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**Randy Vieser, P.E., DEE**
*Senior Associates*

November 1, 2006

Abdool Jabar
Environmental Engineer
Division of Enforcement and Compliance Assistance
US Environmental Protection Agency – Region 2
290 Broadway (22nd Floor)
New York, NY 10007-1866

**Subject: Elan Chemical Company, Inc., Newark, NJ**
**EPA ID # NJD 042895680**

Dear Mr. Jabar:

This letter is submitted for your consideration as an addendum to previous information provided to the USEPA regarding the characteristics of waste generated at Elan Chemical Company.

Elan's July 19, 2006 submission included results of RCRA analyses on four different Compound SB wastes. Additional analyses have since been completed. Attached is a summary table presenting the results of RCRA analyses on seven additional Compound SB wastes. Along with the summary table we have included the laboratory analysis reports on these seven wastes. As you can see from the summary table, none of the Compound SB material is considered a RCRA hazardous waste. These results are consistent with Elan's past conclusion that these wastes are non-hazardous.

Please call me or Mary Guerrera, Elan's Director of QA & Regulatory Affairs (973-344-8014) if you have any questions or wish to discuss. Thank you.

Sincerely,

Neil P. Mulvey
Senior Associate

cc. Richard T. Dewling (w/o attach.)
Mary Guerrera, Elan Chemical Company, Inc.
Jocelyn K. Manship, Elan Chemical Company

ELAN CHEMICAL COMPANY, INC.
Newark, NJ

**SUMMARY RESULTS OF RCRA WASTE ANALYSES**
DATE: November 1, 2006

| COMPOUND SB (Residue of Product) | SAMPLE REF./NO. | IGNITABILITY (Flash Point; deg.F) | CORROSIVITY (pH) | REACTIVITY | TOXICITY (TCLP) | COMMENTS |
|---|---|---|---|---|---|---|
| EMPG-aldehyde C-16 | 67461 | > 212 | 9.2 | No | No | Test results submitted to USEPA on 7/19/06 |
| Natural roasted cassia oil (natural benzaldehyde) | 182000 | > 180 | 9.4 | No | No | Test results submitted to USEPA on 7/19/06 |
| 1,2,hexanediol | 182001 | > 180 | 7.65 | No | No | Test results submitted to USEPA on 7/19/06 |
| Ethyl cinnamate | 182002 | > 180 | | No | No | Test results submitted to USEPA on 7/19/06 |
| | | | | | | |
| Butyl butyryl lactate | 184779 | > 180 | 4.37 | No | No | |
| Acetyl propionyl | 184780 | > 180 | 4.29 | No | No | |
| Ethyl caprate | 184781 | > 140 | 12.13 | No | No | |
| Diethyl Sebacate | 184782 | > 180 | 11.94 | No | No | |
| Ethyl benzoate | 184783 | > 180 | 11.19 | No | No | |
| Anisyl alcohol | 184784 | > 140 | 8.98 | No | No | |
| Ethyl decanoate | 184785 | > 140 | 7.08 | No | No | |

**W.A.T.E.R. WORKS LABORATORY INC.**
364 Glenwood Ave., East Orange, NJ 07017
(973) 678-3787 FAX (973) 678-6779

# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : BBL
SAMPLE NUMBER 184779

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2 | ND |
| FLASHPOINT Deg F | | > 180 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

WWL'S TOTAL LIABILITY FOR ANY WORK PERFORMED IS LIMITED TO THE COST OF SERVICES RENDERED.

# METHOD 8260

W.A.T.E.R. WORKS LAB VOA TCLP REPORT

*Sample Number:* 184779 (1:20)
*Client Id:* #1
*Data File:* T5377
*Date Analyzed:* 2 Oct 2006 3:55 p
*Date Received/Extracted:* 9/28/06-NA
*Client Name:* ELAN

*Matrix:* Water
*Initial Volume:* 5ml
*Final Volume:* NA
*Dilution Factor:* 20
*Percent Solids:* 0
*Project:* ELAN

*Column:* DB-624,75m, 0.53mm ID, 3um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | U |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

*Total Target Concentration* 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 625

## W.A.T.E.R. WORKS LAB TCLP BNA REPORT

***Sample Number:*** 184779 1:10
***Client Id:*** #1
***Data File:*** X4069
***Date Analyzed:*** 5 Oct 2006 9:29 p
***Date Received/Extracted:*** 9/28/06-10/3/06
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 470ml
***Final Volume:*** 12ml
***Dilution Factor:*** 10
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** RTX-5,30m, 0.25mm ID, .25um Film

| *CAS #* | *Compound* | *PQL/MDL* | *Concentration (Units: ug/L )* |
|---|---|---|---|
| 106647 | 1,4-Dichlorobenzene | 570 | U |
| 95954 | 2,4,5-Trichlorophenol | 300 | U |
| 88062 | 2,4,6-Trichlorophenol | 360 | U |
| 121142 | 2,4-Dinitrotoluene | 160 | U |
| 5487 | 2-Methylphenol | 560 | U |
| 106445 | 3-Methylphenol | 570 | U |
| 106445 | 4-Methylphenol | 570 | U |
| 118741 | Hexachlorobenzene | 310 | U |
| 87683 | Hexachlorobutadiene | 600 | U |
| 67721 | Hexachloroethane | 400 | U |
| 98953 | Nitrobenzene | 660 | U |
| 87865 | Pentachlorophenol | 180 | U |
| 110861 | Pyridine | 410 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

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# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : ACETYL PROPONYL
SAMPLE NUMBER 184780

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2.0 | ND |
| FLASHPOINT Deg F | | > 180 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

W.W.L.'S TOTAL LIABILITY FOR ANY WORK PERFORMED IS LIMITED TO THE COST OF SERVICES RENDERED.

# METHOD 8260

## W.A.T.E.R. WORKS LAB VOA TCLP REPORT

**Sample Number:** 184780 (1:20)
**Client Id:** #2
**Data File:** T5378
**Date Analyzed:** 2 Oct 2006 4:34 p
**Date Received/Extracted:** 9/28/06-NA
**Client Name:** ELAN

**Matrix:** Water
**Initial Volume:** 5ml
**Final Volume:** NA
**Dilution Factor:** 20
**Percent Solids:** 0
**Project:** ELAN

**Column:** DB-624,75m, 0.53mm ID, 3um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | 7100 |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

**Total Target Concentration** 7100

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 625

## W.A.T.E.R. WORKS LAB TCLP BNA REPORT

*Sample Number:* 184780 1:10
*Client Id:* #2
*Data File:* X4070
*Date Analyzed:* 5 Oct 2006 10:11 p
*Date Received/Extracted:* 9/28/06-10/3/06
*Client Name:* ELAN

*Matrix:* Water
*Initial Volume:* 500ml
*Final Volume:* 4ml
*Dilution Factor:* 10
*Percent Solids:* 0
*Project:* ELAN

*Column:* RTX-5,30m, 0.25mm ID, .25um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 106647 | 1,4-Dichlorobenzene | 180 | U |
| 95954 | 2,4,5-Trichlorophenol | 95 | U |
| 88062 | 2,4,6-Trichlorophenol | 110 | U |
| 121142 | 2,4-Dinitrotoluene | 50 | U |
| 5487 | 2-Methylphenol | 180 | U |
| 106445 | 3-Methylphenol | 180 | U |
| 106445 | 4-Methylphenol | 180 | U |
| 118741 | Hexachlorobenzene | 98 | U |
| 87683 | Hexachlorobutadiene | 190 | U |
| 67721 | Hexachloroethane | 130 | U |
| 98953 | Nitrobenzene | 210 | U |
| 87865 | Pentachlorophenol | 55 | U |
| 110861 | Pyridine | 130 | U |

*Total Target Concentration* 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

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# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : ETHYL CAPRATE
SAMPLE NUMBER 184781

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2.0 | ND |
| FLASHPOINT Deg F | | > 140 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

W.W.L 'S TOTAL LIABILITY FOR ANY WORK PERFORMED IS LIMITED TO THE COST OF SERVICES RENDERED.

# METHOD 625

W.A.T.E.R. WORKS LAB TCLP BNA REPORT

*Sample Number:* 184781 1:10
*Client Id:* #3
*Data File:* X4071
*Date Analyzed:* 5 Oct 2006 10:52 p
*Date Received/Extracted:* 9/28/06-10/3/06
*Client Name:* ELAN

*Matrix:* Water
*Initial Volume:* 500ml
*Final Volume:* 1ml
*Dilution Factor:* 10
*Percent Solids:* 0
*Project:* ELAN

*Column:* RTX-5,30m, 0.25mm ID, .25um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 106647 | 1,4-Dichlorobenzene | 44 | U |
| 95954 | 2,4,5-Trichlorophenol | 24 | U |
| 88062 | 2,4,6-Trichlorophenol | 28 | U |
| 121142 | 2,4-Dinitrotoluene | 13 | U |
| 5487 | 2-Methylphenol | 44 | 66 |
| 106445 | 3-Methylphenol | 44 | U |
| 106445 | 4-Methylphenol | 44 | U |
| 118741 | Hexachlorobenzene | 25 | U |
| 87683 | Hexachlorobutadiene | 47 | U |
| 67721 | Hexachloroethane | 31 | U |
| 98953 | Nitrobenzene | 52 | U |
| 87865 | Pentachlorophenol | 14 | U |
| 110861 | Pyridine | 32 | U |

*Total Target Concentration* 66

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 8260

W.A.T.E.R. WORKS LAB VOA TCLP REPORT

***Sample Number:*** 184781 (1:20)
***Client Id:*** #3
***Data File:*** T5379
***Date Analyzed:*** 2 Oct 2006 5:13 p
***Date Received/Extracted:*** 9/28/06-NA
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 5ml
***Final Volume:*** NA
***Dilution Factor:*** 20
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** DB-624,75m, 0.53mm ID, 3um Film

| *CAS #* | *Compound* | *PQL/MDL* | *Concentration (Units: ug/L )* |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | U |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

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# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : DIETHYL SEBACATE
SAMPLE NUMBER 184782

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2.0 | ND |
| FLASHPOINT Deg F | | > 180 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

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# METHOD 8260

## W.A.T.E.R. WORKS LAB VOA TCLP REPORT

*Sample Number:* 184782 (1:20)
*Client Id:* #4
*Data File:* T5380
*Date Analyzed:* 2 Oct 2006 5:52 p
*Date Received/Extracted:* 9/28/06-NA
*Client Name:* ELAN

*Matrix:* Water
*Initial Volume:* 5ml
*Final Volume:* NA
*Dilution Factor:* 20
*Percent Solids:* 0
*Project:* ELAN

*Column:* DB-624,75m, 0.53mm ID, 3um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | U |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

*Total Target Concentration* 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 625

## W.A.T.E.R. WORKS LAB TCLP BNA REPORT

*Sample Number:* 184782 1:10
*Client Id:* #4
*Data File:* X4068
*Date Analyzed:* 5 Oct 2006 8:47 p
*Date Received/Extracted:* 9/28/06-10/3/06
*Client Name:* ELAN

*Matrix:* Water
*Initial Volume:* 490ml
*Final Volume:* 20ml
*Dilution Factor:* 10
*Percent Solids:* 0
*Project:* ELAN

*Column:* RTX-5,30m, 0.25mm ID, .25um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 106647 | 1,4-Dichlorobenzene | 910 | U |
| 95954 | 2,4,5-Trichlorophenol | 490 | U |
| 88062 | 2,4,6-Trichlorophenol | 580 | U |
| 121142 | 2,4-Dinitrotoluene | 260 | U |
| 5487 | 2-Methylphenol | 890 | U |
| 106445 | 3-Methylphenol | 910 | U |
| 106445 | 4-Methylphenol | 910 | U |
| 118741 | Hexachlorobenzene | 500 | U |
| 87683 | Hexachlorobutadiene | 960 | U |
| 67721 | Hexachloroethane | 640 | U |
| 98953 | Nitrobenzene | 1100 | U |
| 87865 | Pentachlorophenol | 280 | U |
| 110861 | Pyridine | 650 | U |

*Total Target Concentration* 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

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# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : ETHYL BENZOATE
SAMPLE NUMBER 184783

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2.0 | ND |
| FLASHPOINT Deg F | | > 180 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

W.W.L 'S TOTAL LIABILITY FOR ANY WORK PERFORMED IS LIMITED TO THE COST OF SERVICES RENDERED.

# METHOD 8260

## W.A.T.E.R. WORKS LAB VOA TCLP REPORT

***Sample Number:*** 184783 (1:20)
***Client Id:*** #5
***Data File:*** T5381
***Date Analyzed:*** 2 Oct 2006 6:30 p
***Date Received/Extracted:*** 9/28/06-NA
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 5ml
***Final Volume:*** NA
***Dilution Factor:*** 20
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** DB-624,75m, 0.53mm ID, 3um Film

| *CAS #* | *Compound* | *PQL/MDL* | *Concentration (Units: ug/L )* |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | U |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 625

## W.A.T.E.R. WORKS LAB TCLP BNA REPORT

***Sample Number:*** 184783 1:10
***Client Id:*** #5
***Data File:*** X4067
***Date Analyzed:*** 5 Oct 2006 8:05 p
***Date Received/Extracted:*** 9/28/06-10/3/06
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 610ml
***Final Volume:*** 12ml
***Dilution Factor:*** 10
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** RTX-5,30m, 0.25mm ID, .25um Film

| *CAS #* | *Compound* | *PQL/MDL* | *Concentration (Units: ug/L )* |
|---|---|---|---|
| 106647 | 1,4-Dichlorobenzene | 520 | U |
| 95954 | 2,4,5-Trichlorophenol | 280 | U |
| 88062 | 2,4,6-Trichlorophenol | 330 | U |
| 121142 | 2,4-Dinitrotoluene | 150 | U |
| 5487 | 2-Methylphenol | 520 | U |
| 108445 | 3-Methylphenol | 520 | U |
| 108445 | 4-Methylphenol | 520 | U |
| 118741 | Hexachlorobenzene | 290 | U |
| 87683 | Hexachlorobutadiene | 550 | U |
| 67721 | Hexachloroethane | 370 | U |
| 98953 | Nitrobenzene | 610 | U |
| 87865 | Pentachlorophenol | 160 | U |
| 110861 | Pyridine | 380 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

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# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : ANISYL ALCOHOL
SAMPLE NUMBER 184784

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2.0 | ND |
| FLASHPOINT Deg F | | > 140 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

W.W.L 'S TOTAL LIABILITY FOR ANY WORK PERFORMED IS LIMITED TO THE COST OF SERVICES RENDERED

# METHOD 8260

## W.A.T.E.R. WORKS LAB VOA TCLP REPORT

***Sample Number:*** 184784 (1:20)
***Client Id:*** #6
***Data File:*** T5382
***Date Analyzed:*** 2 Oct 2006 7:09 p
***Date Received/Extracted:*** 9/28/06-NA
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 5ml
***Final Volume:*** NA
***Dilution Factor:*** 20
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** DB-624,75m, 0.53mm ID, 3um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | U |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 625

