

**GENERATOR RCRA
CLOSURE REPORT**

**BOVANO OF CHESHIRE
830 SOUTH MAIN STREET
Cheshire, Connecticut**

NYE PROJECT NUMBER: 00-126

SUBMITTED TO:

**Mr. James Flood
Bovano of Cheshire
830 South Main Street
Cheshire, CT 06410**

BY

**NAFIS & YOUNG ENGINEERS, INC.
10 Middle Street, Suite 714
Bridgeport, CT 06604**

February 28, 2001



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



June 21, 2002

Mr. Jim Flood
President
Bovano Industries
830 South Main Street
Cheshire, CT 06410

JUN 26 2002

RE: Closure of Less Than 90-day Hazardous Waste Storage Area

Dear Mr. Flood:

The Department of Environmental Protection, Bureau of Waste Management, Waste Engineering and Enforcement Division ("WEED") has received the May 24, 2002 documentation from Dryfoos Environmental Consultants, LLC ("DEC") which was submitted on your behalf. WEED has the following comments on the report and the closure of your less than 90-day hazardous waste storage area.

First, WEED staff had asked you to sample the two stained areas outside of the hazardous waste storage area. DEC's sketches show that two additional samples were collected outside of the storage area. However, DEC only sampled one of the two stained areas visible in the photograph noted as "Sampling Location Photograph" in the report titled "Generator RCRA Closure Report" received by WEED on March 7, 2002. Although we would have preferred that you sampled both stains, WEED will assume that the staining in the two areas visible in the photograph are similar in nature, and therefore one sample will satisfy our closure requirements.

Second, DEC's interpretation of the Remediation Standard Regulations is incorrect. Note for your information that although DEC represented to you in the May 24, 2002 submittal that the maximum allowable concentration for TCE under the GA/GAA Pollutant Mobility Criteria via SPLP analysis is 100 ppb, it is not. The correct maximum allowable concentration is actually 5 ppb for TCE. However, Bovano still meets the closure criteria under the allowable limit of 5 ppb TCE. If DEC needs assistance in understanding these regulations and the correct maximum allowable concentrations, they should contact David Ringquist in the Closure Program at (860) 424-3573.

Third, during the meeting with the WEED staff on August 28, 2001, Department you indicated that you were considering removing concrete, using a jackhammer, from the floor of the storage area. If a decision was made to remove this concrete, please submit copies of the analysis of that concrete and any paperwork confirming Bovano properly disposed of the concrete from the hazardous waste storage area. If the concrete has not been removed, but this is done in the future, appropriate documentation should then be submitted.

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Bovano Industries

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At this time, Bovano has completed the investigation and sampling required under the Draft Generator Closure Guidance. Therefore, your closure plan is approved. No further work is required from you at this time except to submit any paperwork from concrete floor removal if that was conducted. This closure approval applies specifically to the one less than 90-day hazardous waste storage area at your facility.

If you have any questions related to the closure of your less than 90-day hazardous waste storage area, please contact MaryAnn Nusom Haverstock of the Waste Engineering and Enforcement Division at (860) 424-3347.

Sincerely,



Robert Isner, Assistant Director
Bureau of Waste Management
Waste Engineering and Enforcement Division

RCI/PMP/MNH

cc: Rodd Dryfoos
Dryfoos Environmental Consultants, LLC
49 Carter Lane
Cheshire, CT 06410

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1.0 INTRODUCTION

Nafis & Young Engineers, Inc. was retained by Bovano of Cheshire to conduct RCRA closure procedures pursuant to Connecticut Department of Environmental Protection (CT-DEP) Notice of Violation No. 1046, issued to Bovano of Cheshire on April 26, 2000 (**NOV # 1046 is included in Appendix 1**). Based on this NOV, and a letter issued from the CT-DEP to Bovano of Cheshire on June 8, 2000, it was determined that the Bovano of Cheshire RCRA hazardous waste storage area (**Appendix 2, Figure 1**) is required to be closed under generator requirements.

Guidance in preparing the RCRA Generator Closure Report was obtained from the *Draft RCRA Closure Guidance for Generators Who Store Less than 90 days: Container Storage Areas and Tank Systems.*

2.0 CLOSURE PROCEDURES

Based upon facility documentation, operator knowledge, and CT-DEP records, the location of the hazardous material storage area requiring closure was identified and a list of constituents (contaminants) of concern was developed. Through visual inspection, the conditions of the structures defining the closure area were characterized and a sampling strategy was developed to identify contaminated structures and/or soil beneath the closure area. Based on the laboratory analytical results of collected samples, the closure was deemed complete.

2.1 Closure Area

The approximately five (5) foot by five (5) foot by five (5) foot material storage area at the Bovano of Cheshire facility is located in the northwestern corner of the western site building (**Appendix 2, Figure 1**). The material storage area is defined by a single pour concrete floor, and two (2) cinder block and mortar building walls. A line of masking

tape had been placed on the concrete floor by the facility operator, indicating the approximate room-ward extent of the closure area.

2.2 Constituents of Concern

Based upon interviews with the facility operator, and documentation obtained from the CT-DEP, a single constituent of concern, Trichloroethylene (TCE), was identified. Three (3) 55 gallon drums of TCE had been historically stored in the material storage area. The Material Safety Data Sheet (MSDS) for the contents of the three (3) 55 gallon drums is included in **Appendix 5**.

2.3 Sampling Procedures

In order to determine whether the structures comprising the closure area (walls and floor) had been contaminated with TCE, five (5) concrete chip samples were collected on November 7, 2000 and submitted under strict chain of custody procedures to a Connecticut state certified laboratory and analyzed for Total Volatile Organics (VOCs) via EPA Method 8260. Sample locations are depicted in the Sample Location Photograph included in **Appendix 3**. Due to the competency of the concrete floor and cinder block walls, it was determined that soil samples would be collected from beneath the concrete floor of the material storage area only if material storage area structures had been contaminated and borings indicated that the TCE had migrated through the concrete floor.

Using a hammer that had been decontaminated with Alconox and Deionized water, concrete chip samples were dislodged from the floor and walls of the material storage area and placed in laboratory provided containers. Cross contamination between sampling locations was prevented by decontamination procedures.

2.4 Sampling Results

Laboratory Analytical Results are included in **Appendix 4**. Sample S-1, collected from the northern wall, revealed a TCE concentration of 8.5 parts per billion (ppb). Samples S-2, S-3, S-4 and S-5 revealed non detectable concentrations of TCE (ND<5.0 ppb).

3.0 CONCLUSIONS

Based on communications with Mr. David Rinqvist of the CT-DEP, the criteria used for determining the necessity for additional sampling and/or remediation were the Connecticut Remediation Standard Regulations (RSRs) Residential Direct Exposure Criteria and the GA, GAA Pollutant Mobility Criteria.

Residential Direct Exposure Criteria:

The residential Direct Exposure Criteria for Trichloroethylene is 56 parts per million (ppm). SS-1, obtained from the northern wall of the material storage area revealed a TCE concentration of 8.5 ppb (.0085 ppm).

GA, GAA Pollutant Mobility Criteria:

The GA, GAA Pollutant Mobility Criteria for Trichloroethylene is 0.10 parts per million (ppm). SS-1, obtained from the northern wall of the material storage area revealed a TCE concentration of 8.5 ppb (.0085 ppm).

