

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9203180039 DOC. DATE: 92/03/13 NOTARIZED: NO DOCKET #
FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylvania 05000387
AUTH. NAME AUTHOR AFFILIATION
FIELDS, J.S. Pennsylvania Power & Light Co.
RECIP. NAME RECIPIENT AFFILIATION
TOMAYKO, W. Pennsylvania, Commonwealth of

SUBJECT: Describes revised disposal plans for cooling tower & spray pond sludges. Sludge removed during outages will be taken to approved MD landfill.

DISTRIBUTION CODE: C001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 8
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NOTES: LPDR 1 cy Transcripts.

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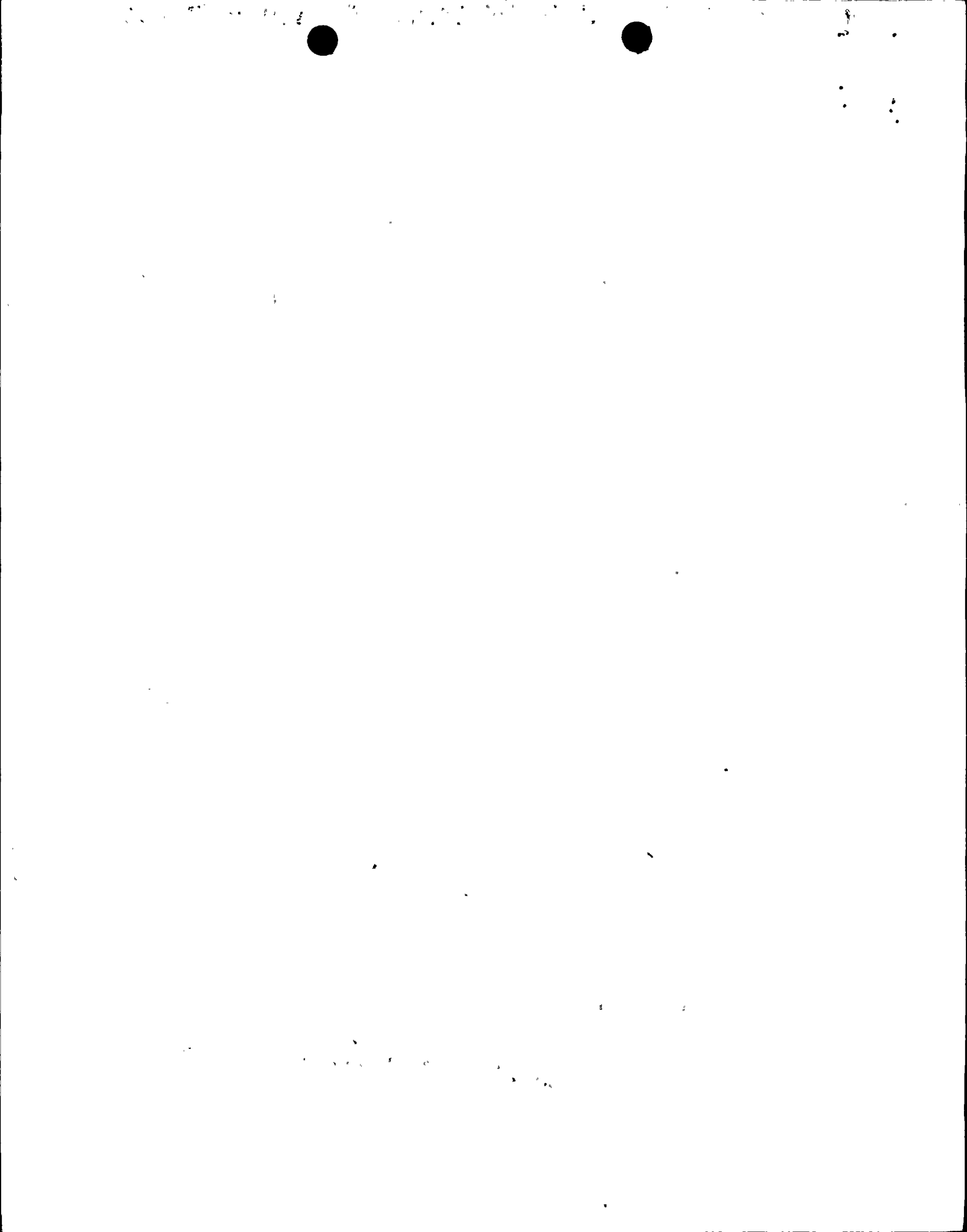
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INTERNAL:	ACRS OC/LFMB REG FILE 001	6 6 1 0 1 1	NRR/DET/ESGB 8D OGC/HDS2 RGN1 DRSS/RPB	1 1 1 0 1 1
EXTERNAL:	EG&G SIMPSON, F NSIC	2 2 1 1	NRC PDR	1 1
NOTES:		2 2		