## W.A.T.E.R. WORKS LAB TCLP BNA REPORT

*Sample Number:* 184784 1:10
*Client Id:* #6
*Data File:* X4066
*Date Analyzed:* 5 Oct 2006 7:23 p
*Date Received/Extracted:* 9/28/06-10/3/06
*Client Name:* ELAN

*Matrix:* Water
*Initial Volume:* 510ml
*Final Volume:* 22ml
*Dilution Factor:* 10
*Percent Solids:* 0
*Project:* ELAN

*Column:* RTX-5,30m, 0.25mm ID, .25um Film

| CAS # | Compound | PQL/MDL | Concentration (Units: ug/L ) |
|---|---|---|---|
| 106467 | 1,4-Dichlorobenzene | 960 | U |
| 95954 | 2,4,5-Trichlorophenol | 510 | U |
| 88062 | 2,4,6-Trichlorophenol | 610 | U |
| 121142 | 2,4-Dinitrotoluene | 270 | U |
| 5487 | 2-Methylphenol | 940 | U |
| 106445 | 3-Methylphenol | 960 | U |
| 106445 | 4-Methylphenol | 960 | U |
| 118741 | Hexachlorobenzene | 530 | U |
| 87683 | Hexachlorobutadiene | 1000 | U |
| 67721 | Hexachloroethane | 680 | U |
| 98953 | Nitrobenzene | 1100 | U |
| 87865 | Pentachlorophenol | 300 | U |
| 110861 | Pyridine | 690 | U |

*Total Target Concentration* 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

**W.A.T.E.R. WORKS LABORATORY INC.**
364 Glenwood Ave., East Orange, NJ 07017
(973) 678-3787 FAX (973) 678-6779

# LABORATORY ANALYSIS REPORT

DATE : OCTOBER 12, 2006

CLIENT : ELAN CHEMICALS

SAMPLE COLLECTED: 9/28/06
SAMPLE RECEIVED: 9/28/06

GENERATOR : ELAN CHEMICALS
NEWARK, NJ

CLIENT ID : ETHYL DECANOATE
SAMPLE NUMBER 184785

| PARAMETER | MDL | RESULT |
|---|---|---|
| REACTIVE CYANIDE | 2.0 | ND |
| REACTIVE SULFIDE | 2.0 | ND |
| FLASHPOINT Deg F | | > 140 |

All Results Reported As ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL

NJDEP LABORATORY ID # 07673

W.W.L.'S TOTAL LIABILITY FOR ANY WORK PERFORMED IS LIMITED TO THE COST OF SERVICES RENDERED.

# METHOD 8260

## W.A.T.E.R. WORKS LAB VOA TCLP REPORT

***Sample Number:*** 184785 (1:20)
***Client Id:*** #7
***Data File:*** T5383
***Date Analyzed:*** 2 Oct 2006 7:48 p
***Date Received/Extracted:*** 9/28/06-NA
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 5ml
***Final Volume:*** NA
***Dilution Factor:*** 20
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** DB-624,75m, 0.53mm ID, 3um Film

| *CAS #* | *Compound* | *PQL/MDL* | *Concentration (Units: ug/L )* |
|---|---|---|---|
| 75354 | 1,1-Dichloroethene | 100 | U |
| 107062 | 1,2-Dichloroethane | 100 | U |
| 78933 | 2-Butanone | 100 | U |
| 71432 | Benzene | 100 | U |
| 56235 | Carbon Tetrachloride | 100 | U |
| 108907 | Chlorobenzene | 100 | U |
| 67663 | Chloroform | 100 | U |
| 127184 | Tetrachloroethene | 100 | U |
| 79016 | Trichloroethene | 100 | U |
| 75014 | Vinyl Chloride | 100 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

# METHOD 625

## W.A.T.E.R. WORKS LAB TCLP BNA REPORT

***Sample Number:*** 184785 1:10
***Client Id:*** #7
***Data File:*** X4065
***Date Analyzed:*** 5 Oct 2006 6:42 p
***Date Received/Extracted:*** 9/28/06-10/3/06
***Client Name:*** ELAN

***Matrix:*** Water
***Initial Volume:*** 480ml
***Final Volume:*** 17ml
***Dilution Factor:*** 10
***Percent Solids:*** 0
***Project:*** ELAN

***Column:*** RTX-5,30m, 0.25mm ID, .25um Film

| *CAS #* | *Compound* | *PQL/MDL* | *Concentration (Units: ug/L )* |
|---|---|---|---|
| 106647 | 1,4-Dichlorobenzene | 790 | U |
| 95954 | 2,4,5-Trichlorophenol | 420 | U |
| 88062 | 2,4,6-Trichlorophenol | 500 | U |
| 121142 | 2,4-Dinitrotoluene | 220 | U |
| 5487 | 2-Methylphenol | 780 | U |
| 106445 | 3-Methylphenol | 790 | U |
| 106445 | 4-Methylphenol | 790 | U |
| 118741 | Hexachlorobenzene | 440 | U |
| 87683 | Hexachlorobutadiene | 830 | U |
| 67721 | Hexachloroethane | 560 | U |
| 98953 | Nitrobenzene | 920 | U |
| 87865 | Pentachlorophenol | 240 | U |
| 110861 | Pyridine | 570 | U |

***Total Target Concentration*** 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

9/26/06

| ## | Residue of Product | wt sample in g | added 75% Ethanol cc | pH |
|---|---|---|---|---|
| #1 – | Butyl Butyryl Lactate – B# 65284 ex. still 27 – 8/29/06 | 4.093g | ~40cc | 4.372 |
| #2 | Acetyl Propionyl B#65162 ex. still 24, 7/28/06 | 4.010g | ~40cc | 4.290 |
| #3 | Ethyl ~~Laurate~~ Caprate. 7/28/06 B#65407, still 28, 9/15/06 | 4.007g | ~40cc | 12.128 |
| #4 | Diethyl Sebacate B#65175, still 23 – 7/30/06 | 4.045g | ~40cc | 11.945 |
| #5 | Ethyl Benzoate B#65173, still 27, 7/30/06 | 4.075g | ~40cc | 11.194 |
| #6 | Anisyl Alcohol B#65163, still 7, 7/27/06 | 4.106g | ~40cc | 8.984 |
| #7 | Ethyl Decanoate B#65448, still 28, 9/24/06 | 4.670g | ~40cc | 7.082 |

9/26/06

INCORPORATED 268 DOREMUS AVE. NEWARK, N.J. 07105 (973) 34

FAX: (973) 344-

**ELAN CHEMICAL CO. – Mixed Solvent Profile**
**10/25/02**

Additional Chemical Composition & Percentage Range

| | |
|---|---|
| - Methoxyphenyl 2 Propenal | 0 – 10 % |
| - Acetophenone | 0 – 10 % |
| - Cyclohexane | 0 – 10 % |
| - 2 Methyl 2 Propanol | 0 – 5 % |
| - Ethoxyacetic Acid Ethyl Ester | 0 – 5 % |
| - ~~Methoxypentyl Benzene~~ | ~~0 – 5 %~~ |
| - 3 Phenyl 2 Propen 1 ol | 0 – 5 % |
| - Benzaldehyde | 0 – 5 % |
| - Dimethoxy Propenyl Benzene | 0 – 5 % |

BEN ARMENTI

Elan Chemical Co.

# Land Disposal Restriction Notification

Generator Name: ELAN CHEMICAL CO. City/State NEWARK, NJ

Generator EPA ID Number: NJD042895680 Manifest Document No. _____

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and theire treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

**NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.**

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥ 10% TOC | ✓ | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018 - D043 only)

| | | | | |
|---|---|---|---|---|
| | | | | |

I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: _____ Title: MGR Date 10/9/02

**(F001 - F005) Spent Solvent Wastes Treatment Standards**

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: _____

| WASTE CODE | CONSTITUENT | ✓ | NON-WASTEWATER Treatment Standard | ✓ | WASTEWATER Treatment Standard |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| F001 | Carbon Tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene Chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene Chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | ✓ | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | ✓ | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | ✓ | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon Disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIODG. INCIN** |
| | Isobutyl alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) fb CAREN: or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | ✓ | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only restricted constituent present in the waste.

**California List Treatment Standards**

INSTRUCTIONS: Place check next to the appropriate categories and corresponding treatment standards.

| | Category | Standard |
|---|---|---|
| _____ | PCB'S > 50 ppm | Incineration |
| _____ | Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _____ | Thallium > 130 mg/l (liquid waste | Removal of compounds and/or solidification to pass PFT |
| _____ | organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

ENVIROCOMPLIANCE LABORATORIES, INC.

10357 Old Keeton Road
Glen Allen, Virginia 23059
Phone 804 • 550 • 3971
Fax 804 • 550 • 3826

# Certificate of Analysis

Giant Resource Recovery, Inc.
Attn: Joyce Loving
P.O. Box K-28
Richmond, VA 23288

Project Name : Recertification AFO & CCO
Date Received: October 17, 2002
Date Issued : October 23, 2002

Sample ID : Elan Chemical Co. Mixed Solvents Sampled 10/7/02

| Parameter | Result | Units | DL | Date/Time Prepared | Date/Time Analyzed | Method | Analyst |
|---|---|---|---|---|---|---|---|
| BTU/lb | 17399 | BTU/lb | 500 | 10-21/2300 | 10-21/2300 | D240 | MAC |
| Ash, % | 0.29 | % | -- | 10-21/2300 | 10-21/2300 | D3174 | MAC |
| Specific Gravity | 0.9477 | | -- | 10-21/2050 | 10-21/2050 | D287 | MAC |
| Moisture, % | 1.93 | | -- | 10-21/2107 | 10-21/2107 | D3173 | MAC |
| Flashpoint | 70 | °F | -- | 10-21/2115 | 10-21/2115 | D93 | MAC |
| pH | 6 | SU | -- | 10-21/2055 | 10-21/2055 | 9041 | MAC |
| Viscosity, cP@104°F | 16.5 | cP | -- | 10-21/2100 | 10-21/2100 | D445 | MAC |
| Chloride | 75 | ppm | 40 | 10-22/2046 | 10-22/2240 | D2361 | GLH |
| PCB as Arochlor 1221 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1232 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1242 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1016 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1248 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1254 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1260 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1262 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| PCB as Arochlor 1268 | BDL | mg/kg | 10.0 | 10-21/1045 | 10-21/2108 | 8082 | OOA |
| Chloromethane | BDL | mg/l | 20.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Bromomethane | BDL | mg/l | 20.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Vinyl chloride | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Dichlorodifluoromethane | BDL | mg/l | 20.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Chloroethane | BDL | mg/l | 20.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Methylene chloride | BDL | mg/l | 20.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Acetone | BDL | mg/l | 50.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Carbon disulfide | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Trichlorofluoromethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1-Dichloroethene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Bromochloromethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1-Dichloroethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Acrylonitrile | BDL | mg/l | 50.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Methyl-t-butyl ether (MTBE) | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| c-1,2-Dichloroethene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |

BDL = Below Detection Limit

Greg L. Hudson
Laboratory Director
R2A48483-1/4

ENVIROCOMPLIANCE LABORATORIES, INC.

10357 Old Keeton Road
Glen Allen, Virginia 23059
Phone 804 • 550 • 3971
Fax 804 • 550 • 3826

# Certificate of Analysis

Giant Resource Recovery, Inc.
Attn: Joyce Loving
P.O. Box K-28
Richmond, VA 23288

Project Name : Recertification AFO & CCO
Date Received: October 17, 2002
Date Issued : October 23, 2002

Sample ID : Elan Chemical Co. Mixed Solvents Sampled 10/7/02

| Parameter | Result | Units | DL | Date/Time Prepared | Date/Time Analyzed | Method | Analyst |
|---|---|---|---|---|---|---|---|
| t-1,2-Dichloroethene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Chloroform | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 2,2-Dichloropropane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1,1-Trichloroethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 2-Butanone (MEK) | BDL | mg/l | 50.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Acrolein | BDL | mg/l | 50.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2-Dichloroethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Dibromomethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Carbon tetrachloride | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Bromodichloromethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2-Dichloropropane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,3-Dichloropropane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Trichloroethene (TCE) | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Benzene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Dibromochloromethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| c-1,3-Dichloropropene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| t-1,3-Dichloropropene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1,2-Trichloroethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2-Dibromoethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Toluene | 74.2 | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 4-Methyl-2-pentanone | BDL | mg/l | 50.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 2-Hexanone | BDL | mg/l | 50.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Bromoform | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1,1,2-Tetrachloroethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1-Dichloropropene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Tetrachloroethene (PCE) | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Chlorobenzene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Ethylbenzene | 7761.0 | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Styrene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Xylenes (total) | 72451.3 | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2,3-Trichloropropane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,1,2,2-Tetrachloroethane | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |

BDL = Below Detection Limit

Greg L. Hudson
Laboratory Director
R2A48483-2/4

ENVIROCOMPLIANCE LABORATORIES, INC.

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Phone 804 • 550 • 3971
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# Certificate of Analysis

Giant Resource Recovery, Inc.
Attn: Joyce Loving
P.O. Box K-28
Richmond, VA 23288

Project Name : Recertification AFO & CCO
Date Received: October 17, 2002
Date Issued : October 23, 2002

Sample ID : Elan Chemical Co. Mixed Solvents Sampled 10/7/02

| Parameter | Result | Units | DL | Date/Time Prepared | Date/Time Analyzed | Method | Analyst |
|---|---|---|---|---|---|---|---|
| Bromobenzene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Isopropylbenzene | 516.1 | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| t-Butylbenzene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| n-Propylbenzene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Hexachlorobutadiene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 2-Chlorotoluene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 4-Chlorotoluene | BDL | mg/l | 5.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| s-Butylbenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,3-Dichlorobenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2-Dichlorobenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,4-Dichlorobenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 4-Isopropyltoluene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| n-Butylbenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,3,5-Trimethylbenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2,4-Trimethylbenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2,4-Trichlorobenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1,2,3-Trichlorobenzene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Naphthalene | BDL | mg/l | 10.0 | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Library Search: | | | | | | 8260B | |
| 2,2-dimethyl-1-propnol | 9.48 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 2,3,4-trimethyl-pentane | 2.02 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Ethoxy-ethyl ester-acetic acid | 5.01 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 2,4-dimethyl-1,3-dioxolane-2-methanol | 6.01 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Acetophenone | 12.35 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Dihydro-5-pentyl-2 (3H)-Furanone | 4.10 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| Dihydro-5-propyl-2 (3H)-Furanone | 7.77 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| bis-2,2-dimethyl-butanedioc acid | 2.14 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 3-methylbutyl ester butanoic acid | 5.36 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |
| 1-azido-2-nitro-benzene | 3.18 | % | -- | 10-22/1612 | 10-23/0900 | 8260B | LML |

BDL = Below Detection Limit

Greg L. Hudson
Laboratory Director
R2A48483-3/4

ENVIROCOMPLIANCE LABORATORIES, INC.