Since the concentrations of TCE in SS-1 are well below the applicable RSR Criteria, it is the opinion of NYE that additional sampling and laboratory analysis is not required for contaminant delineation. In addition, due to the number of samples obtained (5), and the non detection of TCE in all but one (1) sample, it is the further opinion of NYE that

Mr. James Flood
Bovano of Cheshire
RCRA Closer Report
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remediation of structures associated with the Hazardous Waste Material Storage area is not required.

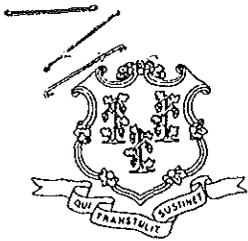
It was a pleasure working with you on this project, and we are grateful for the opportunity to be of service. Please do not hesitate to contact me for any reason at (203) 334-6442.

Very truly yours,
NAFIS & YOUNG ENGINEERS, INC.

A handwritten signature in black ink, appearing to read "R. Dryfoos", written in a cursive style.

Rodd A. Dryfoos
Director-Environmental Services

James Flood
Bovano of Cheshire



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



WASTE ENGINEERING & ENFORCEMENT DIVISION

NOTICE OF VIOLATION # 1046

Date Issued: April 26, 2000

To: Bovano Industries, Inc.
830 South Main Street
Cheshire, CT 06410

The purpose of this Notice is to inform you that personnel of the Department of Environmental Protection ("DEP") have made observations or otherwise obtained information indicating that a violation of law has occurred at the property located at 830 South Main Street, Cheshire, CT. On February 3, 2000, an inspection was conducted by the DEP Bureau of Waste Management. Based upon that inspection, it appears that you have:

1. **Failed to properly establish financial assurance for closure of the facility** as required by Connecticut General Statutes section 22a-449(c)-105 of the Regulations of Connecticut State Agencies ("RCSA") incorporating 40 CFR 265.143. Specifically, Bovano Industries, Inc. ("Bovano") is required to prepare cost estimates and provide financial assurance until closure of the storage area is complete.
2. **Failed to properly establish financial assurance for post-closure care of the facility** as required by Section 22a-449(c)-105 of RCSA incorporating 40 CFR 265.145. Specifically, Bovano is required to obtain post closure assurance for the storage area.
3. **Failed to perform hazardous waste determinations** as required by Section 22a-449(c)-101(a)(1) of RCSA incorporating 40 CFR 261.5(g)(1) and 262.11. Specifically, hazardous waste determinations had not been performed on the a) spent back enamel filters, b) spent lacquer filters and c) waste liquid generated from the silk cleaning. If the waste streams are found to be hazardous, they must be properly managed and disposed according to federal and state RCRA regulations.
4. **Failed to perform and log inspections** as required by Section 22a-449(c)-105(a) & 102(b)(2) of RCSA incorporating 40 CFR 265.15. Specifically, no inspections were performed or logged during the pump-out of waste tanks – the unloading of wastes. In addition, there were no inspections of the tank containment, detection and ancillary equipment, specifically, the piping of the tanks was not inspected or logged. Third, there were no inspections conducted or logged of safety and emergency equipment in the facility.
5. **Failed to perform an installation assessment of the tank systems** as required by Section 22a-449(c)-105(a) of RCSA incorporating 40 CFR 265.190-201. Specifically, no testing was performed prior to the installation of the waste tanks in 1988.

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Bovano of Cheshire
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When you have corrected the violations alleged in this notice, you should submit in writing the details of the corrective actions. The submittal should be made within thirty (30) days on the enclosed Compliance Statement, and *sent to the contact person identified below in paragraph D.* Until the DEP has received such a statement, the DEP will presume you remain in violation. If the violations cannot be corrected within 30 days, provide a schedule of compliance (that includes a timetable) on the enclosed Compliance Statement within 30 days describing the actions you will take to correct the violations. Your actions in response to this notice, including submission of the attached Compliance Statement, may affect the DEP's decision whether or not to take formal enforcement action.

- A. Other violations may exist; legal obligations. This Notice does not necessarily specify all violations of Connecticut environmental law or violations of any other legal requirements which may exist at the aforementioned property. This Notice does not preclude the DEP or other state, local, or federal agencies from commencing any enforcement action regarding any such violations. Your facility may be inspected again pursuant to law and without additional prior notice to determine compliance with state and any applicable federal law. It is your responsibility to comply with all legal requirements, whether or not the DEP notifies you of any violations or takes any enforcement action against you. Nothing in this Notice relieves you of other obligations under applicable federal, state, and local law.
- B. Enforcement action. Civil penalties of up to \$25,000 may be assessed for each day of each violation under section 22a-131 and 22a-438 of the Connecticut General Statutes. Notwithstanding the issuance of this Notice, the DEP may seek such penalties and may issue an order, seek an injunction, or take other legal action under Chapters 439, 445, and 446 of the Connecticut General Statutes.
- C. No assurance by Commissioner. No provision of this Notice and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that actions you may take to address the violation(s) alleged herein will result in compliance.
- D. Staff contact. If you question any of the information contained in this Notice, you may contact MaryAnn Nusom Haverstock of the Bureau of Waste Management at (860) 424-3347, 79 Elm St., Hartford, CT 06106-5127.



David A. Nash, Director
Engineering and Enforcement Division,

Certified to be a true copy of a document in the files of the Department of Environmental Protection, Waste Management Bureau.

NOV # 1046

Date Issued: 4/26/00

Name: Edwin Lopez

Title: Asst. Mgr.

Date: 4/26/00



**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



June 8, 2000

Mr. David Flood
Bovano Industries, Inc.
830 South Main Street
Cheshire, CT 06410

**RE: Notice of Violation No. 1046
Issued to Bovano Industries, Inc. on April 26, 2000**

Dear Mr. Flood:

The DEP Waste Engineering and Enforcement Division has received the letter and documentation submitted by Bovano Industries of Cheshire ("Bovano") dated May 8, 2000 in response to the above-referenced Notice of Violation. The letter was written following a phone conversation with MaryAnn Nusom Haverstock of WEED staff. It explains the present status of the company, and included information that supports Bovano's position that the hazardous waste storage area should be closed in accordance with generator standards.

Storage Area Status

Based on a comprehensive review by WEED staff of our files and the detailed information submitted by Bovano, the Department believes that the hazardous waste storage area should be closed under generator requirements. DEP has information outlining three times when waste was stored on-site for greater than 90 days. These occurred in February 1981, December 1981 and June 1983. The waste was stored on-site for greater than 90 days due to problems in lining up hazardous waste transporters. Consequently, the DEP concurs that Bovano did not operate as a RCRA storage facility and you do not have to establish financial assurance for the closure of the facility or properly establish financial assurance for post-closure care of the facility as stated in NOV 1046.