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: LTR 22 ENCL 20

EM-1





Pennsylvania Power & Light Company

Two North Ninth Street • Allentown, PA 18101-1179 • 215/774-5151

March 13, 1992

Mr. William Tomayko
Regional Facilities Manager
Waste Management
Pennsylvania Department of Environmental Resources
90 East Union Street - 2nd Floor
Wilkes-Barre, PA 18701-3296

SUSQUEHANNA STEAM ELECTRIC STATION
TREATMENT AND DISPOSAL OF UNIT 1
COOLING TOWER SLUDGE
CCN 741326 FILE R9-8C
PLE- 70698

Dear Mr. Tomayko:

In response to your December 2, 1991 letter advising the Pennsylvania Power & Light Company (PP&L) that Cooling Tower and Spray Pond sludges should not be disposed of on Construction and Demolition Site No. 3 (I.D. #101363), we are informing you of our revised disposal plans. We understand that only construction and demolition wastes can be disposed of at Site No. 3 and this wastestream is considered residual waste.

In 1992 there will be two refueling outages at the Susquehanna SES. During each outage Cooling Tower sludge will be removed from the basins and transported for disposal to a Maryland Department of the Environment approved landfill. The Unit 1 outage has begun and the removal of sludge will begin later this month. Unit 2 sludge removal will begin during the 3rd quarter of 1992.

The method for collection and onsite treatment is as follows:

- A vacuum truck and/or submersible pump will remove sediment from the Cooling Tower basin.
- Sludge will be pumped into a tank and conditioned with Nalco 9905 Flocculant; 400-600 lbs. to be used over a one-week period (MSDS attached).
- Sludge will next be pumped to a belt filter press and dewatered to approximately 40% solids.
- Filtrate will be discharged to the other unit's Cooling Tower's blowdown line.
- Sludge will be transported in covered rolloffs to the Vale Summit Landfill, Frostburg, MD.

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COOL 1/1

March 13, 1992

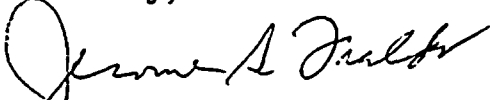
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CCN 741326 PLE-70698
FILE R9-8C

The Nalco 9905 Flocculant will be used to facilitate the dewatering process. It attaches to the solids with a negligible amount being discharged through blowdown of the operating Cooling Tower blowdown. It is estimated that the sludge dewatering process will take about a week per Cooling Tower. This activity usually occurs every 18 months per tower.

If you have any questions please call me at (215) 774-7889.

Sincerely,



Jerome S. Fields
Sr. Environmental Scientist - Nuclear

jsf/ltc2706a(26)

Enclosure

cc: ~~NRC Document Control Desk~~
NRC Region I
Mr. J. J. Raleigh, NRC Project Manager
Mr. S. Lehman, PaDER



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MATERIAL SAFETY DATA SHEET

PRODUCT

NALCO 9905 FLOCCULANT

Emergency Telephone Number
Medical (708) 920-1510 (24 hours)

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SECTION 1 PRODUCT IDENTIFICATION
.....

TRADE NAME: NALCO 9905 FLOCCULANT
DESCRIPTION: Cationic polyacrylamide

NFPA 704M/HMIS RATING: 1/1 HEALTH 0/0 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

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SECTION 2 HAZARDOUS INGREDIENTS
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Our hazard evaluation of the ingredient(s) under OSHA's Hazard Communication Rule, 29 CFR 1910.1200 has found none of the ingredient(s) hazardous.

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SECTION 3 PRECAUTIONARY LABEL INFORMATION
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May cause eye/skin irritation. Do not breathe dust. Keep in a dry place.