10357 Old Keeton Road
Glen Allen, Virginia 23059
Phone 804 • 550 • 3971
Fax 804 • 550 • 3826

# Certificate of Analysis

Giant Resource Recovery, Inc.
Attn: Joyce Loving
P.O. Box K-28
Richmond, VA 23288

Project Name : Recertification AFO & CCO
Date Received: October 17, 2002
Date Issued : October 23, 2002

Sample ID : Elan Chemical Co. Mixed Solvents Sampled 10/7/02

| Parameter | Result | Units | DL | Date/Time Prepared | Date/Time Analyzed | Method | Analyst |
|---|---|---|---|---|---|---|---|
| Arsenic | BDL | mg/kg | .50 | 10-18/1600 | 10-21/1454 | 7060 | GBH |
| Barium | BDL | mg/kg | 12.5 | 10-18/1600 | 10-22/1812 | 7080 | GBH |
| Cadmium | BDL | mg/kg | 1.0 | 10-18/1600 | 10-22/1701 | 7130 | GBH |
| Chromium | BDL | mg/kg | 5.0 | 10-18/1600 | 10-21/1737 | 7190 | GBH |
| Lead | BDL | mg/kg | 5.0 | 10-18/1600 | 10-21/1737 | 7420 | GBH |
| Mercury | BDL | mg/kg | .20 | 10-22/1000 | 10-23/1200 | 7471 | GBH |
| Selenium | BDL | mg/kg | .50 | 10-18/1600 | 10-21/1720 | 7740 | GBH |
| Silver | BDL | mg/kg | 2.5 | 10-18/1600 | 10-22/1736 | 7760 | GBH |

Physical Characteristics:
Odor: Slight Aromatic
Layers: Single layer
Color: Black

BDL = Below Detection Limit

Greg L. Hudson
Laboratory Director

R2A48483-4/4

Grr!

Giant Resource Recovery, Inc.
Cascade, VA
Arvonia, VA

# PROFILE RENEWAL CERTIFICATION

GENERATOR: Elan Chemical Co. Inc

NAME OF WASTE: Mixed Solvents

WASTE PROFILE NO.: 2423

1. Has the chemical composition of this waste or the materials used in the generation of this waste changed since the last profile was completed?

   YES _____ NO X

2. Has the process generating this waste changed since the last profile was completed?

   YES _____ NO X

CERTIFICATION:

I certify that all information provided on this form and on Profile No. 2423 dated 10-26-02 is true and accurate and that all known or suspected hazards have been disclosed. I further certify that there are no hazardous constituents or characteristics except as described herein and if the waste stream or the process generating the waste changes, I will notify Giant Resource Recovery prior to shipping the waste.

Signature _____ Title MNGR

Printed/Typed Name BEN ARMENTI Date 12/1/03

Grr!

Giant Resource Recovery, Inc.
Cascade, VA
Arvonia, VA

# PROFILE RENEWAL CERTIFICATION

GENERATOR: Elan Chemical Co Inc

NAME OF WASTE: Mixed Solvents

WASTE PROFILE NO.: 2423

1. Has the chemical composition of this waste or the materials used in the generation of this waste changed since the last profile was completed?

   YES _____ NO X

2. Has the process generating this waste changed since the last profile was completed?

   YES _____ NO X

CERTIFICATION:

I certify that all information provided on this form and on Profile No. 2423 dated 12/1/03 is true and accurate and that all known or suspected hazards have been disclosed. I further certify that there are no hazardous constituents or characteristics except as described herein, and if the waste stream or the process generating the waste changes, I will notify Giant Resource Recovery prior to shipping the waste.

Signature _____ Title MNGR

Printed/Typed Name BEN ARMENTI Date 12/3/04

Grr!

Giant Resource Recovery, Inc.
Cascade, VA
Arvonia, VA

# PROFILE RENEWAL CERTIFICATION

GENERATOR: Elan Chemical Co Inc

NAME OF WASTE: Mixed Solvents

WASTE PROFILE NO.: 2423

1. Has the chemical composition of this waste or the materials used in the generation of this waste changed since the last profile was completed?

   YES _____ NO ✓

2. Has the process generating this waste changed since the last profile was completed?

   YES _____ NO ✓

CERTIFICATION:

I certify that all information provided on this form and on Profile No. 2423 dated 12-3-04 is true and accurate and that all known or suspected hazards have been disclosed. I further certify that there are no hazardous constituents or characteristics except as described herein, and if the waste stream or the process generating the waste changes, I will notify Giant Resource Recovery prior to shipping the waste.

Signature: [signature] Title: MNGR.

Printed/Typed Name: BEN ARMENTI Date: 12/12/05

**Attachment B**
**GRR – Arvonia, Inc.**
**August 9, 2006 EPA §3007 Request**
**Elan Chemical Waste Shipment Information**

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3183957

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. NJD042895680 Manifest Document No. 83957
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 Doremus Avenue
Newark, NJ 07105

A. State Manifest Document Number **NJA 3183957**

B. State Generator's ID-(Gen. Site Address) SAME

4. Generator's Phone ( 973 ) 344-8014

5. Transporter 1 Company Name: Metropolitan Environmental Inc.
6. US EPA ID Number: INT190010397

C. State Trans. ID-NJDEP 50188
Decal No. 086162

7. Transporter 2 Company Name
8. US EPA ID Number

D. Transporter's Phone (804) 798-7165

E. State Trans. ID-NJDEP
Decal No. -

9. Designated Facility Name and Site Address
Giant Resource Recovery Inc.
Rt 1, State Road 652
Arvonia, VA 23004
10. US EPA ID Number: VAD098443443

F. Transporter's Phone ( )

G. State Facility's ID VAD098443443

H. Facility's Phone ( 804 581-3226

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)

| | HM | 11. US DOT Description | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|---|
| a. | X | RQ Waste Flammable Liquids, N.O.S., 3, UN1993, PGII (Methanol, Ethanol) F003,F005,D001 | 001 | TT | 5000 | GL | F003 F005 |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
a. Profile #2423 Mixed Solvents Fragrances L/I
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. S-02
b. T-83
c.
d.

15. Special Handling Instructions and Additional Information
State of Origin - NJ
Emergency Phone 800-424-9300
Emergency Response Guide #128

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI
Signature: Ben Armenti
Month Day Year: 06 26 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RONALD HANKINS
Signature: Ronald Hankins
Month Day Year: 06 26 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space
38,220 P or 4,925 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian
Signature: Marie C. Christian
Month Day Year: 06 28 01

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

1—TSD MAIL TO-TSD'S STATE

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 03957

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMEST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

| | | | | |
|---|---|---|---|---|
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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH. MGR. Date: 6/26/01

(Indisp.frm)

Rev. 8/10/98

## (F001-F005) Spent Solvent Wastes Treatment Standards

..IONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-..ewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | BIODEG. INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WTCA or CHOXD) IS CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California Land Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCBs > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of constituents and/or stabilization to class 2FT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of constituents and/or stabilization to class 2FT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOCs) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3183957

Date: 06/28/2001
Time: 07:45 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.93 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 12,967 | 8,000 | 18,000 | | N/A | >=5,000 BTU/lb | Yes |
| BTU/ Gal | 100,632 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.51% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.10% | 0.00% | 4.00% | 0.0% | 2.5%if>10% | | Yes |
| Moisture Content | 7.16% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 75 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3183957
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 28-Nov-2000
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 06/28/2001 * 07:35 AM
Analysis Date / Time: 06/28/2001 * 07:45 AM

Spg: 0.93
Lbs/gal: 7.76
Sample Wt: 0.9933
Pounds Received:
Gallons Received: 0

Temp 1: 20.28
Temp2: 23.44
Weight1: 10.9291
Weight2: 10.9342
Cl1: 19.10
Cl2: 19.50

BTUs/ Gal: 100,632
BTUs/ LB: 12,967
Ash %: 0.51%
Chlorides %: 0.101%

PCB'S: Non Detect
Temp Rise: 0

| | | |
|---|---|---|
| H2O | 7.16% | *** |
| FLASH | 75 | |
| pH | | |
| F/W | | |
| Solids | | |
| Viscosity | | |
| Physical State | L | |
| No. of Phases | 1 | |
| % Each Phase | 100 | |
| Phase(s) Color | AMBER | |
| Odor | | |
| TANK IN | 9,10,11 | |

**Methods/Number:** Specific Gravity. Std Hydrometer: pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCBs. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: MW

Date: 6-29-01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3184045

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NJD042895680 Manifest No. 84045

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**

4. Generator's Phone ( )

A. State Manifest Document Number
**NJA 3184045**

B. State Generator's ID (Gen. Site Address)
**SAME**

5. Transporter 1 Company Name: **Metropolitan Environmental, Inc.**
6. US EPA ID Number: **INT190010397**

C. State Trans. ID-NJDEP: **50188**
Decal No. - 086163

7. Transporter 2 Company Name
8. US EPA ID Number

D. Transporter's Phone ( 804 ) 798-7165
E. State Trans. ID-NJDEP
Decal No. -
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: **VAD098443443**

G. State Facility's ID: **VAD098443443**
H. Facility's Phone ( 804-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 051000 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

GENERATOR

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300**
**GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI
Signature:
Month Day Year: 07 31 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bryan H Doutt
Signature:
Month Day Year: 07 31 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space
39,780 lb or 5,016 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian
Signature:
Month Day Year: 08 01 01

EPA Form 8700-22 SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

1—TSD MAIL TO-TSD'S STATE

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 84045

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TCC Ignitable Liquids ≥10% TCC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: Title: PURCH. MNGR Date: 7/31/01

(Indec.frm)

## (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | NCD** | | BDOD NCD** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 5.36 mg/l |
| | 2-Nitropropane | | NCD** | | INTOX or CHOXD IS CARBN or NCD** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents are no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

### California Land Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB's > 50 ppm | Incineration |
| _ Halogens > 1000 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Cyanides > 100 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III at total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184045

Date: 08/01/2001
Time: 09:20 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.95 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 14,144 | 8,000 | 18,000 | | N/A | >5,000 BTU/lb | Yes |
| BTU/ Gal | 112,133 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.37% | 0.00% | 10.00% | 0.0% – | 50% | | Yes |
| % Chlorides | 0.02% | 0.00% | 4.00% | 0.0% – | 25%if>10% | | Yes |
| Moisture Content | 4.77% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 74 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184045
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 28-Nov-2000
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 08/01/2001 * 09:10 AM
Analysis Date / Time: 08/01/2001 * 09:20 AM

Spg: 0.95
Lbs/gal: 7.93
Sample Wt: 1.0028

Pounds Received: 39,780
Gallons Received: 5,016 0

Temp 1: 23.68
Temp2: 27.16
Weight1: 11.5408
Weight2: 11.5445
Cl1: 45.90
Cl2: 46.00

BTUs/ Gal: 112,133
BTUs/ LB: 14,144
Ash %: 0.37%
Chlorides %: 0.025%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 4.77% *** |
| FLASH | 74 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 13 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity, Std Hydrometer; pH, EPA SW-846; Moisture, ASTM E-203; Calorimeter, ASTM-D240; Ash, ASTM-D240; Chloride, ASTM D-808,D512; PCBs, EPA 600/4-81-045; Flash Pt., EPA SW-846-1010; Viscometer, ASTM D-2196

Analyst Signature: [signature]

Date: 8-1-01

PRO# 94370

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3184044

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID Number: NJD042895680 — Manifest No.: 84044

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
973-344-8014

4. Generator's Phone ( )

A. State Manifest Document Number: NJA 3184044

B. State Generator's Site ID (Site Address): SAME

5. Transporter 1 Company Name: Metropolitan Environmental, Inc.

6. US EPA ID Number: INT190010397

C. State Trans. ID-NJDEP: 50188

Decal No. -

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone ( 804 ) 798-7165

E. State Trans. ID-NJDEP: 886164

Decal No. -

9. Designated Facility Name and Site Address
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004

10. US EPA ID Number: VAD098443443

F. Transporter's Phone ( )

G. State Facility's ID: VAD098443443

H. Facility's Phone ( 804-581-3226

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)

| | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. | X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 6000 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
PROFILE #2423 MIXED SOLVENTS
FRAGRANCES L/I

K. Handling Codes for Wastes Listed Above
a. S-02 T-83 c.
b. d.

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE – (800) 424-8300

GUIDE BOOK ID 128

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI — Signature: [signature] — Month Day Year: 08 08 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROBERT STAMETZ — Signature: [signature] — Month Day Year: 08 08 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
45,320 Lb. or 5,840 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian — Signature: Marie C Christian — Month Day Year: 08 09 01

EPA Form 8700-22

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 84044

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TCC Ignitable Liquids ≥10% TCC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be tested to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: LAB MGR Date: 08-08-01

(landep.frm)

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | √ | Non-Wastewater Treatment Standard | √ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BDAT, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | INCIN or CHOXN, or CARBN, or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents are no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

## California Land Treatment Standards

INSTRUCTIONS: Place check mark in appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB > 50 ppm | Incineration |
| _ Halogens > 1000 mg/l (liquid waste) | Removal of compounds and/or solidification to class I/II |
| _ Cyanides > 100 mg/l (liquid waste) | Removal of compounds and/or solidification to class I/II |
| _ Waste or total hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 (Appendix III) at total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184044

Date: 08/09/2001
Time: 07:40 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.93 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,057 | 8,000 | 18,000 | | N/A | >>>5,000 BTU/lb | Yes |
| BTU/ Gal | 101,333 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 1.06% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.08% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 5.10% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 74 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184044
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 28-Nov-2000
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 08/09/2001 * 07:30 AM
Analysis Date / Time: 08/09/2001 * 07:40 AM

Spg: 0.93
Lbs/gal: 7.76
Sample Wt: 0.9677
Pounds Received:
Gallons Received: 0

Temp 1: 21.40
Temp2: 24.50
Weight1: 11.5377
Weight2: 11.5480
Cl1: 41.60
Cl2: 41.90

BTUs/ Gal: 101,333
BTUs/ LB: 13,057
Ash %: 1.06%
Chlorides %: 0.078%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 5.10% *** |
| FLASH | 74 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 7&8 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity. Std Hydrometer: pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCB's. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: [signature]
Date: 8/8/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3184040

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID Number: NJD042895080 — Manifest Document No.: 840140
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address:
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
973-344-8014

4. Generator's Phone ( )

A. State Manifest Document Number: NJA 3184040

B. State Generator's ID: SAME (Gen. Site Address)

5. Transporter 1 Company Name: Metropolitan Environmental, Inc.
6. US EPA ID Number: INT190010397
C. State Trans. ID-NJDEP: 50188
Decal No.:

7. Transporter 2 Company Name:
8. US EPA ID Number:
D. Transporter's Phone: 804 798-7165
E. State Trans. ID-NJDEP:
Decal No.:

9. Designated Facility Name and Site Address:
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004
10. US EPA ID Number: VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID: VAD098443443
H. Facility's Phone: 804-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|
| a. X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 5500 | G | F003 F005 |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above
PROFILE #2423 MIXED SOLVENTS
FRAGRANCES L/I

K. Handling Codes for Wastes Listed Above
a. S-02 T-83

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE – (800) 424-8300
GUIDE BOOK ID 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI — Signature: [signature] — Month Day Year: 09 14 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: SIDNEY W. BALLARD — Signature: Sidney W. Ballard — Month Day Year: 09 14 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Month Day Year:

19. Discrepancy Indication Space
39,800 lbs or 5,129 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian — Signature: Marie C Christian — Month Day Year: 09 17 01

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 84040

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TCC Ignitable Liquids ≥10% TCC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: _____ Title: _____ Date: _____

(indsec.frm)

## (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | √ | Non-Wastewater Treatment Standard | √ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | NCI** | | BDOL NCI** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | NCI** | | NTCX or CHOXD, IC CWEN or NCI** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

### California List Treatment Standards

INSTRUCTIONS: Place check mark in appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCBs > 50 ppm | Incineration |
| _ Mercury > 260 mg/l (liquid waste) | Retorting or combustion in a boiler (RFT) |
| _ Thallium > 160 mg/l (liquid waste) | Retorting or combustion in a boiler (RFT) |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III at total concentration > 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184040

Date: 09/17/2001
Time: 08:20 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.93 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,140 | 8,000 | 18,000 | | N/A | >=5,000 BTU/lb | Yes |
| BTU/ Gal | 101,978 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.79% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.15% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 8.14% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 79 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184040
EPA ID#: NJD042395680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 28-Nov-2000
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 09/17/2001 * 08:10 AM
Analysis Date / Time: 09/17/2001 * 08:20 AM

Pounds Received: 39,800
Gallons Received: 5,129 0

Spg: 0.93
Lbs/gal: 7.76
Sample Wt: 1.0019

Temp 1: 21.39
Temp2: 24.62
Weight1: 10.8042
Weight2: 10.8121
Cl1: 5.80
Cl2: 6.40

BTUs/ Gal: 101,978
BTUs/ LB: 13,140
Ash %: 0.79%
Chlorides %: 0.150%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 8.14% |
| FLASH | 79 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | AMBER |
| Odor | |
| TANK IN | 15 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity, Std Hydrometer; pH, EPA SW-846; Moisture, ASTM E-203; Calorimeter, ASTM-0240; Ash, ASTM-0240; Chloride, ASTM D-808,0512; PCB's, EPA 608/4.8 1.0-46; Flash Pt., EPA SW-846, 1010; Viscometer, ASTM D-2196

Analyst Signature: MCC

Date: 9/17/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3184042

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: NJD042895680 84042
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**

4. Generator's Phone ( )

A. State Manifest Document Number: **NJA** 3184042

B. State Generator's ID: **SAME** (or Gen. Site Address)

5. Transporter 1 Company Name: ~~Metropolitan Environmental, Inc.~~
6. US EPA ID Number: ~~INT190010307~~

C. State Trans. ID-NJDEP: 50188
Decal No.: 085337

7. Transporter 2 Company Name: NAPPI TRUCKING
8. US EPA ID Number: NJD000813477

D. Transporter's Phone ( ~~804-780-7165~~

E. State Trans. ID-NJDEP
Decal No.:

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443

F. Transporter's Phone ( 732 ) 566-3000
G. State Facility's ID: VAD098443443
H. Facility's Phone ( 804-581-3226

| | 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a | X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 5500 G | | F003 F005 |
| b | | | | | | |
| c | | | | | | |
| d | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS**
**FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300**
**GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOCELYN KAPP MAUSHIP
Signature: [signature]
Month Day Year: 10 03 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Michael Moran
Signature: [signature]
Month Day Year: 10 03 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

19. Discrepancy Indication Space
37,920 lbs or 5,049 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian
Signature: Marie C. Christian
Month Day Year: 10 04 01

EPA Form 8700-22 SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection, (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 84042

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TCC Ignitable Liquids ≥10% TCC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be tested to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: Environmental Mgr. Date: 10/3/01

(Indicate form)

## (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | √ | Non-Wastewater Treatment Standard | √ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | NCIN** | | BIODEG NCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | NCIN** | | INTOX or CHOXD, IS GRAN or NCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

### California List Treatment Standards

INSTRUCTIONS: Please check box to accurate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCBs > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquid or free hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration > 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184042

Date: 10/04/2001
Time: 10:20 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.90 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 14,355 | 8,000 | 18,000 | | N/A | ---5,000 BTU/lb | Yes |
| BTU/ Gal | 107,817 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 1.01% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.07% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 6.26% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 73 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184042
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 28-Nov-2000
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 10/04/2001 * 10:15 AM
Analysis Date / Time: 10/04/2001 * 10:20 AM

Pounds Received: 37,920
Gallons Received: 5,049 0

Spg: 0.90
Lbs/gal: 7.51
Sample Wt: 1.0238

Temp 1: 25.18
Temp2: 28.50
Weight1: 10.7868
Weight2: 10.7971
Cl1: 36.90
Cl2: 37.20

BTUs/ Gal: 107,817
BTUs/ LB: 14,355
Ash %: 1.01%
Chlorides %: 0.073%

PCB'S: Non Detect
Temp Rise: 0

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

| | | |
|---|---|---|
| H2O | 6.26% | *** |
| FLASH | 73 | |
| pH | | |
| F/W | | |
| Solids | | |
| Viscosity | | |
| Physical State | L | |
| No. of Phases | 1 | |
| % Each Phase | 100 | |
| Phase(s) Color | BROWN | |
| Odor | | |
| TANK IN | | |

Methods/Number: Specific Gravity. Sird Hydrometer: pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCB's. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: [signature]
Date: 10/04/01

## (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | √ | Non-Wastewater Treatment Standard | √ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichlorofluoromethane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichlorofluoromethane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | NCD** | | BDOD, NCD** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | NCD** | | (NTOX or CHOXD) is CARBN or NCD** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

### California Ban Treatment Standards

INSTRUCTIONS: Place check mark in appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCBs > 50 ppm | Incineration |
| _ Halogens > 1000 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Cyanides > 1000 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquids of toxic hazardous waste containing halogenated organic compounds | Incineration |
| _ HOCs as listed in 40 CFR 268.32 (applies if waste concentration ≥ 1000 mg/kg or 1000 mg/l) | |

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 84086

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TCC Ignitable Liquids ≥10% TCC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH. MNGR. Date: 10/22/01

(Indicate/mm)

Rev. 4/10/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3184086

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID Number: NJD042895680 | Manifest Document No.: 84086 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
973-344-8014

4. Generator's Phone ( )

A. State Manifest Document Number: NJA 3184086

B. State Generator's ID (Gen. Site Address): SAME

5. Transporter 1 Company Name: ~~Metropolitan Environmental, Inc.~~ RTE

6. US EPA ID Number: RTE ~~NJT180010097~~

C. State Trans. ID-NJDEP: RTE ~~50180~~

Decal No. -

7. Transporter 2 Company Name: NAPPI TRUCKING CORP

8. US EPA ID Number: NJD000813477

D. Transporter's Phone ( ~~908 708 7166~~

E. State Trans. ID-NJDEP: 010342

Decal No. - 085340

9. Designated Facility Name and Site Address
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004

10. US EPA ID Number: VAD098443443

F. Transporter's Phone ( 732 ) 566-3000

G. State Facility's ID: VAD098443443

H. Facility's Phone ( 804-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 05534 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
PROFILE #2423 MIXED SOLVENTS
FRAGRANCES L/I

K. Handling Codes for Wastes Listed Above
a. S-02 b. c. T-83 d.

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE – (800) 424-9300
GUIDE BOOK ID 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI | Signature: Ben A | Month Day Year: 102201

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR | Signature: Russell T. Emmett Jr | Month Day Year: 102201

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space
43,860 lbs or 5,476 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian | Signature: Marie C Christian | Month Day Year: 10 23 01

EPA Form 8700-22 SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184086

Date: 10/23/2001
Time: 11:20 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.96 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 14,348 | 8,000 | 18,000 | | N/A | >5,000 BTU/lb | Yes |
| BTU/ Gal | 114,948 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.97% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.05% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 7.52% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 73 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3184086
EPA ID# NJD042895680
Waste Codes D001,F003,F005

Annual Profile Signature Date 28-Nov-2000
Analysis Recertification Date 09-Oct-97
Analysis on File YES
Compliance review on File YES
Customer # 400219

Sample Date/time 10/23/2001 * 11:10 AM
Analysis Date / Time 10/23/2001 * 11:20 AM

Pounds Received 4 386 0
Gallons Received 6 476 0

Spg 0.96
Lbs/gal 8.01
Sample Wt 0.9626

Temp 1 24.06
Temp2 27.18
Weight1 11.4870
Weight2 11.4963
Cl1 11.10
Cl2 11.30

BTUs/ Gal 114,948
BTUs/ LB 14,348
Ash % 0.97%
Chlorides % 0.052%

PCB'S: Non Detect
Temp Rise 0

| | |
|---|---|
| H2O | 7.52% |
| FLASH | 73 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 13 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity, Bird Hydrometer: pH, EPA SW-846: Moisture, ASTM E-203: Chlorimeter, ASTM-D240: Ash, ASTM-D240: Chloride, ASTM D-808.0512: PCB's, EPA 600/4-81-045: Flash Pt., EPA SW-846-1010: Viscometer, ASTM D-2196

Analyst Signature: [illegible]
Date: 10/23/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292324

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: NJD042895680 — Manifest Document No.: 92324
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number: **NJA** 3292324
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking** CORP
6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: 010342
Decal No. - RR 16499 085 340
D. Transporter's Phone ( ) 732-566-3000

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Trans. ID-NJDEP
Decal No. -
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443
G. State Facility's ID: VAD098443443
H. Facility's Phone ( ) 804-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 05500 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300** **GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI — Signature: [signature] — Month Day Year: 1 1 1 2 0 1

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR — Signature: Russell T. Emmett Jr — Month Day Year: 1 1 1 2 0 1

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
43,020 lbs or 5,371 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian — Signature: Marie C Christian — Month Day Year: 1 1 13 01

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 92324

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: MNGR Date: 11/12/01

(Indlsc.frm)

Rev. 4/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIOD, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) fb CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

## California Ban Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to class PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to class PFT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III at total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3202324

Date: 11/13/2001
Time: 08:40 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.96 | 0.80 | 1.00 | 0.00 + | 0.20 | | Yes |
| BTU/lb | 12,580 | 8,000 | 18,000 | | N/A | >5,000 is fuels | Yes |
| BTU/ Gal | 100,831 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 1.98% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.03% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 12.57% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 75 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | + | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3202324
EPA ID#: NJD042805680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 28-Nov-2000
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 11/13/2001 06:30 AM
Analysis Date / Time: 11/13/2001 08:40 AM

Pounds Received: 43,020
Gallons Received: 2,371 0

Spg: 0.96
Lbs/gal: 8.01
Sample Wt: 0.0002

| | | | | | |
|---|---|---|---|---|---|
| Temp 1 | 22.51 | Weight1 | 10.7700 | CO | 39.80 |
| Temp2 | 25.24 | Weight2 | 10.7800 | CO2 | 30.00 |
| BTUs/ Gal | 100,831 | | | | |
| BTUs/ LB | 12,580 | Ash % | 1.98% | Chlorides % | 0.026% |
| PCB'S: | Non Detect | | | | |
| Temp Rise | 0 | | | | |

| | |
|---|---|
| H2O | 12.57% |
| FLASH | 75 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 148 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity, Std Hydrometer; pH, EPA SW-846; Moisture, ASTM E-203; Calorimeter, ASTM-D240; Ash, ASTM-D240; Chloride, ASTM D-808-0612; PCBs, EPA 8081A,8082; Flash Pt., EPA SW-846, 1010; Viscosity, ASTM D-2196

Analyst Signature: Mcc

Date 11/13/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292326

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. NJD042895680 Manifest No. 92326
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number **NJA 3292326**
B. State Generator's ID (Gen. Site Address) **SAME**

5. Transporter 1 Company Name **Nappi Trucking** CORP
6. US EPA ID Number **NJD000813477**
C. State Trans. ID-NJDEP 010342 RT215198
Decal No. - 085347
D. Transporter's Phone ( **732-566-3000**

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Trans. ID-NJDEP
Decal No. -
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number **VAD098443443**
G. State Facility's ID **VAD098443443**
H. Facility's Phone ( **804-581-3226**

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 05223 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

GENERATOR

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS**
**FRAGRANCES L/I**
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300** **GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOCELYN MANSHIP Signature: Jocelyn Manship Month Day Year: 11 28 01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR Signature: Russell T. Emmett Jr Month Day Year: 11 28 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Month Day Year:

FACILITY

19. Discrepancy Indication Space
41,200 lbs or 5,195 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: On behalf of GRR/Marie C. Christian Signature: Marie C Christian Month Day Year: 11 29 01

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 90326

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set form in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an anarysis of the waste.

Signature: [signature] Title: Environmental Mgr. Date: 11/28/01

(Indisc.frm)

Rev. 4/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | RECOVERY, INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WETOX or CHOXD) fb CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California Land Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile # P-2433 — Date: 11/29/2001
Generator: Elan chemical Co. — Time: 09:40 AM
Manifest # NJA3292326

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.95 | 0.80 | 1.00 | 0.09 | 0.20 | | Yes |
| BTU/lb | 10,897 | 0,000 | 18,000 | | N/A | | Yes |
| BTU/ Gal | 86,385 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 5.37% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.08% | 0.00% | 4.00% | 0.0% | 25%if<10% | | Yes |
| Moisture Content | 2.82% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 76 | 1 | 100 | 0 | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | | | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile # P-2433 — Actual Profile Signature Date: 29-Nov-2001
Generator: Elan chemical Co. — Analytical Revalidation Date: 09-Oct-97
Manifest # NJA3292326 — Analysis on File: YES
EPA ID# NJD042225590 — Compliance Notice on File: YES
Waste Codes: D001,F003,F005 — Customer #: 40029

| Sample Date/Time | 11/29/2001 | 09:30 AM | Analysis Date / Time | 11/29/2001 | 09:40 AM |
|---|---|---|---|---|---|

Pounds Received: 41,200
Gallons Received: 5195 d

| | | | | | |
|---|---|---|---|---|---|
| Spg | 0.95 | Sample Wt | 0.0864 | | |
| lb/gal | 7.93 | | | | |
| Temp 1 | 23.56 | Weight1 | 8.3243 | CD | 17.30 |
| Temp2 | 28.02 | Weight2 | 8.2780 | CD2 | 17.50 |
| BTUs/ Gal | 86,385 | | | | |
| BTUs/ LB | 10,897 | Ash % | 5.37% | Chlorides % | 0.078% |
| PCB'S: | Non Detect | | | | |
| Temp Rise | 0 | | | | |

| | |
|---|---|
| H2O | 2.82% |
| FLASH | 76 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 2 |

Does Generator Signed Profile Indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Method/Number: Specific Gravity: Pint Hydrometer; pH: EPA SW-846; Moisture: ASTM D-420; Calorimeter: ASTM-0240; Ash: ASTM-0240
Chloride: ASTM D268 D512; PCBs: EPA 8082/4.8.1/JAK; Flash Pt: EPA SW846-1010; Viscometer: ASTM D-2196

Analyst Signature: Mcc — Date: 11/29/01

40,840 lbs. or
5,318 gals.