Generator Closure

Please verify that the hazardous waste was always stored on a concrete base or other type of pad when outside on the loading dock. Written documentation, potentially including any available photographs, would be acceptable. Bovano must also identify all other areas at the facility where hazardous waste has been stored. Bovano must close all hazardous waste storage areas according to the "Draft RCRA Closure Guidance For Generators Who Store Less Than 90 Days". This is required by Section 22a-449(c)-102(a) of the Regulations of Connecticut State Agencies ("RCSA") incorporating 40 CFR Parts 262.34(a), 265.111 and 265.114. This guidance document is enclosed. Bovano must submit documentation to demonstrate that the hazardous waste storage areas have been properly closed. At a minimum, this documentation should include identification of all constituents of concern, a description of closure activities, a drawing showing the hazardous waste storage areas and all sampling locations, and all appropriate

Mr. David Flood
Bovano Industries, Inc.
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analytical data. The documentation must be prepared by a licensed professional engineer. The hazardous waste storage areas are being closed in accordance with generator standards.

Please do not hesitate to contact Ms. Haverstock of my staff at (860) 424-3347 should you have any questions or comments with regard to this correspondence.

Sincerely,



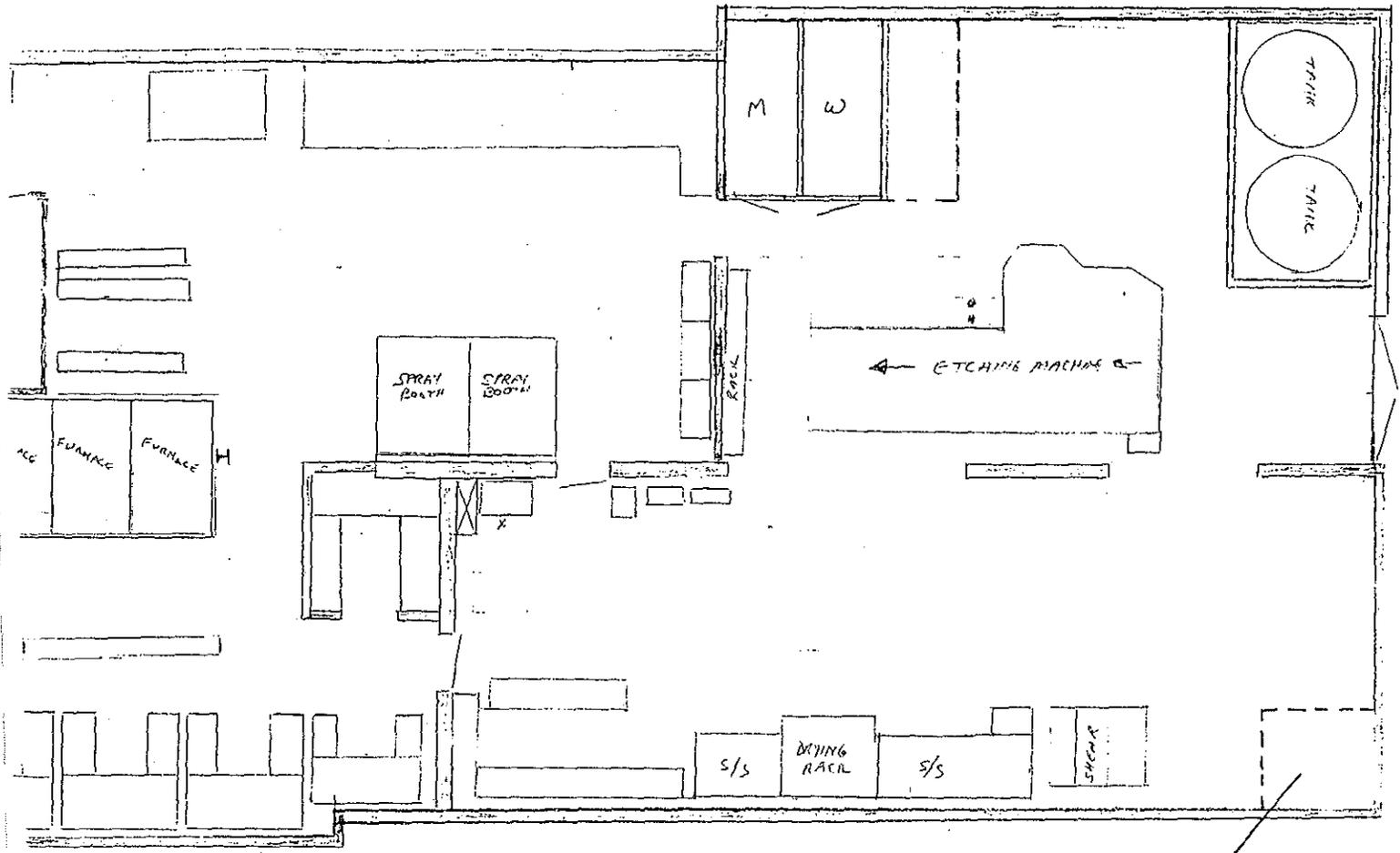
David A. Nash, Director
Bureau of Waste Management
Waste Engineering & Enforcement Division

cc: Kevin Sullivan, DEP/WEED
Julie Dutton, DEP/WEED
Dwight Chernauskas, DEP/WEED

G:\NOV\bovoinfo.doc

X

BOVANO of CHESHIRE PRODUCTION LINE



HAZARDOUS MATERIAL
STORAGE AREA



FIGURE I: STORAGE AREA
"Not to scale"