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SECTION 4 FIRST AID INFORMATION
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EYES: Flush with water for 15 minutes. Call a physician.
SKIN: Wash thoroughly with soap and rinse with water. Call a physician.
INGESTION: Induce vomiting. Give water. Call a physician.
INHALATION: Remove to fresh air. Treat symptoms.

NOTE TO PHYSICIAN: No specific antidote is known. Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

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SECTION 5 HEALTH EFFECTS INFORMATION
.....

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin, Inhalation

EYE CONTACT: May cause irritation with prolonged contact.
SKIN CONTACT: May cause irritation with prolonged contact.
INHALATION: May cause slight irritation to the respiratory tract and lungs.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.



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.....
SECTION 6 TOXICOLOGY INFORMATION
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TOXICITY STUDIES: Toxicity studies have been conducted on this product. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS): LD50 = Greater than 2 g/kg

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SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES
.....

COLOR: White	FORM: Powder	ODOR: Slight ammoniacal
BULK DENSITY:	45.3 lbs/ft ³	
SOLUBILITY IN WATER:	Completely	
pH (at 1%) =	3 - 4	ASTM E-70
FLASH POINT:	Not applicable	

NOTE: These physical properties are typical values for this product.

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SECTION 8 FIRE AND EXPLOSION INFORMATION
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FLASH POINT: Not applicable

EXTINGUISHING MEDIA: Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve NOx under fire conditions.

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SECTION 9 REACTIVITY INFORMATION
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INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO₂, NOx may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

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SECTION 10 PERSONAL PROTECTION EQUIPMENT
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RESPIRATORY PROTECTION: Respiratory protection not normally needed. If significant dusting occurs, wear a NIOSH approved or equivalent dust respirator.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: If significant dusting occurs, local exhaust ventilation is recommended.



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SECTION 10 PERSONAL PROTECTION EQUIPMENT (CONTINUED)
.....

PROTECTIVE EQUIPMENT: No special precautions. Avoid eye and skin contact, and inhalation of dust.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

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SECTION 11 SPILL AND DISPOSAL INFORMATION
.....

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (708-920-1510)

SPILL CONTROL AND RECOVERY:

Solid spills: Sweep or vacuum up and reclaim into recovery or salvage drums for disposal. Wear the protective equipment specified in Section 10. Refer to CERCLA in Section 14.

NOTE: Solutions of product are extremely slippery.

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous solid waste, it can be disposed of in an industrial waste landfill in accordance with local, state, and federal regulations.

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SECTION 12 ENVIRONMENTAL INFORMATION
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If released into the environment, see CERCLA in Section 14.

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SECTION 13 TRANSPORTATION INFORMATION
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DOT PROPER SHIPPING NAME/HAZARD CODE - PRODUCT IS NOT REGULATED DURING TRANSPORTATION

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SECTION 14 REGULATORY INFORMATION
.....

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:



MATERIAL SAFETY DATA SHEET

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Medical (708) 920-1510 (24 hours)

.....
SECTION 14 REGULATORY INFORMATION
.....

(CONTINUED)

Based on our hazard evaluation, none of the ingredients in this product are hazardous.

CERCLA/SUPERFUND, 40 CFR 117, 302:

Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986

(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found that this product is not hazardous under 29 CFR 1910.1200.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain ingredients (at a level of 1% or greater) on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:

Consult Section 11 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15

(formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):

None of the ingredients are specifically listed.

CLEAN AIR ACT, 40 CFR 60, SECTION 111, 40 CFR 61, SECTION 112:

This product does not contain ingredients covered by the Clean Air Act.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product does not contain any chemicals which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.



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.....
SECTION 14 REGULATORY INFORMATION
.....

(CONTINUED)

STATE RIGHT TO KNOW LAWS:

This product does not contain ingredients listed by State Right To Know Laws.

INTERNATIONAL REGULATIONS:

This is not a WHMIS controlled product under The House of Commons of Canada Bill C-70.

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SECTION 15 ADDITIONAL INFORMATION
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None

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SECTION 16 USER'S RESPONSIBILITY
.....

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

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SECTION 17 BIBLIOGRAPHY
.....

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SECTION 17 BIBLIOGRAPHY

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Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

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PREPARED BY: Ricky A. Stackhouse Ph.D., Toxicologist

DATE CHANGED: 10/16/91

DATE PRINTED: 01/29/92