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292325

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. NJD042096000 — Manifest Document No. 92328
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number **NJA 3292325**
B. State Generator's ID-(Gen. Site Address) **SAME**

5. Transporter 1 Company Name **Nappi Trucking** CORP
6. US EPA ID Number NJD000813477
C. State Trans. ID-NJDEP 010342
Decal No. - RTE ~~15406~~ 088579
7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone ( ) 732-566-3000
E. State Trans. ID-NJDEP
Decal No. -

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID VAD098443443
H. Facility's Phone ( ) 804-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 05266 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS**
**FRAGRANCES L/I**
b. c. d.

K. Handling Codes for Wastes Listed Above
T-83 S-02 Lightweight Aggregate Rotary Kiln
b. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300**
**GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI — Signature: [signature] — Month Day Year: 12 1 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR — Signature: Russell T. Emmett Jr — Month Day Year: 12 1 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On Behalf of GRR/Yvonne GB Harris — Signature: Yvonne GB Harris — Month Day Year: 12 17 01

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 92325

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH MNGR Date: 12/14/01

(Indisc.frm)

Rev. 8/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | BIOLOGICAL INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WTOX or CHOXD) & CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California Ban Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Mercury > 1.04 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PST |
| _ Thallium > 1.00 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PST |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292325

Date: 12/17/2001
Time: 07:50 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.92 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,969 | 8,000 | 18,000 | | N/A | >>>5,000 BTU/lb | Yes |
| BTU/ Gal | 107,244 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.28% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.02% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 7.98% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 63 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292325
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 12/17/2001 * 07:45 AM
Analysis Date / Time: 12/17/2001 * 07:50 AM

Pounds Received: 40,840
Gallons Received: 5318 0

Spg: 0.92
Lbs/gal: 7.68
Sample Wt: 1.0046

Temp 1: 23.25
Temp2: 26.42
Weight1: 10.7256
Weight2: 10.7284
Cl1: 21.00
Cl2: 21.10

BTUs/ Gal: 107,244
BTUs/ LB: 13,969
Ash %: 0.28%
Chlorides %: 0.025%

PCB'S: Non Detect
Temp Rise: 0

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

| | |
|---|---|
| H2O | 7.98% *** |
| FLASH | 63 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | AMBER |
| Odor | |
| TANK IN | 14 |

Methods/Number: Specific Gravity. Std Hydrometer: pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.0512: PCBs. EPA 600/4-81-045; Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: MC

Date: 12/17/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292275

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: NJD042895680 — Manifest Document No.: 92275
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number: **NJA 3292275**
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking** CORP.
6. US EPA ID Number: **NJD000813477**
C. State Trans. ID-NJDEP: 10342
Decal No.: GB ~~15409~~ 85347
7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone ( ): **732-566-3000**
E. State Trans. ID-NJDEP
Decal No.

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: **VAD098443443**
F. Transporter's Phone ( )
G. State Facility's ID: **VAD098443443**
H. Facility's Phone ( ): **804-581-3226**

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 5123- | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**
b. c. d.

K. Handling Codes for Wastes Listed Above
T-83 S-02 Lightweight Aggregate Rotary Kiln
b. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300** **GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ALMENTI — Signature: [signature] — Month Day Year: 12 27 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GEORGE BRADBURY JR — Signature: [signature] — Month Day Year: 12 27 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Fred G Hammer — Signature: [signature] — Month Day Year: 12 28 01

19. Discrepancy Indication Space
5024 YSBA 122801
38,600 lbs. or ~~5,066~~ gals. received

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On Behalf of GRR/Yvonne GB Harris — Signature: [signature] — Month Day Year: 12 28 01

EPA Form 8700-22 — SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

## GENERAL INFORMATION

The Hazardous Waste manifest is designed to track waste from the point of generation to final disposal, cradle to grave. In order to accomplish this goal, it is essential that all items on the manifest be completed correctly. Incomplete, incorrect [illegible] are violations of the law and could make you subject to civil or criminal liabilities as specified in the New Jersey Hazardous Waste Regulations.

### INSTRUCTIONS (IMPORTANT) READ ALL INSTRUCTIONS BEFORE COMPLETING

State & Federal regulations require Generators, Transporters, and Treatment, Storage & Disposal Facilities (TSDFs) to use this form and if necessary, [illegible] for both inter and intrastate shipments. Continuation sheets may be purchased [illegible] or photocopied to provide copies as described below.

The New Jersey manifest contains 8 copies. ALL COPIES MUST BE LEGIBLE. This form is designed for use on a 12 pitch (elite) typewriter; a firm ball point pen may also be used [illegible]. The 8 copies must be filed with the appropriate party as they are completed. COPY DISTRIBUTION is as follows:

ORIGINAL: DESTINATION STATE-TSDF must mail original to the state regulatory agency where the facility is located.

COPY 2: GENERATOR STATE- The TSDF mails this copy back to the state regulatory agency where the waste was generated.

COPY 3: GENERATOR COPY- The TSDF mails this copy back to the generator of the waste.

COPY 4: TSDF COPY-TSDF keeps this copy for his records.

COPY 5: TRANSPORTER COPY-The transporter keeps this copy for his records. NOTE: If a continuing transporter is used the generator is responsible for supplying him with a legible photocopy which must contain required signatures.

COPY 6: DESTINATION STATE-The generator mails this copy to the state regulatory agency where the designated facility (TSDF) is located.

COPY 7: GENERATOR STATE-The generator mails this copy to the state regulatory agency where the waste was generated.

COPY 8: GENERATOR COPY- The generator keeps this copy for his records.

ALL 8 COPIES MUST BE LEGIBLE

### MANIFEST FORM ACQUISITION

1. If the destination (consignment) state supplies [illegible] the generator is obligated to obtain the manifest from that state.
2. If the destination state does not supply [illegible] the generator is obligated to obtain the manifest form from the generator state.
3. If neither the generator state or the consignment state supplies the manifest, then the generator may obtain the manifest from any source.

### GENERATOR SECTION

Item 1: GENERATOR'S EPA ID NO. [illegible] identification number. [illegible]

Item 2: PAGE 1 OF [illegible] Enter the total number of pages [illegible] page, plus the number of continuation sheets [illegible]

Item 3: GENERATOR'S NAME & MAILING ADDRESS [illegible] address of the generator. [illegible] manifest forms.

Item 4: GENERATOR'S PHONE NUMBER [illegible] authorized agent of the generator [illegible]

Item 5: TRANSPORTER 1 COMPANY NAME [illegible] first transporter who will transport the waste.

Item 6: US EPA ID NUMBER- Enter the [illegible] Item 5.

Item 7: TRANSPORTER 2 COMPANY NAME-If applicable, enter the company name [illegible] EPA) of the second transporter who will transport the waste. If more than two transporters will be used, use a continuation sheet [illegible] transporting the waste.

Item 8: US EPA ID NUMBER-If a second transporter is used, enter the EPA identification number of the second transporter identified in item 7.

Item 9: DESIGNATED FACILITY NAME & SITE ADDRESS- Enter the company name and site address [illegible]

Item 10: EPA ID NUMBER- Enter the EPA [illegible] number of the designated TSDF for waste [illegible] facility listed in item 9.

Item 11: USDOT DESCRIPTION-Enter the correct USDOT shipping name, hazard class or division, the identification number and the packing group (49 CFR 172.202). [illegible] part of the USDOT shipping name [illegible] 172.203. Enter additional shipping description information as required by 49 CFR 172 subpart C. If more than 4 wastes are being shipped, a second manifest or continuation sheets should be used. For information on USDOT waste descriptions, call the USDOT regional office.

Item 12: CONTAINERS (NO. & TYPE)-Enter the number of containers for each waste and the appropriate abbreviations from Table 1 (below) for the type of container used.

### TABLE 1 CONTAINER TYPES

- DM-Metal drums, barrels, kegs
- DW-Wooden drums, barrels, kegs
- DF-Fiberboard or plastic drums, barrels, kegs
- TP-Tanks portable
- TT-Cargo tanks (Tank trucks)
- TC-Tank cars
- DT-Dump truck
- CY-Cylinders
- CM-Metal boxes, cartons, cases (including roll-offs)
- CW-Wooden boxes, cartons, cases
- CF-[illegible] boxes, cartons, cases
- BA-Burlap, cloth, paper or plastic bags

Item 13: TOTAL QUANTITY- Enter the total quantity [illegible]

Item 14: UNIT (WT/VOL)- Enter the appropriate abbreviation [illegible] Table II (below) for the unit of measure [illegible]

### TABLE II UNITS OF MEASURE

[illegible]

Item 15: SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION - Use this space [illegible] storage, disposal [illegible] INTERNATIONAL SHIPMENTS [illegible] and USDOT hazardous materials.

Item 16: GENERATOR'S CERTIFICATION [illegible]

Item A: STATE MANIFEST DOCUMENT NUMBER - Number preprinted by New Jersey except on the continuation sheets. Enter this number on each continuation sheet attached to a manifest.

Item B: STATE GEN ID [illegible] of the waste generation site. If the mailing address and the site address are the same, enter "same".

Item C: STATE TRAN #1 ID - Enter the New Jersey state permit number. This must include both the transporters permit number and the decal number [illegible] hazardous waste transport unit or hazardous waste vehicle which contains the [illegible]

Item D: TRANSPORTER'S PHONE - Enter a telephone number [illegible] where an authorized agent of the transporter can be reached.

Item E: STATE TRAN #2 ID - If applicable, enter the New Jersey State permit number of the waste carrying portion of the second vehicle.

Item F: TRANSPORTER'S PHONE - If applicable, enter the phone number [illegible]

Item G: [illegible]

Item H: [illegible]

Item I: [illegible]

Item J: [illegible]

### TRANSPORTER SECTION

It is a violation [illegible] a generator who fails to properly complete the [illegible] fails to obtain the date and handwritten [illegible]

Item 17: TRANSPORTER 1 ACKNOWLEDGEMENT [illegible] the person accepting the [illegible] the first transporter [illegible] acknowledge acceptance of the [illegible]

Item 18: [illegible]

NOTE: [illegible] NEW JERSEY MUST HAVE A NEW JERSEY HAZARDOUS WASTE TRANSPORTER'S PERMIT [illegible]

### DESIGNATED FACILITY SECTION

Item 19: DISCREPANCY INDICATION SPACE [illegible] of the designated facility [illegible]

Item 20: FACILITY OWNER OR OPERATOR CERTIFICATION [illegible] the name of the person receiving [illegible] This person must [illegible] signing and entering the date [illegible]

Item K: HANDLING CODES FOR [illegible] the designated facility for each waste. Only the following handling codes may be used: Storage: S01 (Container), S02 (Tank), [illegible] S05 (Other-Specify); Treatment: [illegible] T04 (Other-Specify); Disposal: [illegible] Injection Well), D80 (Landfill), D81 (Land Application), D82 (Ocean [illegible])

*NOTE: For interstate shipments you may be required to comply with the manifesting requirements of [illegible] New Jersey [illegible] be filled in except for Item "G".

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and [illegible] for reviewing instructions, gathering data, and [illegible] regarding the burden [illegible] Policy Branch, [illegible] Washington, DC 20460 and to the Office of [illegible] Washington, DC 20503.

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 92275

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

| | | | | |
|---|---|---|---|---|
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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH. MNGR Date: 12/27/01

(Indisp.frm)

Rev. 8/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIOD, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) to CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California Ban Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: 92275

Date: 12/28/01
Time: 12:00 PM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.92 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,913 | 8,000 | 18,000 | | N/A | >5,000 BTU/lb | Yes |
| BTU/ Gal | 106,814 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.45% | 0.00% | 10.00% | 0.0% | 50% | | Yes |
| % Chlorides | 0.03% | 0.00% | 4.00% | 0.0% | 25%if>10% | | Yes |
| Moisture Content | 7.62% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 74 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: 92275
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 12/28/01 " 11:50 AM
Analysis Date / Time: 12/28/01 " 12:00 PM

Pounds Received: 38,600
Gallons Received: 5,026 0

Spg: 0.92
Lbs/gal: 7.68
Sample Wt: 0.9991

Temp 1: 26.20
Temp2: 29.34
Weight1: 8.2468
Weight2: 8.2513
Cl1: 12.40
Cl2: 12.50

BTUs/ Gal: 106,814
BTUs/ LB: 13,913
Ash %: 0.45%
Chlorides %: 0.025%

PCB'S: Non Detect
Temp Rise: 0

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

| | |
|---|---|
| H2O | 7.62% |
| FLASH | 74 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | RED |
| Odor | |
| TANK IN | 9 |

**Methods/Number:** Specific Gravity. Std Hydrometer. pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.0512: PCB's. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: mcc
Date: 12/28/01

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292276

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No: NJD042895680
Manifest No.: 92276
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number: **NJA 3292276**
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking**
6. US EPA ID Number: **NJD000813477**
7. Transporter 2 Company Name
8. US EPA ID Number

C. State Trans. ID-NJDEP: **15499**
Decal No.: **085374**
D. Transporter's Phone ( ): **732-566-3000**
E. State Trans. ID-NJDEP
Decal No.
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: **VAD098443443**

G. State Facility's ID: **VAD098443443**
H. Facility's Phone ( ): **804-581-3226**

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 5800 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS**
**FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S002 b. T-83 c. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300**
**GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI
Signature:
Month Day Year: 01 24 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: D.K. BURRIS
Signature: D.K. B
Month Day Year: 01 24 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space
45,200 lbs or 5,765 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian
Signature: Marie C Christian
Month Day Year: 01 25 02

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

GENERATOR
TRANSPORTER
FACILITY

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

1—TSD MAIL TO-TSD'S STATE

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | BIOD, INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WTOX or CHOXD) fb CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only restricted constituent present in the waste

California List Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III w/ total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 92276

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: Pur Ch. Mgr Date: 1/26/02

(Indisp.frm)

Rev. 3/10/98

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292276

Date: 01/25/2002
Time: 08:10 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.94 | 0.80 | 1.00 | 0.00 + | 0.20 | | Yes |
| BTU/lb | 14,340 | 8,000 | 18,000 | | N/A | ***5,000 BTU/lb | Yes |
| BTU/ Gal | 112,485 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.61% | 0.00% | 10.00% | 0.0% – | 50% | | Yes |
| % Chlorides | 0.05% | 0.00% | 4.00% | 0.0% – | 25%if>10% | | Yes |
| Moisture Content | 5.03% | 0.0% | 30.0% | | N/A | | Yes |
| Flash Point | 70 | 1 | 100 | 0 + | 50 | | Yes |
| Viscosity | Not Tested | 1 | 1000 | | | | Yes |
| pH | Non Aqueous | 5.0 | 9.0 | + | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292276
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 01/25/2002 * 08:00 AM
Analysis Date / Time: 01/25/2002 * 08:10 AM

Spg: 0.94
Lbs/gal: 7.84
Sample Wt: 1.0064
Pounds Received:
Gallons Received: 0

Temp 1: 21.01
Temp2: 24.27
Weight1: 8.1082
Weight2: 8.1143
Cl1: 34.00
Cl2: 34.20

BTUs/ Gal: 112,485
BTUs/ LB: 14,340
Ash %: 0.61%
Chlorides %: 0.050%

PCB'S: Non Detect
Temp Rise: 0

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

| | |
|---|---|
| H2O | 5.03% *** |
| FLASH | 70 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | AMBER |
| Odor | |
| TANK IN | 13 |

**Methods/Number:** Specific Gravity. Std Hydrometer. pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCBs. EPA 600/4-81.045: Flash Pt.. EPA SW-846.1010: Viscometer. ASTM D-2196

Analyst Signature: MC

Date: 01/25/02

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292277

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJD042895680 | Manifest Document No.: 92277 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
973-344-8014
4. Generator's Phone ( )

A. State Manifest Document Number: NJA 3292277
B. State Generator's ID-(Gen. Site Address): SAME

5. Transporter 1 Company Name: Nappi Trucking ~~CORP~~ CORP. | 6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: 10342
Decal No.: 15409 8 079579
D. Transporter's Phone ( ): 732-566-3000

7. Transporter 2 Company Name | 8. US EPA ID Number
E. State Trans. ID-NJDEP
Decal No.:
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004
10. US EPA ID Number: VAD098443443
G. State Facility's ID: VAD098443443
H. Facility's Phone ( ): (434) 804-581-3226

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)

| | HM | 11. US DOT Description | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|---|
| a. | X | RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | X5068 | G | F003 F005 |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
a. PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE – (800) 424-8300
GUIDE BOOK ID 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI | Signature: Ben A | Month Day Year: 02 26 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOSEPH SCIAME | Signature: Joseph Sciame | Month Day Year: 02 26 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space
40,920 lbs or 5,058 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian | Signature: Marie C Christian | Month Day Year: 02 2 7 02

EPA Form 8700-22 SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 92277

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [illegible]

Title: PURCH. MNGR.