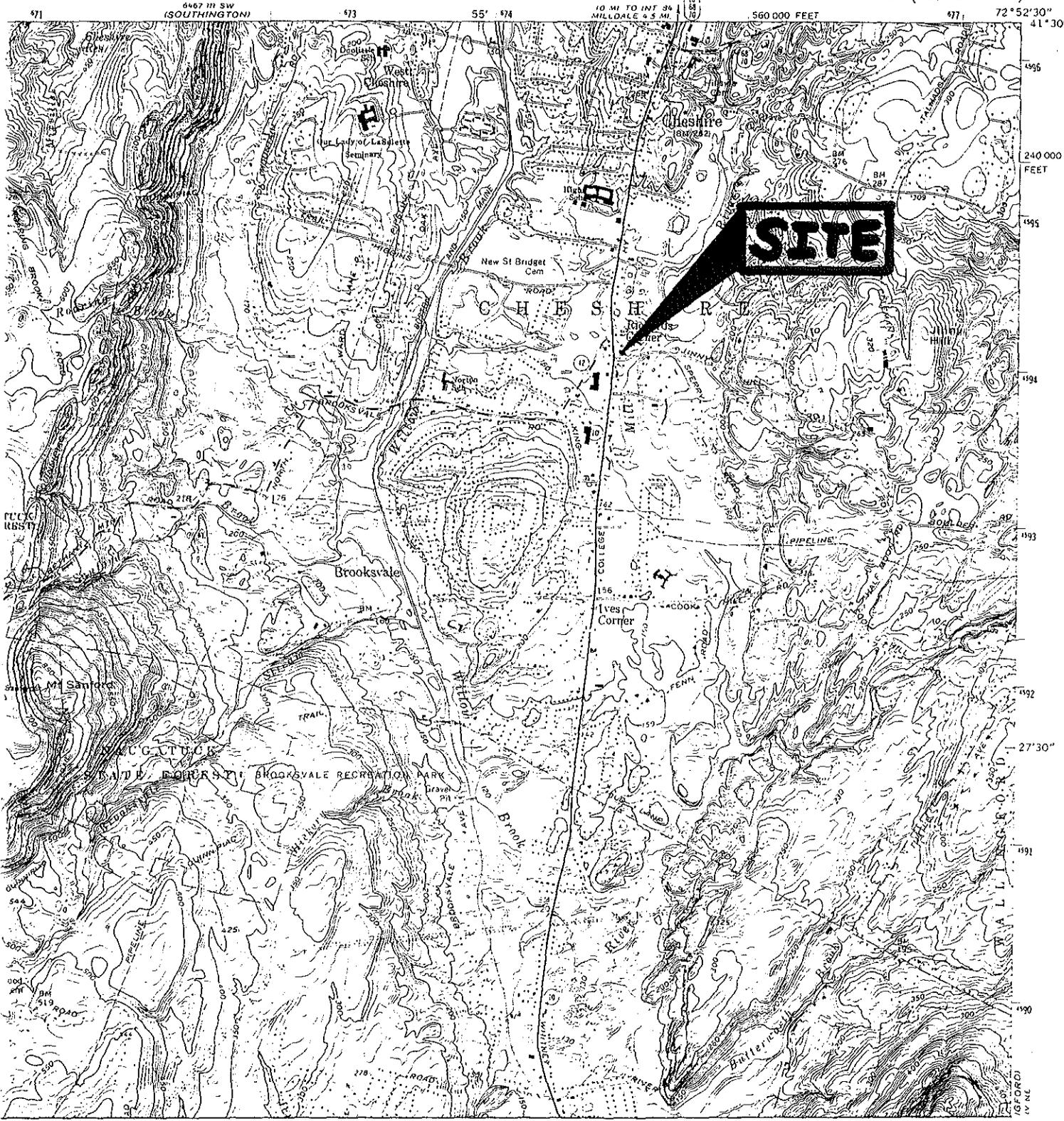
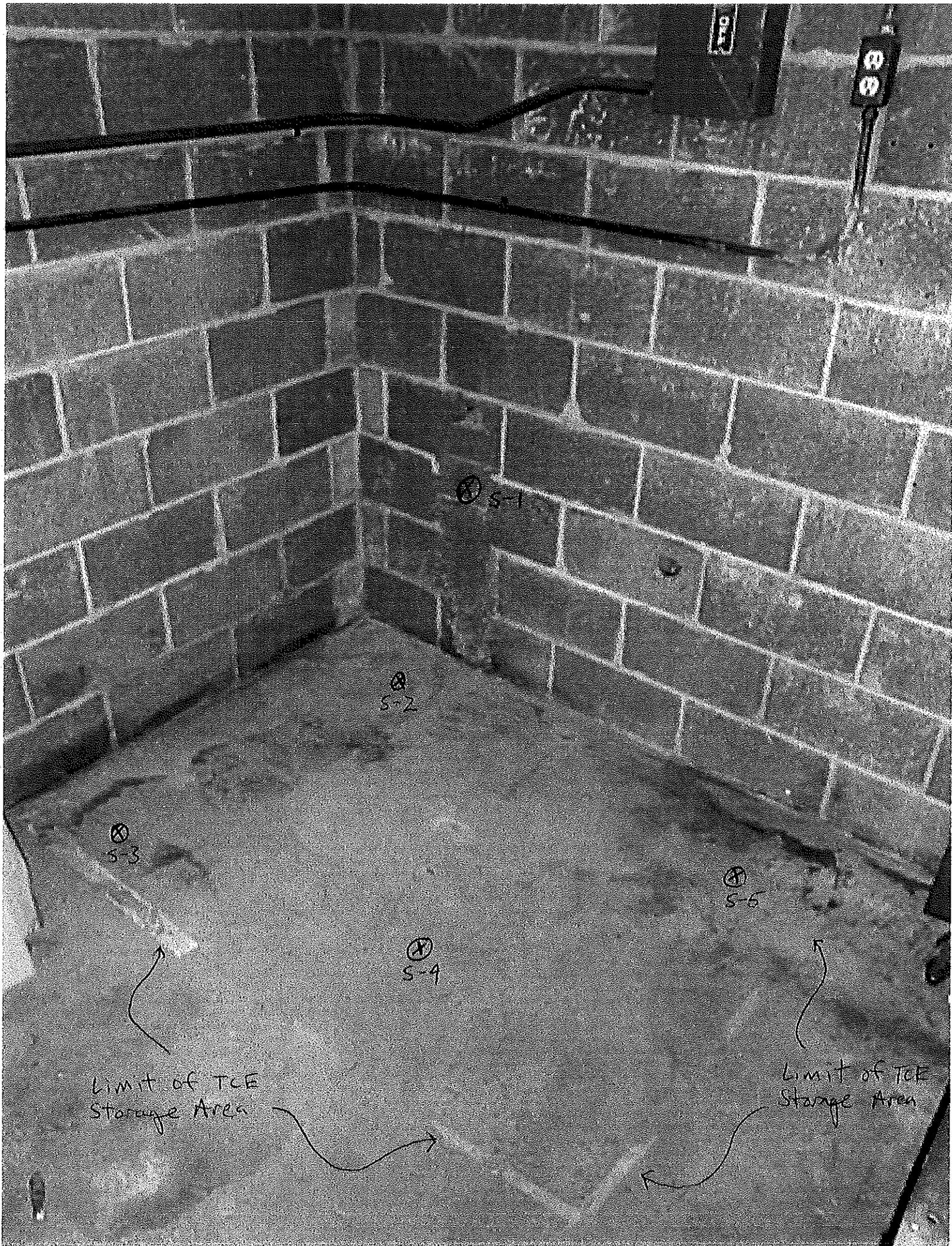


FIGURE 2: SITE LOCATION



X

⊗ S-1

⊗ S-2

⊗ S-3

⊗ S-4

⊗ S-5

Limit of TCE Storage Area

Limit of TCE Storage Area



80 Lupes Drive
Stratford, CT 06615

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet@cetlabs.com

November 9, 2000

Mr. Rodd Dryfoos
Nafis & Young
1355 Middletown Avenue
Northford, CT 06472

Project: Cheshire
Project #: 00-126
CET #: 00110331
Concrete: S-1; S-2; S-3; S-4; S-5
Collection Date(s): 11/7/00

ANALYSIS:

Volatile Organics [EPA 8260] Units: ug/kg Analysis Date: 11/8/00

	S-1	S-2	S-3	S-4	S-5
Trichloroethene	8.5	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0

Sincerely,

David Ditta
Laboratory Director

NOTES:

[] Indicates Date Prep Test Completed; ND is Not Detected.



