D
 - a. MSDS attached
 - b. & c. Trade Secret Ingredient (E195)
Trade Secret Ingredient (122)
Additional information may be obtained through Ray Post, Product Manager (215)674-9200 x532 on an as needed basis.
 - d. The product, DEPOSI-TROL 860D, will be removed to remove calcium scale.
2. The concentration of the additive to be used is 1100 mg/L.
 - a. The addition frequency will be made on an "As needed" basis. Application frequency will typically be less than 1 time per year.
 - b. The treatment application will last a maximum of 72 hours.
 - c. The product is gravity fed based on theoretical calculations. Three individual additions are made with a verification test after each addition before the desired concentration is reached.
3. It is estimated that a maximum of 400 ppm of Betz DEPOSI-TROL would discharge through the main plant outfall.
 - a. The average discharge from the cooling tower = 18,000 gpm that is combined with the average plant discharge of 55,000 gpm.
 - b. Detoxification is not required.
4. The average flow rate at the outfall is 84.96 MGD at the main plant outfall. See #3 for circulating water system flow rates.
5. Lake Erie receives the discharge from the plant through outfall 3IB00016004.
6. Toxicity and environmental information.
 - a. 48-hour LC50 - Daphnia Magna
0% mortality - 1000 mg/L
96-hour Fathead Minnow
0% Mortality - 1000 mg/L
 - b. Not applicable.

BETZ LABORATORIES, INC.
4636 SOMERTON ROAD, TREVOSE, PA. 19053
BETZ MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE (HEALTH/ACCIDENT) 800-877-1940

(PAGE 1 OF 3)

PRODUCT: DEPOSI-TROL 860D EFFECTIVE DATE: 02-10-95
PRINTED: 02-10-95
REVISIONS TO SECTIONS: 1,7

PRODUCT APPLICATION: CHEMICAL CLEANING COMPOUND.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD IS LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE AND CHRONIC HAZARDS OF THIS FORMULATION.

TRADE SECRET INGREDIENT (E195); EYE IRRITANT; PEL: NOT DETERMINED; TLV: NOT DETERMINED; TSRN 125438 - 5118P

TRADE SECRET INGREDIENT (122); POSSIBLE EYE IRRITANT; PEL: NUISANCE DUST; TLV: 5 MG/M3; NOTE: MANUFACTURER'S RECOMMENDED EXPOSURE LIMIT: 10 MG/M3; TSRN 125438 - 5214P

TRADE SECRET INGREDIENT (222); OXIDIZER; CORROSIVE; PULMONARY DAMAGE; DENTAL EROSION; PEL: 5 MG/M3 (10 MG/M3-STEL); TLV: 5 MG/M3 (10 MG/M3-STEL); TSRN 125438 - 5238P

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 1.4 ODOR: ACID
FL PT. (DEG. F): > 200 P-M (CC) SP. GR. (70F): 1.098
VAPOR PRESSURE (mmHG): - 18.0 VAPOR DENSITY (AIR=1): < 1.00
VISC cps 70F: ND % SOLUBILITY (WATER): 100.0
EVAP RATE: < 1.00 (ETHER=1) APPEARANCE: YELLOW TO DARK BROWN
PHYSICAL STATE: LIQUID FREEZE POINT (DEG. F): 26.00

-----SECTION 3-----REACTIVITY DATA-----

STABLE. MAY REACT WITH STRONG OXIDIZERS. DO NOT CONTAMINATE. BETZ TANK CLEAN-OUT CATEGORY 'B'

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

RECEIVED

MAY 22 1995

DOCUMENT CONTROL

PRODUCT: DEPOSITROL 860D

SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS *** PRIMARY ROUTE OF EXPOSURE

MAY CAUSE SLIGHT IRRITATION TO THE SKIN

ACUTE EYE EFFECTS ***

SEVERE IRRITANT TO THE EYES

ACUTE RESPIRATORY EFFECTS *** PRIMARY ROUTE OF EXPOSURE

VAPORS, GASES, MISTS AND/OR AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT.

CHRONIC EFFECTS OF OVEREXPOSURE***

PROLONGED OR REPEATED EXPOSURE MAY CAUSE LUNG DAMAGE AND/OR MAY CAUSE PRIMARY IRRITANT DERMATITIS.

MEDICAL CONDITIONS AGGRAVATED ***

NOT KNOWN

SYMPTOMS OF EXPOSURE ***

INHALATION MAY CAUSE IRRITATION OF RESPIRATORY TRACT, SKIN CONTACT MAY CAUSE ITCHING AND/OR REDNESS.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS ***

MAY BE TOXIC IF ORALLY INGESTED OR INHALED.

SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT ***

REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES

EYE CONTACT***

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE***

REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR. APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY

ESTION***

DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM

DO NOT INDUCE VOMITING. IMMEDIATELY CONTACT PHYSICIAN. DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS.

FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. SPREAD SAND/GRIT.

DISPOSAL INSTRUCTIONS****

WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT PRODUCT (AS IS).

INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE). PROPER FIRE EXTINGUISHING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

PRODUCT: DEPOSITROL 860D

SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134. USE RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE AN AIRLINE RESPIRATOR (POSITIVE-PRESSURE FULL FACEPIECE)

RECOMMENDED SKIN PROTECTION***

NEOPRENE GLOVES

WASH OFF AFTER EACH USE REPLACE AS NECESSARY.

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

KEEP CONTAINERS CLOSED WHEN NOT IN USE.

USE APPROVED CONTAINERS ONLY. STORE IN COOL, WELL-VENTED AREA. CONTACT WITH METALS MAY RELEASE FLAMMABLE HYDROGEN GAS.

HANDLING INSTRUCTIONS***

CONTAINS AN OXIDIZER. AVOID ALL CONTACT WITH REDUCING AGENTS, OILS, GREASES, ORGANICS AND ACIDS. DO NOT ALLOW TO DRY. CORROSIVE TO SKIN AND/OR EYES. DO NOT BREATHE MIST OR VAPOR.

THIS MSDS WAS WRITTEN TO COMPLY WITH THE OSHA HAZARD COMMUNICATION STANDARD

APPENDIX: REGULATORY INFORMATION

THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE

EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE.

/ CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

...TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY

...REPORTABLE QUANTITY (RQ) FOR UNDILUTED PRODUCT:

9,111 GALLONS DUE TO (122); 5,466 GALLONS DUE TO (222);

...RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE, THE RCRA HAZARDOUS WASTE IDENTIFICATION NUMBER IS: D002=CORROSIVE (PH, STEEL)

...DOT HAZARD/UN#/ER GUIDE# IS: CORROSIVE TO STEEL/UN1760/#

...CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) MATERIALS:

NO REGULATED CONSTITUENT PRESENT AT OSHA THRESHOLDS

...SARA SECTION 302 CHEMICALS:: TRADE SECRET (222)-INORGANIC ACID

...SARA SECTION 313 CHEMICALS:: TRADE SECRET (222)-INORGANIC ACID, 2.0-5.0%

...SARA SECTION 312 HAZARD CLASS: IMMEDIATE (ACUTE); DELAYED (CHRONIC)

...MICHIGAN CRITICAL MATERIALS:

NO REGULATED CONSTITUENT PRESENT AT OSHA THRESHOLDS

NFPA/HMIS: HEALTH - 2; FIRE - 1; REACTIVITY - 0; SPECIAL - CORR; PE - 8