Date: 2/26/02

(Indisp.frm)

Rev. 4/10/98

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | BIOLOGICAL INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WETOX or CHOXD) fb CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

## California Land Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292277

Date: 02/27/2002
Time: 09:35 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.97 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 11,546 | 8,000 | 18,000 | | N/A | >5,000 BTU/lb | Yes |
| BTU/ Gal | 93,464 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 1.80% | | | | N/A | | N/A |
| % Chlorides | 0.03% | | | | N/A | | N/A |
| Moisture Content | 19.50% | | | | N/A | | N/A |
| Flash Point | 62 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292277
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 02/27/2002 * 09:25 AM
Analysis Date / Time: 02/27/2002 * 09:35 AM

Pounds Received: 46,920
Gallons Received: 5058 0

Spg: 0.97
Lbs/gal: 8.09
Sample Wt: 0.9930

Temp 1: 25.16
Temp2: 27.75
Weight1: 11.3700
Weight2: 11.3879
Cl1: 22.80
Cl2: 22.90

BTUs/ Gal: 93,464
BTUs/ LB: 11,546
Ash %: 1.80%
Chlorides %: 0.025%

PCB'S: Non Detect
Temp Rise: 0

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

| | |
|---|---|
| H2O | 19.50% |
| FLASH | 62 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | AMBER |
| Odor | |
| TANK IN | 1 |

Methods/Number: Specific Gravity, Std Hydrometer; pH, EPA SW-846; Moisture, ASTM E-203; Calorimeter, ASTM-D240; Ash, ASTM-D240; Chloride, ASTM D-808,D512; PCBs, EPA 600/4-81-045; Flash Pt, EPA SW-846-1010; Viscometer, ASTM D-2196

Analyst Signature: MC

Date: 02/27/02

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292278

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. NJD042895680 Manifest Document No. 92278
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number **NJA 3292278**
B. State Generator's ID-(Gen. Site Address) **SAME**

5. Transporter 1 Company Name: **Nappi Trucking**
6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: 15499
Decal No.: 85580
7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone ( ) 732-566-3000
E. State Trans. ID-NJDEP
Decal No.

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID VAD098443443
H. Facility's Phone (434) 801-581-3226

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)

| | HM | 11. US DOT Description | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|---|
| a. | X | RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 5800 | G | F003 F005 |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S-02 b. T-83 c. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300** **GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI Signature: Ben A Month Day Year: 03 05 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: D.R. Burns Signature: D.R. B Month Day Year: 03 05 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space
42,900 lbs or 5,410 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian Signature: Marie C. Christian Month Day Year: 03 06 02

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 92278

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH. MNGR Date: 3/5/02

(Indisc.frm)

Rev. 8/10/98

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIODG, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) fb CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California List Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III at total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292278

Date: 03/06/2002
Time: 09:30 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.99 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,058 | 8,000 | 18,000 | | N/A | >5,000 BTU/lb | Yes |
| BTU/ Gal | 107,882 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 1.65% | | | | N/A | | N/A |
| % Chlorides | 0.05% | | | | N/A | | N/A |
| Moisture Content | 8.83% | | | | N/A | | N/A |
| Flash Point | 74 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292278
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 03/06/2002 * 09:15 AM
Analysis Date / Time: 03/06/2002 * 09:30 AM

Pounds Received: 42,900
Gallons Received: 5410 0

Spg: 0.99
Lbs/gal: 8.26
Sample Wt: 0.9899

Temp 1: 26.60
Temp2: 29.52
Weight1: 10.5938
Weight2: 10.6101
Cl1: 30.80
Cl2: 31.00

BTUs/ Gal: 107,882
BTUs/ LB: 13,058
Ash %: 1.65%
Chlorides %: 0.051%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 8.83% *** |
| FLASH | 74 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 7 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity. Std Hydrometer: pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCBs. EPA 600/4-81-046: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: [illegible]
Date: 03/06/02

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292279

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. NJD042895680 Manifest No. 92279
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number **NJA 3292279**
B. State Generator's ID-(Gen. Site Address) **SAME**

5. Transporter 1 Company Name **Nappi Trucking**
6. US EPA ID Number NJD000813477
7. Transporter 2 Company Name
8. US EPA ID Number

C. State Trans. ID-NJDEP 15499
Decal No. - 085372
D. Transporter's Phone ( ) 732-566-3000
E. State Trans. ID-NJDEP
Decal No. -
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number VAD098443443

G. State Facility's ID VAD098443443
H. Facility's Phone ( 434 ) 804-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 5000 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**
b. c. d.

K. Handling Codes for Wastes Listed Above
a. S-02 T-83 b. c. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300** **GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI Signature: Month Day Year 03 25 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: D.K. Chancellor Signature: D K Chancellor Month Day Year 03 25 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space
37,640 lbs or 4,601 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian Signature: Marie C Christian Month Day Year 03 26 02

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 92279

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH Date: 3/25/02

(Indisp.frm)

Rev. 8/10/98

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.8 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIOD, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) is CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

## California List Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III at total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292279

Date: 03/26/2002
Time: 08:40 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.98 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 11,830 | 8,000 | 18,000 | | N/A | >=5,000 BTU/lb | Yes |
| BTU/ Gal | 96,744 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.81% | | | -- | N/A | | N/A |
| % Chlorides | 0.08% | | | -- | N/A | | N/A |
| Moisture Content | 12.60% | | | | N/A | | N/A |
| Flash Point | 72 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292279
EPA ID# NJD042895680
Waste Codes D001,F003,F005

Annual Profile Signature Date 29-Nov-2001
Analysis Recertification Date 09-Oct-97
Analysis on File YES
Compliance review on File YES
Customer # 400219

Sample Date/time 03/26/2002 * 08:35 AM
Analysis Date / Time 03/26/2002 * 08:40 AM

Pounds Received 37640
Gallons Received 4601 0

Spg 0.98
Lbs/gal 8.18
Sample Wt 0.9767

Temp 1 24.03
Temp2 26.64
Weight1 11.4164
Weight2 11.4243
Cl1 2.80
Cl2 3.10

BTUs/ Gal 96,744
BTUs/ LB 11,830
Ash % 0.81%
Chlorides % 0.077%

PCB'S: Non Detect
Temp Rise 0

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

| | |
|---|---|
| H2O | 12.60% *** |
| FLASH | 72 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 13 |

Methods/Number: Specific Gravity, Std Hydrometer; pH, EPA SW-846; Moisture, ASTM E-203; Chlorimeter, ASTM-D240; Ash, ASTM-D240; Chloride, ASTM D-808,0512; PCBs, EPA 600/4-81-045; Flash Pt., EPA SW-846-1010; Viscometer, ASTM D-2196

Analyst Signature [signature] Date 03/26/02

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

3292280

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: NJD042895680 | Manifest Document No.: 92280 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number: **NJA** 3292280
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking** | 6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: 10312 WB ~~15409~~ | Decal No.: 085372
7. Transporter 2 Company Name | 8. US EPA ID Number
D. Transporter's Phone ( ) 732-566-3000
E. State Trans. ID-NJDEP | Decal No.

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID: VAD098443443
H. Facility's Phone ( ) 804-581-3226

| | 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. | X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 5000 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**
b. c. d.

K. Handling Codes for Wastes Listed Above
T-83 S-02 Lightweight Aggregate Rotary Kiln
b. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300** **GUIDE BOOK ID 128**

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOCELYN K. MANSHIP | Signature | Month Day Year: 04 09 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: William Beall | Signature | Month Day Year: 04 09 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space
37,520 lbs. or 4,835 gals. received

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: On Behalf of GRR/Yvonne GB Harris | Signature | Month Day Year: 04 10 02

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 92280

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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|---|---|---|---|---|
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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: Environmental Mgr. Date: 04/09/02

(Indlsc.frm)

Rev. 4/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | ECOG, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) IS CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California List Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292280

Date: 04/10/2002
Time: 11:25 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.93 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,514 | 8,000 | 18,000 | | N/A | >=5,000 BTU/lb | Yes |
| BTU/ Gal | 104,881 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.60% | | | | N/A | | N/A |
| % Chlorides | 0.02% | | | | N/A | | N/A |
| Moisture Content | 11.30% | | | | N/A | | N/A |
| Flash Point | 74 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | <50 | | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA3292280
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 04/10/2002 * 11:20 AM
Analysis Date / Time: 04/10/2002 * 11:25 AM

Spg: 0.93
Lbs/gal: 7.76
Sample Wt: 1.0188
Pounds Received:
Gallons Received: 0

Temp 1: 26.38
Temp2: 29.48
Weight1: 11.4707
Weight2: 11.4768
Cl1: 33.90
Cl2: 34.00

BTUs/ Gal: 104,881
BTUs/ LB: 13,514
Ash %: 0.60%
Chlorides %: 0.025%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 11.30% |
| FLASH | 74 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | brown |
| Odor | |
| TANK IN | |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity, Std Hydrometer; pH, EPA SW-846; Moisture, ASTM E-203; Calorimeter, ASTM-D240; Ash, ASTM-D240; Chloride, ASTM D-808.0512; PCBs, EPA 600/4-81-046; Flash Pt., EPA SW-846-1010; Viscometer, ASTM D-2196

Analysis Signature: _____ Date: _____

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

2888030

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039. Expires 9-30-97

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No: NJD042895680 — Manifest Document No.: 88030 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
973-344-8014
4. Generator's Phone ( )

A. State Manifest Document Number: NJA 2888030
B. State Generator's ID-(Gen. Site Address): SAME
C. State Trans. ID-NJDEP: RTE 010342
Decal No.: RTE 088579
D. Transporter's Phone ( ): 732-566-3000
E. State Trans. ID-NJDEP:
Decal No.:
F. Transporter's Phone ( )
G. State Facility's ID: VAD098443443
H. Facility's Phone ( ): 434-581-3226

5. Transporter 1 Company Name: Nappi Trucking CDRP
6. US EPA ID Number: NJD000813477
7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004
10. US EPA ID Number: VAD098443443

| | 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. | X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 05423 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
PROFILE #2423 MIXED SOLVENTS
FRAGRANCES L/I

K. Handling Codes for Wastes Listed Above
a. S-02 T-83

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE – (800) 424-9300
GUIDE BOOK ID 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI — Signature: [signature] — Month Day Year: 042902

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR — Signature: Russell T. Emmett Jr — Month Day Year: 042902

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Month Day Year:

19. Discrepancy Indication Space
43,340 lbs or 5,465 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian — Signature: Marie C. Christian — Month Day Year: 0 4 30 02

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

1—TSD MAIL TO-TSD'S STATE

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 98030

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: MNGR Date: 4/29/02

(Indisc.frm)

Rev. 8/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIOD, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) to CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

## California Unit Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888030

Date: 04/30/2002
Time: 08:35 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.95 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 13,785 | 8,000 | 18,000 | | N/A | ---5,000 BTU/lb | Yes |
| BTU/ Gal | 109,288 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.77% | | | --- | N/A | | N/A |
| % Chlorides | 0.08% | | | --- | N/A | | N/A |
| Moisture Content | 3.95% | | | | N/A | | N/A |
| Flash Point | 68 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888030
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Rectification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 04/30/2002 * 08:15 AM
Analysis Date / Time: 04/30/2002 * 08:35 AM

Spg: 0.95
Lbs/gal: 7.93
Sample Wt: 0.9923
Pounds Received
Gallons Received: 0

Temp 1: 23.92
Temp2: 27.00
Weight1: 11.3369
Weight2: 11.3445
Cl1: 27.20
Cl2: 27.50

BTUs/ Gal: 109,288
BTUs/ LB: 13,785
Ash %: 0.77%
Chlorides %: 0.076%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 3.95% |
| FLASH | 68 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | |
| No. of Phases | L |
| % Each Phase | 1 |
| Phase(s) Color | 100 |
| Odor | |
| TANK IN | |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Method/Number: Specific Gravity. Bird Hydrometer. pH. EPA SW-846: Moisture. ASTM E-203: Chlorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCBs. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature

Form 14

2 8 8 8 0 2 7

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 9-30-97

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: NJD042895680 — Manifest Document No.: 88027
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number: **NJA 2888027**
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking** — 6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: Decal No.- **15499**
7. Transporter 2 Company Name — 8. US EPA ID Number
D. Transporter's Phone ( ): **732-566-3000**
E. State Trans. ID-NJDEP: Decal No.- **085344**

9. Designated Facility Name and Site Address: **GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID: **VAD098443443**
H. Facility's Phone ( ): **434-581-3226**

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|
| a. X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 5100 | G | F003 F005 |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS**
**FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above: a. S-02 T-83 b. c. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE - (800) 424-9300** **GUIDE BOOK ID 128**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOCELYN MANSHIP — Signature: Jocelyn Manship — Month Day Year: 052302

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Eugene Tylm — Signature: Eugene Tylm — Month Day Year: 052302

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
40,443 lbs or 5,100 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian — Signature: Marie C. Christian — Month Day Year: 05 28 02

Form 8700-22 (Rev. 9-94) Previous editions are obsolete. SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 88027

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: ENV. Mgr Date: 5/23/02

(Indisp.frm)

Rev. 8/10/98

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIOD, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXI) IS CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only listed constituent present in the waste

## California List Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Halons > 104 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquid or solid Hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888027

Date: 05/28/2002
Time: 08:25 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.95 | 0.80 | 1.00 | 0.00 + | 0.20 | | Yes |
| BTU/lb | 10,028 | 8,000 | 18,000 | | N/A | ***4,000 BTU/lb | Yes |
| BTU/ Gal | 79,500 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 1.60% | | | | N/A | | N/A |
| % Chlorides | 0.15% | | | | N/A | | N/A |
| Moisture Content | 18.62% | | | | N/A | | N/A |
| Flash Point | 78 | 1 | 100 | 0 + | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | + | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888027
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 05/28/2002 " 08:15 AM
Analysis Date / Time: 05/28/2002 " 08:25 AM

Spg: 0.95
Lbs/gal: 7.93
Sample Wt: 0.9965
Pounds Received
Gallons Received: 0

Temp 1: 21.88
Temp2: 24.13
Weight1: 10.5140
Weight2: 10.5299
Cl1: 2.40
Cl2: 3.00

BTUs/ Gal: 79,500
BTUs/ LB: 10,028
Ash %: 1.60%
Chlorides %: 0.151%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 18.62% *** |
| FLASH | 78 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | AMBER |
| Odor | |
| TANK IN | |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Method/Number: Specific Gravity: Std Hydrometer. pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCB's. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: [illegible]
Date: 05/28/02

2888028

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039. Expires 5-30-97

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No: NJD042895680
Manifest Document No: 88028
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**
4. Generator's Phone ( )

A. State Manifest Document Number: **NJA 2888028**
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking** CORP
6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: 010342
Decal No.- RTE ~~15498~~ 080456
7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone ( ): 732-566-3000
E. State Trans. ID-NJDEP
Decal No.-

9. Designated Facility Name and Site Address
**GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID: VAD098443443
H. Facility's Phone ( ): 434-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 05078 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300**
**GUIDE BOOK ID 128**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI
Signature: [signature]
Month Day Year: 53002

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR
Signature: Russell T. Emmett Jr
Month Day Year: 053002

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space
39,260 lbs or 5,008 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian
Signature: Marie C Christian
Month Day Year: 0 5 31 0 2

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES.