COMPLETE ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY

80 Lupes Drive
 Stratford, CT 06615
 Tel (203) 377-9984
 FAX (203) 377-9952

COMPANY NAME AND ADDRESS

Nafis & Young

REPORT TO:

Rodol

PROJECT #:

00-126

PROJECT LOCATION:

dashua

PURCHASE ORDER #:

SAMPLED BY:

R-D

ANALYSIS REQUIRED

RELINQUISHED BY:

DATE TIME

11/8/01 10:45

RECEIVED BY:

DATE TIME

11/8 10:45

RELINQUISHED BY:

DATE TIME

RECEIVED BY:

DATE TIME

RELINQUISHED BY:

DATE TIME

RECEIVED BY:

DATE TIME

SAMPLE #

SAMPLE LOCATION

DATE TIME

SAMPLE MATRIX

PRIORITY YES / NO

OF CONTAINERS

S-1

floor

11/7/01 9:00

concrete

1

✓

S-2

floor

concrete

1

✓

S-3

floor

concrete

1

✓

S-4

floor

concrete

1

✓

S-5

floor

concrete

1

✓

Analysis required for
 8260

SPECIAL INSTRUCTIONS

COMMENTS



Material Safety Data Sheet

The Dow Chemical Company
Midland, Michigan 48674

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PAGE: 1

24-HOUR EMERGENCY PHONE NUMBER: 517-636-4400

PRODUCT: NEU-TRI* SOLVENT / HUB-TRI

PRODUCT CODE: 56530

EFFECTIVE DATE: 03/10/99 DATE PRINTED: 01/15/00 MSD: 000168

THE DOW CHEMICAL COMPANY, MIDLAND, MI 48674

CUSTOMER INFORMATION CENTER: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

TRICHLOROETHYLENE	CAS# 000079-01-6	99.4%
1, 2-BUTYLENE OXIDE	CAS# 000106-88-7	0.5%
STABILIZERS		0.1%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

 * COLORLESS LIQUID. IRRITATING ODOR. TOXIC FUMES ARE RELEASED IN *
 * FIRE SITUATIONS. HARMFUL IF INHALED. CAN CAUSE DEATH IF TOO MUCH *
 * IS BREATHED. CLEAR ALL PERSONEL FROM SPILL AREA. WEAR FULL *
 * PROTECTED EQUIPMENT. CONTAIN LIQUID TO PREVENT CONTAMINATION OF *
 * SOIL SUFACE WATER OR GROUND WATER. *

POTENTIAL HEALTH EFFECTS (SEE SECTION 11 FOR TOXICOLOGICAL DATA.)

EYE: MAY CAUSE PAIN AND SLIGHT EYE IRRITATION. CORNEAL INJURY IS UNLIKELY. VAPORS MAY IRRITATE EYES.

SKIN: PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION. MAY CAUSE DRYING OR FLAKING OF SKIN. MAY CAUSE MORE SEVERE RESPONSE IF CONFINED TO SKIN. A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS. TRICHLOROETHYLENE MAY BE ABSORBED THROUGH SKIN AND MAY CAUSE NUMBNESS IN THE FINGERS IMMERSED IN THE LIQUID.

INGESTION: SINGLE DOSE ORAL TOXICITY IS CONSIDERED TO BE LOW.

(CONTINUED ON PAGE 2 , OVER)

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MATERIAL SAFETY DATA SHEET

PAGE: 2

PRODUCT: NEU-TRI* SOLVENT
PRODUCT CODE: 56530

EFFECTIVE DATE: 03/10/99

DATE PRINTED: 01/15/00

MSD: 000168

SMALL AMOUNTS SWALLOWED INCIDENTAL TO NORMAL HANDLING OPERATIONS ARE NOT LIKELY TO CAUSE INJURY; HOWEVER, SWALLOWING AMOUNTS LARGER THAN THAT MAY CAUSE SERIOUS INJURY, EVEN DEATH. IF ASPIRATED (LIQUID ENTERS THE LUNG), MAY BE RAPIDLY ABSORBED THROUGH THE LUNGS AND RESULT IN INJURY TO OTHER BODY SYSTEMS.

INHALATION: IN CONFINED OR POORLY VENTILATED AREAS, VAPORS CAN READILY ACCUMULATE AND CAN CAUSE UNCONSCIOUSNESS AND DEATH. EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT. EXCESSIVE EXPOSURE MAY INCREASE SENSITIVITY TO EPINEPHRINE AND INCREASE MYOCARDIAL IRRITABILITY (IRREGULAR HEARTBEATS). MAY CAUSE ALCOHOL INTOLERANCE OFTEN MANIFESTED BY TEMPORARY REDDENING OF THE SKIN CALLED 'DEGREASER'S FLUSH'. MINIMAL ANESTHETIC OR IRRITANT EFFECTS MAY BE SEEN AROUND 200-400 PPM TRICHLOROETHYLENE. LEVELS IN THE RANGE OF 1000-2000 PPM MAY RAPIDLY CAUSE DIZZINESS AND DRUNKENNESS. PROGRESSIVELY HIGHER LEVELS OR LONGER EXPOSURE MAY CAUSE UNCONSCIOUSNESS AND DEATH AND MAY BE IMMEDIATELY HAZARDOUS TO LIFE.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: ALCOHOL CONSUMED BEFORE OR AFTER EXPOSURE MAY INCREASE ADVERSE EFFECTS. TRICHLOROETHYLENE IS REPORTED TO HAVE CAUSED HEARING LOSS IN LABORATORY ANIMALS UPON REPEATED EXPOSURE TO 2500 PPM OR HIGHER (ORDERS OF MAGNITUDE GREATER THAN THE CURRENT OCCUPATIONAL EXPOSURE STANDARDS). HOWEVER, THE RELEVANCE OF THIS TO HUMANS IS UNKNOWN. REPEATED EXPOSURE MAY CAUSE CENTRAL OR POSSIBLY EVEN PERIPHERAL NERVOUS SYSTEM EFFECTS; HIGH LEVELS HAVE CAUSED LIVER OR KIDNEY EFFECTS IN LABORATORY ANIMALS.

CANCER INFORMATION: TUMORS WERE OBSERVED IN MICE GIVEN LARGE DOSES OF TRICHLOROETHYLENE. A VERY LOW INCIDENCE OF TUMORS HAS BEEN OBSERVED IN MALE RATS AT HIGH LEVELS OF TRICHLOROETHYLENE WHICH CAUSED REDUCED SURVIVAL, RENDERING THESE STUDIES INADEQUATE. DATA SUGGEST A NONGENOTOXIC MECHANISM FOR TUMOR FORMATION THAT IMPLIES THAT NONTOXIC DOSES OF TRICHLOROETHYLENE SHOULD POSE LITTLE OR NO CARCINOGENIC HAZARD. HUMAN DATA HAVE NOT ESTABLISHED AN ASSOCIATION BETWEEN TRICHLOROETHYLENE EXPOSURE AND CANCER. TRICHLOROETHYLENE IS NOT BELIEVED TO POSE A MEASURABLE CARCINOGENIC RISK TO MAN WHEN HANDLED AS RECOMMENDED. BUTYLENE OXIDE HAS BEEN SHOWN TO PRODUCE BENIGN AND MALIGNANT TUMORS IN RATS BUT NOT MICE. THESE TUMORS OCCURRED ONLY FOLLOWING HIGH EXPOSURE LEVELS WHICH FIRST PRODUCED CHRONIC UPPER RESPIRATORY TRACT IRRITATION. BUTYLENE OXIDE IS NOT BELIEVED TO POSE A CARCINOGENIC RISK TO MAN WHEN HANDLED AS RECOMMENDED. THIS MIXTURE CONTAINS A COMPONENT(S) WHICH ARE LISTED AS POTENTIAL CARCINOGENS FOR HAZARD COMMUNICATION PURPOSES UNDER

(CONTINUED ON PAGE 3)

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MATERIAL SAFETY DATA SHEET

PAGE: 3

PRODUCT: NEU-TRI* SOLVENT
PRODUCT CODE: 56530

EFFECTIVE DATE: 03/10/99

DATE PRINTED: 01/15/00

MSD: 000168

OSHA STANDARD 29CFR 1910.1200. COMPONENTS LISTED BY IARC:
TRICHLOROETHYLENE.