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 88028

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [illegible] Title: MGR Date: 5/30/92

(Indisp.frm)

Rev. 4/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | BIOLOGICAL INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WETOX or CHOXD) fb CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California Unit Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of constituent and/or solidification to pass PRT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of constituent and/or solidification to pass PRT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888028

Date: 05/31/2002
Time: 08:00 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.94 | 0.80 | 1.00 | 0.00 + | 0.20 | | Yes |
| BTU/lb | 10,566 | 8,000 | 18,000 | | N/A. | ==5,000 BTU/lb | Yes |
| BTU/ Gal | 82,884 | 70,000 | 150,000 | | N/A. | | Yes |
| % Ash | 1.58% | | | -- | N/A. | | N/A. |
| % Chlorides | 0.20% | | | -- | N/A. | | N/A. |
| Moisture Content | 18.24% | | | | N/A. | | N/A. |
| Flash Point | 73 | 1 | 100 | 0 + | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A. |
| pH | Non Aqueous | 5.0 | 9.0 | + | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888028
EPA ID#: NJD042893680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 05/31/2002 " 07:50 AM
Analysis Date / Time: 05/31/2002 " 08:00 AM

Spg: 0.94
Lbs/gal: 7.84
Sample Wt: 1.0004
Pounds Received:
Gallons Received: 0

Temp 1: 20.92
Temp2: 23.30
Weight1: 11.3088
Weight2: 11.3244
Cl1: 34.80
Cl2: 35.40

BTUs/ Gal: 82,884
BTUs/ LB: 10,566
Ash %: 1.58%
Chlorides %: 0.200%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 18.24% |
| FLASH | 73 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 7&8 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity. Bird Hydrometer: pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCB's. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: [illegible]

Date: 05/31/02

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

2888029

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039. Expires 1-30-97

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No: NJD042895680 | Manifest Document No.: 88029 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
**Elan Chemical Co.**
**268 DOREMUS AVE., NEWARK, NJ 07105**
**973-344-8014**

4. Generator's Phone ( )

A. State Manifest Document Number: **NJA 2888029**
B. State Generator's ID-(Gen. Site Address): **SAME**

5. Transporter 1 Company Name: **Nappi Trucking** | 6. US EPA ID Number: NJD000813477
C. State Trans. ID-NJDEP: S10342 ~~15489~~ JK
Decal No.-: 085372
7. Transporter 2 Company Name | 8. US EPA ID Number
D. Transporter's Phone ( ): 732-566-3000
E. State Trans. ID-NJDEP
Decal No.-

9. Designated Facility Name and Site Address: **GIANT RESOURCE RECOVERY INC**
**Rt. 1, STATE RD 652**
**ARVONIA, VA 23004**
10. US EPA ID Number: VAD098443443
F. Transporter's Phone ( )
G. State Facility's ID: VAD098443443
H. Facility's Phone ( ): 434-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt./Vol. | Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 5211 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
**PROFILE #2423 MIXED SOLVENTS**
**FRAGRANCES L/I**

K. Handling Codes for Wastes Listed Above
a. S-02 T-83 b. c. d.

15. Special Handling Instructions and Additional Information
**STATE OF ORIGIN - NJ**
**EMERGENCY PHONE – (800) 424-9300**
**GUIDE BOOK ID 128**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI | Signature: Ben A | Month Day Year: 061902

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOHN KELLEY | Signature: John Kelley | Month Day Year: 061902

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space
41,520 lbs or 5,184 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: On behalf of GRR/Marie C. Christian | Signature: Marie C Christian | Month Day Year: 06 2 4 02

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL

CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680

MANIFEST DOCUMENT NUMBER: 88029

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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|---|---|---|---|---|
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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [illegible]

Title: PURCH MNGR

Date: 6/19/02

(Indisp.frm)

Rev. 4/10/94

## (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCIN** | | BIOD, INCIN** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCIN** | | (WTOX or CHOXD) fb CARBN or INCIN** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

### California List Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Criterion | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Halogens > 10A mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888029

Date: 06/24/2002
Time: 10:40 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 0.96 | 0.80 | 1.00 | 0.00 + | 0.20 | | Yes |
| BTU/lb | 11,994 | 8,000 | 18,000 | | N/A. | [illegible] BTU/lb | Yes |
| BTU/ Gal | 96,090 | 70,000 | 150,000 | | N/A. | | Yes |
| % Ash | 1.06% | | | | N/A. | | N/A. |
| % Chlorides | 0.26% | | | | N/A. | | N/A. |
| Moisture Content | 11.80% | | | | N/A. | | N/A. |
| Flash Point | 75 | 1 | 100 | 0 + | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A. |
| pH | Non Aqueous | 5.0 | 9.0 | + | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888029
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 06/24/2002 " 10:30 AM
Analysis Date / Time: 06/24/2002 " 10:40 AM

Pounds Received: 41,526
Gallons Received: 5,184 0

Spg: 0.96
Lbs/gal: 8.01
Sample Wt: 1.0442

Temp 1: 23.78
Temp2: 26.60
Weight1: 11.3247
Weight2: 11.3358
Cl1: 26.20
Cl2: 27.30

BTUs/ Gal: 96,090
BTUs/ LB: 11,994
Ash %: 1.06%
Chlorides %: 0.263%

PCB'S: Non Detect
Temp Rise: 0

| | |
|---|---|
| H2O | 11.80% |
| FLASH | 75 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | AMBER |
| Odor | |
| TANK IN | 7 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity. Std Hydrometer. pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCBs. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: [illegible]
Date: 06/24/02

2888019

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 9-30-97

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: NJD042895680 | Manifest Document No.: 88019 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
973-344-8014

4. Generator's Phone ( )

A. State Manifest Document Number: NJA 2888019

B. State Generator's ID-(Gen. Site Address): SAME

5. Transporter 1 Company Name: Nappi Trucking CORP | 6. US EPA ID Number: NJD000813477

C. State Trans. ID-NJDEP: 010342 RE 15409 | Decal No.: 080501

7. Transporter 2 Company Name | 8. US EPA ID Number

D. Transporter's Phone ( ): 732-566-3000

E. State Trans. ID-NJDEP | Decal No.:

9. Designated Facility Name and Site Address
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004

10. US EPA ID Number: VAD098443443

F. Transporter's Phone ( )

G. State Facility's ID: VAD098443443

H. Facility's Phone ( ): 434-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | HM | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt./Vol. | I. Waste No. |
|---|---|---|---|---|---|---|
| a. RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | X | 001 | TT | 05513 | G | F003 F005 |
| b. | | | | | | |
| c. | | | | | | |
| d. | | | | | | |

J. Additional Descriptions for Materials Listed Above
PROFILE #2423 MIXED SOLVENTS
FRAGRANCES L/I

K. Handling Codes for Wastes Listed Above
a. S-02 T-83

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE – (800) 424-9300 GUIDE BOOK ID 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BEN ARMENTI | Signature: Ben A | Month Day Year: 070902

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RUSSELL T. EMMETT JR | Signature: Russell T. Emmett Jr | Month Day Year: 070902

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space
44,200 lbs or 5,293 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C. Christian | Signature: Marie C. Christian | Month Day Year: 07 10 02

Rev. 2-86 Previous editions are obsolete. SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

# Land Disposal Restriction Notification

GENERATOR NAME: ELAN CHEMICAL CITY/STATE: NEWARK, NJ

GENERATOR EPA ID NUMBER: NJD042895680 MANIFEST DOCUMENT NUMBER: 88019

This form is submitted in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform with land disposal restrictions.

INSTRUCTIONS: Indicate the applicable hazardous constituents and their treatment standards by checking the appropiate box in the Wastewater or Non-Wastewater column. For restricted waste codes not pre-printed, such as additional D, F, P, U, and K codes, write in the waste code; description, subcategory or constituent; and treatment standard listed in 40 CFR 268.40. If D018-D043 apply, also list all Underlying Hazardous Constituents as defined by 40 CFR 268.2 and their associated Universal Treatment Standards listed in 40 CFR 268.48.

NOTE: If the waste is hazardous debris as defined by 40 CFR 268.2, a different form must be used which can be obtained from the TSDF.

| EPA Waste Code and Description, Treatment Subcategory, or Constituent | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|
| D001 - High TOC Ignitable Liquids ≥10% TOC | X | RORGS, CMBST | | N/A |
| D004 - Arsenic | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D005 - Barium | | 100.0 mg/l TCLP | | 100.0 mg/l |
| D006 - Cadmium | | 1.0 mg/l TCLP | | 1.0 mg/l |
| D007 - Chromium | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D008 - Lead | | 5.0 mg/l TCLP | | 5.0 mg/l |
| D009 - Mercury (Low Mercury Subcategory <260 mg/kg) | | 0.2 mg/l TCLP | | 0.2 mg/l |
| D010 - Selenium | | 5.7 mg/l TCLP | | 1.0 mg/l |
| D011 - Silver | | 5.0 mg/l TCLP | | 5.0 mg/l |

Additional Waste Codes and Underlying Hazardous Constituents (UHC's apply to D018-D043 only)

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I am the generator of an untreated waste identified on this form which must be treated to the appropriate treatment standards set forth in 40 CFR 268. This information is based upon either generator knowledge of the waste stream or an analysis of the waste.

Signature: [signature] Title: PURCH Date: 7/9/02

(Indisp.frm)

Rev. 4/10/94

# (F001-F005) Spent Solvent Wastes Treatment Standards

INSTRUCTIONS: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewater or Non-Wastewater column. At least one constituent should be checked for each waste code that appears on the manifest.

Waste Codes: F003, F005

| WASTE CODE | CONSTITUENT | ✓ | Non-Wastewater Treatment Standard | ✓ | Wastewater Treatment Standard |
|---|---|---|---|---|---|
| F001 | Carbon tetrachloride | | 6.0 mg/kg | | 0.057 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F002 | Chlorobenzene | | 6.0 mg/kg | | 0.057 mg/l |
| | o-Dichlorobenzene | | 6.0 mg/kg | | 0.088 mg/l |
| | Methylene chloride | | 30 mg/kg | | 0.089 mg/l |
| | Tetrachloroethylene | | 6.0 mg/kg | | 0.056 mg/l |
| | 1,1,1-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloroethane | | 6.0 mg/kg | | 0.054 mg/l |
| | Trichloroethylene | | 6.0 mg/kg | | 0.054 mg/l |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | | 30 mg/kg | | 0.057 mg/l |
| | Trichloromonofluoro-methane | | 30 mg/kg | | 0.020 mg/l |
| F003 | Acetone | | 160 mg/kg | | 0.28 mg/l |
| | n-Butyl alcohol | | 2.6 mg/kg | | 5.6 mg/l |
| | Cyclohexanone | | 0.75 mg/l TCLP* | | 0.36 mg/l |
| | Ethyl acetate | | 33 mg/kg | | 0.34 mg/l |
| | Ethyl benzene | | 10 mg/kg | | 0.057 mg/l |
| | Ethyl ether | | 160 mg/kg | | 0.12 mg/l |
| | Methanol | X | 0.75 mg/l TCLP* | | 5.6 mg/l |
| | Methyl isobutyl ketone | | 33 mg/kg | | 0.14 mg/l |
| | Xylenes | X | 30 mg/kg | | 0.32 mg/l |
| F004 | Cresol (m and p isomers) | | 5.6 mg/kg | | 0.77 mg/l |
| | o-Cresol | | 5.6 mg/kg | | 0.11 mg/l |
| | Nitrobenzene | | 14 mg/kg | | 0.068 mg/l |
| F005 | Benzene | | 10 mg/kg | | 0.14 mg/l |
| | Carbon disulfide | | 4.8 mg/l TCLP* | | 3.8 mg/l |
| | 2-Ethoxyethanol | | INCINERATION** | | BIOLOGICAL INCINERATION** |
| | Isobutyl Alcohol | | 170 mg/kg | | 5.6 mg/l |
| | Methyl ethyl ketone | | 36 mg/kg | | 0.28 mg/l |
| | 2-Nitropropane | | INCINERATION** | | (WETOX or CHOXD) fb CARBON or INCINERATION** |
| | Pyridine | | 16 mg/kg | | 0.014 mg/l |
| | Toluene | X | 10 mg/kg | | 0.080 mg/l |

* Treatment Standard only applies if 1 or more of these constituents and no other F001-F005 constituents are present in the waste

** Treatment Standard applies if this is the only regulated constituent present in the waste

California Land Treatment Standards

INSTRUCTIONS: Place check next to appropriate categories and corresponding treatment standards.

| Category | Standard |
|---|---|
| _ PCB'S > 50 ppm | Incineration |
| _ Nickel > 134 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Thallium > 130 mg/l (liquid waste) | Removal of compounds and/or solidification to pass PFT |
| _ Liquid or solid hazardous waste containing halogenated organic compounds (HOCs) listed in 40 CFR 268.32 Appendix III at total concentration ≥ 1000 mg/kg or 1000 mg/l | Incineration |