TERATOLOGY (BIRTH DEFECTS): BIRTH DEFECTS ARE UNLIKELY.
EXPOSURES HAVING NO EFFECT ON THE MOTHER SHOULD HAVE NO EFFECT
ON THE FETUS. DID NOT CAUSE BIRTH DEFECTS IN ANIMALS; OTHER
EFFECTS WERE SEEN IN THE FETUS ONLY AT DOSES WHICH CAUSED TOXIC
EFFECTS TO THE MOTHER.

REPRODUCTIVE EFFECTS: ANIMAL DATA ON BUTYLENE OXIDE AND
TRICHLOROETHYLENE DO NOT SUGGEST ANY REPRODUCTIVE HAZARD FROM
EXPOSURE.

4. FIRST AID

EYE: FLUSH EYES WITH PLENTY OF WATER.

SKIN: WASH OFF IN FLOWING WATER OR SHOWER.

INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN AND/OR
TRANSPORT TO EMERGENCY FACILITY IMMEDIATELY.

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE
ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, OXYGEN
SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. CALL A PHYSICIAN
OR TRANSPORT TO A MEDICAL FACILITY.

NOTE TO PHYSICIAN: BECAUSE RAPID ABSORPTION MAY OCCUR THROUGH
LUNGS IF ASPIRATED AND CAUSE SYSTEMIC EFFECTS, THE DECISION OF
WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY A
PHYSICIAN. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR
ESOPHAGEAL CONTROL. DANGER FROM LUNG ASPIRATION MUST BE
WEIGHED AGAINST TOXICITY WHEN CONSIDERING EMPTYING THE STOMACH.
EXPOSURE MAY INCREASE "MYOCARDIAL IRRITABILITY". DO NOT
ADMINISTER SYMPATHOMIMETIC DRUGS UNLESS ABSOLUTELY NECESSARY.
NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON
JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE
PATIENT.

5. FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES**

FLASH POINT: NONE

METHOD USED: TCC

AUTOIGNITION TEMPERATURE: 788F, 420C

(CONTINUED ON PAGE 4 , OVER)

* OR (R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

MATERIAL SAFETY DATA SHEET

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FLAMMABILITY LIMITS

LFL: 8.0% @ 100C; 8.0% @ 25C
UFL: 44.8% @ 100C; 10.5% @ 25C

HAZARDOUS COMBUSTION PRODUCTS: DURING A FIRE, SMOKE MAY CONTAIN THE ORIGINAL MATERIAL IN ADDITION TO UNIDENTIFIED TOXIC AND/OR IRRITATING COMPOUNDS. HAZARDOUS COMBUSTION PRODUCTS MAY INCLUDE AND ARE NOT LIMITED TO HYDROGEN CHLORIDE. HAZARDOUS COMBUSTION PRODUCTS MAY INCLUDE TRACE AMOUNTS OF PHOSGENE, CHLORINE, AND CARBON MONOXIDE.

OTHER FLAMMABILITY INFORMATION: CONTAINER MAY VENT AND/OR RUPTURE DUE TO FIRE. ALTHOUGH THIS MATERIAL DOES NOT HAVE A FLASH POINT, IT CAN BURN AT ROOM TEMPERATURE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A LONG DISTANCE AND ACCUMULATE IN LOW LYING AREAS.

EXTINGUISHING MEDIA: WATER FOG OR FINE SPRAY, CARBON DIOXIDE, DRY CHEMICAL, FOAM. WATER FOG, APPLIED GENTLY MAY BE USED AS A BLANKET FOR FIRE EXTINGUISHMENT.

FIRE FIGHTING INSTRUCTIONS: KEEP PEOPLE AWAY. ISOLATE FIRE AREA AND DENY UNNECESSARY ENTRY. CONTAIN FIRE WATER RUN-OFF IF POSSIBLE. FIRE WATER RUN-OFF, IF NOT CONTAINED MAY CAUSE ENVIRONMENTAL DAMAGE. BURNING LIQUIDS MAY BE MOVED BY FLUSHING WITH WATER TO PROTECT PERSONNEL AND MINIMIZE PROPERTY DAMAGE. WATER FOG APPLIED GENTLY MAY BE USED AS A BLANKET FOR FIRE EXTINGUISHMENT. STAY UPWIND. KEEP OUT OF LOW AREAS WHERE GASES (FUMES) CAN ACCUMULATE.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND PROTECTIVE FIRE FIGHTING CLOTHING (INCLUDES FIRE FIGHTING HELMET, COAT, PANTS, BOOTS, AND GLOVES). IF PROTECTIVE EQUIPMENT IS NOT AVAILABLE OR NOT USED, FIGHT FIRE FROM A PROTECTED LOCATION OR SAFE DISTANCE.

6. ACCIDENTAL RELEASE MEASURES (SEE SECTION 15 FOR REGULATORY INFORMATION)

PROTECT PEOPLE: CLEAR ALL PERSONNEL FROM AREA. DO NOT BREATHE VAPORS. VENTILATE AREA OF LEAK OR SPILL. WEAR PROTECTIVE EQUIPMENT INCLUDING POSITIVE PRESSURE SELF CONTAINED OR AIR SUPPLIED BREATHING APPARATUS. FOLLOW CONFINED SPACE ENTRY PROCEDURES: ASTM D-4276 AND OSHA (29 CFR 1910.146).

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PROTECT ENVIRONMENT: CONTAIN LIQUID TO PREVENT CONTAMINATION OF SOIL, SURFACE WATER OR GROUND WATER. MATERIAL IS HEAVIER THAN WATER AND HAS LIMITED WATER SOLUBILITY. IT WILL COLLECT ON THE LOWEST SURFACE.

CLEANUP: FOR LARGE SPILLS: EVACUATE SPILL AREA, CONTAIN LIQUID; TRANSFER TO PROPERLY LABELED CLOSED METAL CONTAINERS. FOR SMALL SPILLS: MOP OR SOAK UP IMMEDIATELY. PLACE IN PROPERLY LABELED METAL CONTAINERS.

7. HANDLING AND STORAGE

HANDLING: TO AVOID UNCONTROLLED EMISSIONS VENT VAPOR FROM CONTAINER TO STORAGE TANK. DO NOT EAT, DRINK, OR SMOKE IN WORKING AREA. REFER TO EXPOSURE CONTROLS/PERSONAL PROTECTION, SECTION 8, OF THE MSDS. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN VAPORS. DO NOT CUT, DRILL, GRIND, WELD, OR PERFORM SIMILAR OPERATIONS ON OR NEAR EMPTY CONTAINERS. VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS SUCH AS PITS, DEGREASERS, STORAGE TANKS, AND OTHER CONFINED AREAS. DO NOT ENTER THESE AREAS WHERE VAPORS OF THIS PRODUCT ARE SUSPECTED UNLESS SPECIAL BREATHING APPARATUS IS USED AND AN OBSERVER IS PRESENT FOR ASSISTANCE.

STORAGE: KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. FOR MORE STORAGE AND HANDLING INFORMATION REFER TO BULLETIN #100-06170. STORE IN A DRY PLACE. DO NOT STORE IN ALUMINUM, ZINC, ALUMINUM ALLOYS AND PLASTICS. PRODUCT SHOULD NOT BE PACKAGED IN ALUMINUM AEROSOL CANS OR WITH FINELY DIVIDED ALUMINUM OR ITS ALLOYS IN AN AEROSOL CAN. PRODUCT IS DENSER THAN WATER. DESIGN STORAGE CONTAINERS APPROPRIATELY.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE LEVELS BELOW THE EXPOSURE GUIDELINES. LETHAL CONCENTRATIONS MAY EXIST IN AREAS WITH POOR VENTILATION.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: USE SAFETY GLASSES. IF VAPOR EXPOSURE CAUSES EYE DISCOMFORT, USE A FULL-FACE RESPIRATOR.

SKIN PROTECTION: USE PROTECTIVE CLOTHING IMPERVIOUS TO THIS MATERIAL. SELECTION OF SPECIFIC ITEMS SUCH AS FACE SHIELD, GLOVES, BOOTS, APRON, OR FULL-BODY SUIT WILL DEPEND ON

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OPERATION. REMOVE CONTAMINATED CLOTHING IMMEDIATELY, WASH SKIN AREA WITH SOAP AND WATER, LAUNDER CLOTHING BEFORE REUSE.

RESPIRATORY PROTECTION: ATMOSPHERIC LEVELS SHOULD BE MAINTAINED BELOW THE EXPOSURE GUIDELINE. WHEN RESPIRATORY PROTECTION IS REQUIRED, USE AN APPROVED AIR-PURIFYING OR POSITIVE-PRESSURE SUPPLIED-AIR RESPIRATOR DEPENDING ON THE POTENTIAL CONCENTRATION. FOR EMERGENCY AND OTHER CONDITIONS WHERE THE EXPOSURE GUIDELINE MAY BE GREATLY EXCEEDED, USE AN APPROVED POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS OR POSITIVE-PRESSURE AIRLINE WITH AUXILIARY SELF-CONTAINED AIR SUPPLY. IN CONFINED OR POORLY VENTILATED AREAS, USE AN APPROVED POSITIVE-PRESSURE SUPPLIED-AIR RESPIRATOR.

EXPOSURE GUIDELINE(S): TRICHLOROETHYLENE: ACGIH TLV IS 50 PPM TWA, 100 PPM STEL, A5. OSHA PEL IS 50 PPM TWA, 200 PPM STEL. PELS ARE IN ACCORD WITH THOSE RECOMMENDED BY OSHA, AS IN THE 1989 REVISION OF PELS.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: COLORLESS LIQUID.
ODOR: IRRITATING ODOR AT HIGH CONCENTRATIONS.
VAPOR PRESSURE: 60 MMHG @ 20C
VAPOR DENSITY: 4.53
BOILING POINT: 189F (87C)
SOLUBILITY IN WATER: 0.1 G/100G @ 25C
SPECIFIC GRAVITY: 1.46 @ 25/25C

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS. SEE STORAGE SECTION.

CONDITIONS TO AVOID: AVOID DIRECT SUNLIGHT OR ULTRAVIOLET SOURCES. AVOID OPEN FLAMES, WELDING ARCS, OR OTHER HIGH TEMPERATURE SOURCES WHICH INDUCE THERMAL DECOMPOSITION. HIGH ENERGY SOURCES SUCH AS WELDING ARCS CAN CAUSE DEGRADATION GENERATING CHLORINE, HYDROGEN CHLORIDE AND POSSIBLE PHOSGENE. AND SHOULD BE AVOIDED.

INCOMPATIBILITY WITH OTHER MATERIALS: AVOID CONTACT WITH METALS SUCH AS: ALUMINUM POWDERS, MAGNESIUM POWDERS, POTASSIUM, SODIUM, AND ZINC POWDER. AVOID UNINTENDED CONTACT WITH AMINES. AVOID CONTACT WITH STRONG BASES AND STRONG OXIDIZERS. AVOID PROLONGED CONTACT WITH OR STORAGE IN ALUMINUM OR ITS ALLOYS.

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DICHLOROACETYLENE MAY BE FORMED BY REACTION WITH STRONG BASES.

HAZARDOUS DECOMPOSITION PRODUCTS: HAZARDOUS DECOMPOSITION PRODUCTS MAY INCLUDE AND ARE NOT LIMITED TO HYDROGEN CHLORIDE AND TRACE AMOUNTS OF CHLORINE AND PHOSGENE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

11. TOXICOLOGICAL INFORMATION (SEE SECTION 3 FOR POTENTIAL HEALTH EFFECTS. FOR DETAILED TOXICOLOGICAL DATA, WRITE OR CALL THE ADDRESS OR NON-EMERGENCY NUMBER SHOWN IN SECTION 1)

SKIN: THE LD50 FOR SKIN ABSORPTION IN RABBITS IS APPROX. 10,000 MG/KG.

INGESTION: THE ORAL LD50 FOR RATS IS 4920 MG/KG.

INHALATION: THE LC50 FOR RATS IS 12,500 PPM FOR 4 HOURS.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): FOR THE MINOR COMPONENT(S) BUTYLENE OXIDE IN VITRO MUTAGENICITY STUDIES WERE POSITIVE. ANIMAL MUTAGENICITY STUDIES WERE NEGATIVE. FOR EPOXIDE-FREE TRICHLOROETHYLENE, IN VITRO MUTAGENICITY STUDIES WERE NEGATIVE. ANIMAL MUTAGENICITY STUDIES WERE PREDOMINANTLY NEGATIVE. PURE TRICHLOROETHYLENE (WITHOUT ADDITIVES) LACKS MUTAGENIC POTENTIAL IN MOST TESTS.

12. ECOLOGICAL INFORMATION (FOR DETAILED ECOLOGICAL DATA, WRITE OR CALL THE ADDRESS OR NON-EMERGENCY NUMBER SHOWN IN SECTION 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING:

BASED LARGELY OR COMPLETELY ON DATA FOR MAJOR COMPONENT(S).
BIODCONCENTRATION POTENTIAL IS LOW (BCF LESS THAN 100 OR LOG POW LESS THAN 3).
POTENTIAL FOR MOBILITY IN SOIL IS HIGH (KOC BETWEEN 50 AND 150).

DEGRADATION & PERSISTENCE:

BASED LARGELY OR COMPLETELY ON DATA FOR MAJOR COMPONENT(S).
BIODEGRADATION MAY OCCUR UNDER BOTH AEROBIC AND ANAEROBIC CONDITIONS (IN EITHER THE PRESENCE OR ABSENCE OF OXYGEN).

ECOTOXICITY:

BASED LARGELY OR COMPLETELY ON DATA FOR MAJOR COMPONENT(S).
MATERIAL IS MODERATELY TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50 BETWEEN 1 AND 10 MG/L IN MOST SENSITIVE SPECIES).