# GIANT RESOURCE RECOVERY ARVONIA, VA

*Waste Acceptance Review*

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888019

Date: 07/10/2002
Time: 08:35 AM

| | Actual Results | Profile Data Low | Profile Data High | Actual Variance | Permitted Variance | | Acceptable |
|---|---|---|---|---|---|---|---|
| Specific Gravity | 1.00 | 0.80 | 1.00 | 0.00 ± | 0.20 | | Yes |
| BTU/lb | 12,485 | 8,000 | 18,000 | | N/A | ---5,000 BTU/lb | Yes |
| BTU/ Gal | 104,188 | 70,000 | 150,000 | | N/A | | Yes |
| % Ash | 0.45% | | | | N/A | | N/A |
| % Chlorides | 0.18% | | | | N/A | | N/A |
| Moisture Content | 5.84% | | | | N/A | | N/A |
| Flash Point | 73 | 1 | 100 | 0 ± | 50 | | Yes |
| Viscosity | Not Tested | | | | | | N/A |
| pH | Non Aqueous | 5.0 | 9.0 | ± | 2 | | Yes |
| PCBs | Non Detect | | <50 | 0 ppm | <50ppm | | Yes |
| Compatibility Test | Pass | | | | | | Yes |
| Temp Rise | <20 F | | | | | | |

## Analytical Summary

Profile #: P-2423
Generator: Elan chemical Co.
Manifest #: NJA2888019
EPA ID#: NJD042895680
Waste Codes: D001,F003,F005

Annual Profile Signature Date: 29-Nov-2001
Analysis Recertification Date: 09-Oct-97
Analysis on File: YES
Compliance review on File: YES
Customer #: 400219

Sample Date/time: 07/10/2002 " 09:15 AM
Analysis Date / Time: 07/10/2002 " 08:35 AM

Pounds Received: 44,200
Gallons Received: 5,243 0

Spg: 1.00
Lbs/gal: 8.35
Sample Wt: 0.9498

| | | | | | |
|---|---|---|---|---|---|
| Temp 1 | 27.53 | Weight1 | 11.2813 | Cl1 | 35.10 |
| Temp2 | 30.20 | Weight2 | 11.2856 | Cl2 | 35.80 |
| BTUs/ Gal | 104,188 | | | | |
| BTUs/ LB | 12,485 | Ash % | 0.45% | Chlorides % | 0.184% |
| PCB'S: | Non Detect | | | | |
| Temp Rise | 0 | | | | |

| | |
|---|---|
| H2O | 5.84% |
| FLASH | 73 |
| pH | |
| F/W | |
| Solids | |
| Viscosity | |
| Physical State | L |
| No. of Phases | 1 |
| % Each Phase | 100 |
| Phase(s) Color | BROWN |
| Odor | |
| TANK IN | 14 |

Does Generator signed Profile indicate TSCA regulated PCB's? No
Pre Qualification analysis indicates TSCA regulated PCB's? No

Methods/Number: Specific Gravity. Std Hydrometer. pH. EPA SW-846: Moisture. ASTM E-203: Calorimeter. ASTM-D240: Ash. ASTM-D240: Chloride. ASTM D-808.D512: PCB's. EPA 600/4-81-045: Flash Pt.. EPA SW-846-1010: Viscometer. ASTM D-2196

Analyst Signature: mu

Date: 07/10/02

2888020

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved OMB No. 2050-0039 Expires 9-30-97

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. NJD042895680 | Manifest Document No. 88020 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
Elan Chemical Co.
268 DOREMUS AVE., NEWARK, NJ 07105
~~973-344-9014~~

4. Generator's Phone ( )

A. State Manifest Document Number **NJA 2888020**

B. State Generator's ID (Gen. Site Address) ~~CAME~~

5. Transporter 1 Company Name: Nappi Trucking | 6. US EPA ID Number: NJD000813477

C. State Trans. ID-NJDEP: 15499 Decal No.: 080478

7. Transporter 2 Company Name | 8. US EPA ID Number

D. Transporter's Phone ( ) 732-566-3000

E. State Trans. ID-NJDEP | Decal No.

9. Designated Facility Name and Site Address
GIANT RESOURCE RECOVERY INC
Rt. 1, STATE RD 652
ARVONIA, VA 23004

10. US EPA ID Number: VAD098443443

F. Transporter's Phone ( )

G. State Facility's ID: VAD098443443

H. Facility's Phone ( ) 434-581-3226

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt./Vol. | Waste No. |
|---|---|---|---|---|---|
| a. X RQ Waste Flammable Liquid, N.O.S., 3, UN1993, PGII (METHANOL, ETHANOL) D001,F003,F005 | 001 | TT | 5000 | G | F003 F005 |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

J. Additional Descriptions for Materials Listed Above
PROFILE #2423 MIXED SOLVENTS
FRAGRANCES L/I

K. Handling Codes for Wastes Listed Above
a. S-02 T-83
b.
c.
d.

15. Special Handling Instructions and Additional Information
STATE OF ORIGIN - NJ
EMERGENCY PHONE - (800) 424-9300 GUIDE BOOK ID 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOCELYN MANSHIP | Signature: Jocelyn Manship | Month Day Year: 08 09 02

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Eugene T Yin | Signature: Eugene | Month Day Year: 08 09 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space
36,860 lbs or 4,506 gals recd

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: On behalf of GRR/Marie C.Christian | Signature: Marie C Christian | Month Day Year: 08 1 2 02

21. Facility Owner or Operator: Please address any discrepancies to:

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

1—TSD MAIL TO-TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

Dewling Associates, Inc.
Environmental Engineers & Scientists

1605 Vauxhall Road
Union, N.J. 07083
TEL: 908-687-6636
FAX: 908-687-6755
E-MAIL: Dewling@aol.com

**Richard T. Dewling, Ph.D., P.E., DEE**
*CEO*
**Michael P. Bonchonsky, M.S., J.D.**
*President*
**Fred N. Rubel, M.S., QEP**
*Senior Associate & Director*
**David E. Breuer, B.C.E.**
**Kathryn Crumm, P.E.**
**Michael McCue, MChE., MBA., J.D.**
**Neil P. Mulvey, M.S.**
**Randy Vieser, P.E., DEE**
*Senior Associates*

**SENT VIA COURIER FOR HAND DELIVERY**

July 19, 2006

Abdool Jabar
Environmental Engineer
Hazardous Waste Compliance Section
RCRA Compliance Branch
Division of Enforcement and Compliance Assistance
US Environmental Protection Agency – Region 2
22nd Floor
290 Broadway
New York, NY 10007-1866

**Subject: Response to Notice of Violation / RCRA § 3007 Information Request**
**Elan Chemical Company, Inc.**
**Newark, NJ**
**EPA ID # NJD 042895680**

Dear Mr. Jabar:

This letter and enclosed attachments are in response to the April 28, 2006 Notice of Violation / RCRA § 3007 Information Request letter received by Elan Chemical Company, Inc., Newark, NJ.

This submission includes two responses:

- Response to Alleged Notice of Violations (NOVs)
- Response to Information Request Letter (IRL)

Each response is organized by referencing the NOV or IRL item number as described in the April 28, 2006 letter from the USEPA. Where necessary attachments are enclosed to provide supporting documentation. Attachments are referenced in the response to a particular item number.

As you know, several of the alleged NOVs reference a lack of documentation. In fact, Elan had documentation showing that the requirements were met and provided documentation during the USEPA inspection. Elan's documentation was apparently rejected because of differences of opinion over format or level of detail. Contrary to the

cited NOV, Elan had appropriate documentation showing that the requirements were met. Items where Elan objects to an alleged NOV are noted in the "Response to Alleged NOVs" document.

While Elan is prepared to respond to any concerns the USEPA has regarding it's RCRA program, please note that the NJDEP, Bureau of Hazardous Waste Compliance & Enforcement has inspected Elan's facility in prior years (including 2003, 2004, and 2005) and has not cited Elan for violating hazardous waste regulations.

Thank you for the opportunity to prepare these responses and please call me at (908) 687-6636 if you have any questions or require additional information or clarification.

Sincerely,

Neil P. Mulvey
Senior Associate

cc. Richard T. Dewling (w/o attach.)
Mary Guerrera, Elan Chemical Company, Inc. (w/attach.)
Jocelyn K. Manship, Elan Chemical Company (w/ attach.)

INCORPORATED 268 DOREMUS AVE. NEWARK, N.J. 07105 (973) 344-8014

FAX: (973) 344-1948

## 1. OUTLINE

Integrity testing of Tank No: 78was performed at Elan Chemical Co. on March 12, 2002. The conditions outlined in the approval issued by NJDEP on April 16, 1993 have been maintained. There have been no changes to any aspect of the AST system. Tank No: 78 is vertically situated in concrete secondary containment (capable of holding the contents + 10% of the total volume of the tank). Eddie Kearney of Elan Chemical Co. performed the integrity testing in accordance with API standard 653 and N.J.A.C. 7:1E 2.2-2.4 and the NJDEP Department of Hazardous Waste Storage Engineering guidelines. A visual inspection was also performed on Tank No: 78 which included a review of the tank's contents, usage, volumetric capacity, dimensions, construction appurtenance locations and condition, evidence of overflow or leakage and the physical condition of the tank and piping exterior.

## 2. METHODS

### A. Visual Inspection

- Tank number and location
- Specific contents of tank
- Specific usage and operational status
- Volumetric capacity in US gallons
- Tank dimensions
- Material of construction
- Provision for spill containment
- Age of tank or year installed
- Exterior coating
- Fill port location and condition
- Vent location and condition
- Evidence of overflow of leakage
- Presence of stained surfaces on or around tank
- Presence of stressed vegetation around tank
- Physical condition of tank, including dents, holes, corrosion or cracked welds
- Piping (to first valve); length, diameter, construction material and condition of pipe and all fitting.

B. Ultrasonic thickness testing

Plate thickness measurements were obtained using a Stress Tel Model T-MIKE E ultrasonic thickness gauge. Prior to testing a one point calibration procedure was performed on the gauge using a block of carbon steel of known thickness. Thickness measurements were obtained along four vertical rows spaced 90° apart with 2-1/2 foot vertical spacing between measurements. The first measurement in each vertical row was taken one foot from the bottom plate. For the tank bottom and roof, thickness measurements were obtained along four rows spaced radially 90° apart with 2 feet between measurements.

## 3. FINDINGS

The visual inspection of Tank No: 78 revealed no significant areas of concern. The pertinent data is summarized in Table 1.

## 4. RECOMMENDATIONS

Based on the visual inspections and ultrasonic testing results Tank No: 78 is acceptable for continual use. Tank No: 78 will be subject to integrity testing and visual inspection 5 years from this test date. We do recommend painting of the exterior of the tank at this time.

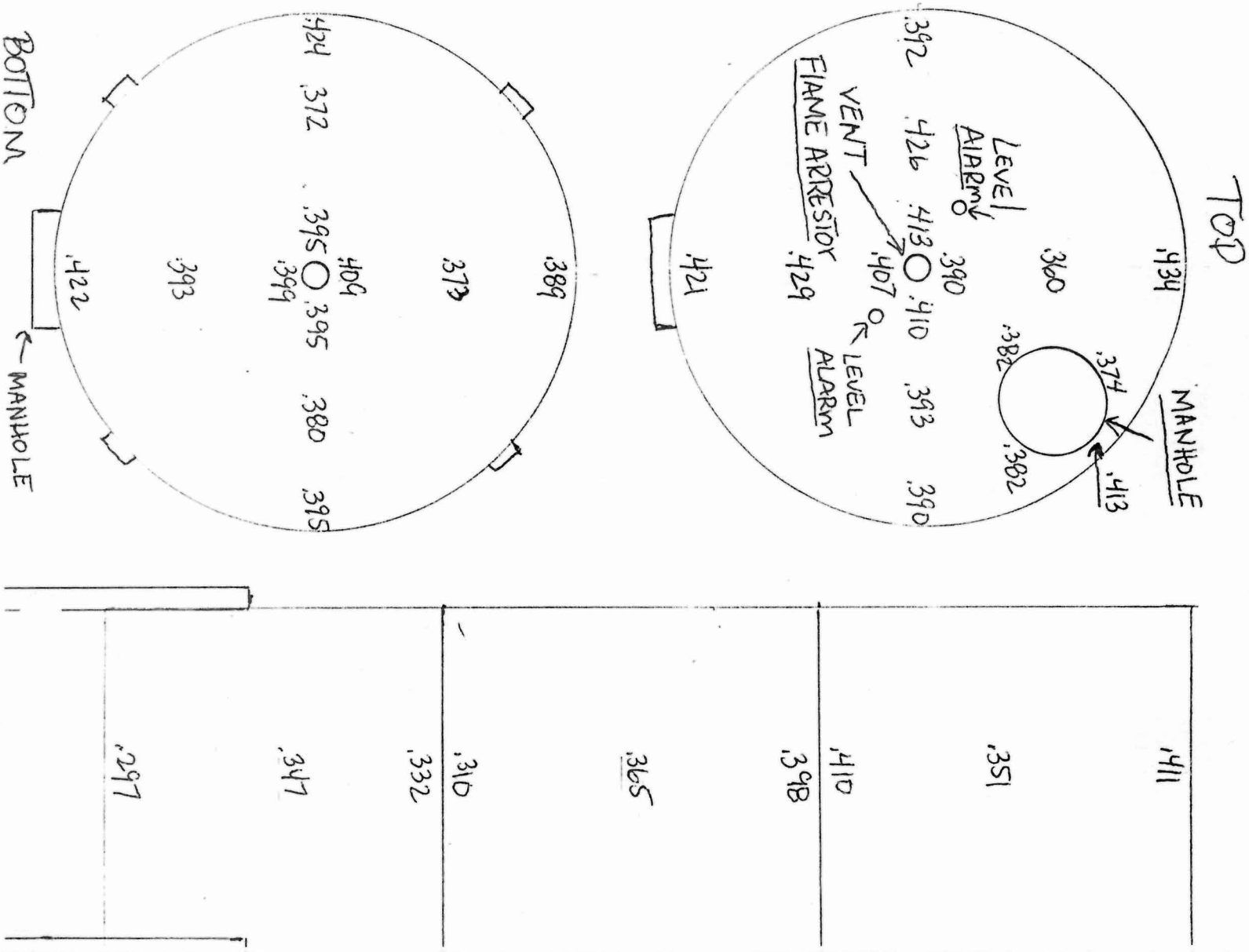
Jocelyn K. Manship
Environmental & Safety Manager

Table I Tank # 78 Summary of AST Visual Inspection Data

| | |
|---|---|
| **Contents** | Hazardous Waste |
| **Volumetric Capacity** | 10,000 Gallons |
| **Location** | Outside-East Tank Farm |
| **Dimensions** | 25.2' Height<br>8.5' Diameter<br>26.3' Circumference |
| **Construction** | Carbon Steel |
| **Spill Containment** | Adequate |
| **Exterior** | Painted White |
| **Overflow** | no |
| **Leakage** | no |
| **Stained Surfaces** | from rust |
| **Comments** | Requires painting<br>A total of 68 thickness measurements were obtained along the shell, roof, and bottom of Tank #78. Thickness data exceeded API 653 and NJDEP criteria for AST shell thickness. All data are presented in a schematic diagram of Tank 78. |

Inspection performed 3/12/02

TK #78 Hazardous Waste Cas.# 64742-48-9 8'D x 24'H

Cap. 12,000 gal.

KJ