13. DISPOSAL CONSIDERATIONS (SEE SECTION 15 FOR REGULATORY INFORMATION)

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DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. ALL DISPOSAL METHODS MUST BE IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL LAWS AND REGULATIONS. REGULATIONS MAY VARY IN DIFFERENT LOCATIONS. WASTE CHARACTERIZATIONS AND COMPLIANCE WITH APPLICABLE LAWS ARE THE RESPONSIBILITY SOLELY OF THE WASTE GENERATOR. THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (COMPOSITION/INFORMATION ON INGREDIENTS).

FOR UNUSED & UNCONTAMINATED PRODUCT, THE PREFERRED OPTIONS INCLUDE SENDING TO A LICENSED, PERMITTED: RECYCLER, RECLAIMER, INCINERATOR OR OTHER THERMAL DESTRUCTION DEVICE.

AS A SERVICE TO ITS CUSTOMERS, DOW CAN PROVIDE NAMES OF INFORMATION RESOURCES TO HELP IDENTIFY WASTE MANAGEMENT COMPANIES AND OTHER FACILITIES WHICH RECYCLE, REPROCESS OR MANAGE CHEMICALS OR PLASTICS, AND THAT MANAGE USED DRUMS. TELEPHONE DOW'S CUSTOMER INFORMATION CENTER AT 800-258-2436 OR 517-832-1556 FOR FURTHER DETAILS.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.):
FOR DOT REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS, PRODUCT SHIPPING PAPERS, OR YOUR DOW REPRESENTATIVE.

CANADIAN TDG INFORMATION:
FOR TDG REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS, PRODUCT SHIPPING PAPERS, OR YOUR DOW REPRESENTATIVE.

15. REGULATORY INFORMATION (NOT MEANT TO BE ALL-INCLUSIVE--SELECTED REGULATIONS REPRESENTED)

NOTICE: THE INFORMATION HEREIN IS PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE AS OF THE EFFECTIVE DATE SHOWN ABOVE. HOWEVER, NO WARRANTY, EXPRESS OR IMPLIED IS GIVEN. REGULATORY REQUIREMENTS ARE SUBJECT TO CHANGE AND MAY DIFFER FROM ONE LOCATION TO ANOTHER; IT IS THE BUYER'S RESPONSIBILITY TO ENSURE THAT ITS ACTIVITIES COMPLY WITH FEDERAL, STATE OR PROVINCIAL, AND LOCAL LAWS. THE FOLLOWING SPECIFIC INFORMATION IS MADE FOR THE PURPOSE OF COMPLYING WITH NUMEROUS FEDERAL, STATE OR PROVINCIAL, AND LOCAL LAWS AND REGULATIONS. SEE OTHER SECTIONS FOR HEALTH AND SAFETY INFORMATION.

U.S. REGULATIONS

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REGULATORY INFORMATION (CONTINUED)

SARA 313 INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
TRICHLOROETHYLENE	000079-01-6	99.4 %

SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:

AN IMMEDIATE HEALTH HAZARD
& DELAYED HEALTH HAZARD

CALIFORNIA PROPOSITION 65: THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986:

WARNING:
THIS PRODUCT CONTAINS A CHEM. CAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY.

STATE RIGHT-TO-KNOW: THE FOLLOWING PRODUCT COMPONENTS ARE CITED ON CERTAIN STATE LISTS AS MENTIONED. NON-LISTED COMPONENTS MAY BE SHOWN IN THE COMPOSITION SECTION OF THE MSDS.

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REGULATORY INFORMATION (CONTINUED)

CHEMICAL NAME	CAS NUMBER	LIST
TRICHLOROETHYLENE	000079-01-6	NJ1 NJ2 NJ3 PA1 PA3

NJ1=NEW JERSEY SPECIAL HEALTH HAZARD SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 0.1%).
 NJ2=NEW JERSEY ENVIRONMENTAL HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%).
 NJ3=NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%).
 PA1=PENNSYLVANIA HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%).
 PA3=PENNSYLVANIA ENVIRONMENTAL HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD; 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, OR SUPERFUND):

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(S) LISTED AS "HAZARDOUS SUBSTANCES" UNDER CERCLA WHICH MAY REQUIRE REPORTING OF RELEASES:

CATEGORY:

CHEMICAL NAME	CAS#	RQ	% IN PRODUCT
TRICHLOROETHYLENE	000079-01-6	100 LBS	99.4%

CANADIAN REGULATIONS

WHMIS INFORMATION: THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION FOR THIS PRODUCT IS:

- D1B - POISONOUS SUBSTANCE DEFINED BY TDG REGULATIONS
- D2A - POSSIBLE, PROBABLE OR KNOWN HUMAN CARCINOGEN ACCORDING TO CLASSIFICATIONS BY IARC OR ACGIH
- D2B - EYE OR SKIN IRRITANT

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REGULATORY INFORMATION (CONTINUED)

REFER ELSEWHERE IN THE MSDS FOR SPECIFIC WARNINGS AND SAFE HANDLING INFORMATION. REFER TO THE EMPLOYER'S WORKPLACE EDUCATION PROGRAM.

CPR STATEMENT: THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS (CPR), AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

HAZARDOUS PRODUCTS ACT INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING INGREDIENTS WHICH ARE CONTROLLED PRODUCTS AND/OR ON THE INGREDIENT DISCLOSURE LIST (CANADIAN HPA SECTION 13 AND 14):

COMPONENTS:	CAS #	AMOUNT (%w/w)
TRICHLOROETHYLENE	CAS# 000079-01-6	99.4%

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:
 HEALTH 2
 FLAMMABILITY 1
 REACTIVITY 0

PRODUCT USE INFORMATION: PROCESS WATER IN CONTACT WITH SOLVENT AND/OR WATER SEPARATORS OF CLEANING OR DISTILLATION EQUIPMENT SHOULD BE TREATED AS HAZARDOUS WASTE. DO NOT DISCHARGE WATER FROM WATER SEPARATORS TO DRAIN.

DOW DOES NOT RECOMMEND THE USE OF THIS PRODUCT IN APPLICATIONS WHERE:

- SOIL OR GROUND WATER CONTAMINATION IS LIKELY (DIRECT APPLICATIONS TO THE GROUND, SINK DRAINS, SEWERS, OR SEPTIC TANKS).
- WHERE OVER EXPOSURE IS LIKELY (SMALL ROOMS OR CONFINED SPACE, OR WHERE THERE WOULD BE INADEQUATE VENTILATION).
- WHERE SKIN CONTACT IS LIKELY (ADHESIVE TAPE REMOVAL FROM SKIN OR AS HAND CLEANER TO REMOVE OILS AND GREASES).
- WHERE THERE IS DIRECT FOOD CONTACT.
- WHERE VAPOR CONCENTRATIONS WOULD BE IN THE FLAMMABLE RANGE.
- WHERE DISPOSAL OF WASTE WOULD POSE AN ENVIRONMENTAL OR HEALTH RISK.
- WHERE CHEMICAL REACTIVITY POSES A DANGER (CONTACT WITH STRONG ALKALI, OR IN AREAS WHERE WELDING IS DONE).

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MSDS STATUS: REVISED SECTION 13, DISPOSAL.

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